Giant wind tunnel will help fight pollution

One of the largest wind tunnels outside North America will be built at Monash for research into getting rid of air pollutants from power stations.

The tunnel will be part of a new Environmental Fluid Mechanics laboratory which will adjoin the existing wave tank area of the department of Mechanical Engineering.

It will measure 50m by 10m. with a height of five metres, and contain two fans each five metres in diameter.

Professor Bill Melbourne says it will be used for research into the development of power station configurations and the determination of the height of chimney

The tunnel is being paid for with the aid of grants from the Electricity Supply Association of Australia (\$600,000) and the National Energy Development and Demonstration Council (\$700,000).

"The project is aimed at improving the function of power stations through better use of existing facilities and guidance about location of new ones.

"We will be able to study the dispersion of atmospheric discharges in complex terrain and stability conditions such as thermal air movement.

"Australia has unique conditions such as coastal breezes where there is a stable flow over a highly convective flow, and in outback Queensland thermal conditions where hot air rises and creates highly turbulent wind flows.



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Professor Melbourne said attempts had been made to simulate the appropriate conditions in the department's existing wind tunnel but a larger tunnel was

In a submission to the Electricity Supply Association, the three academics involved in the project — Professor Melbourne, Dr Deane Blackman and Associate Professor Jon Hinwood, said:

"Studies to determine the dispersion of buoyant atmospheric discharges from large sources such as power stations, in conditions where complex terrain or surrounding structures exist, require a very large wind tunnel working section

firstly to create a natural wind boundary layer, and secondly, to accommodate all the relevant features at a scale large enough to permit adequate scaling of the buoyancy effects.

"No such facilities exist in Australia to model these large scale situations".

The design incorporates "a very large open circuit wind tunnel arranged in such a way that the natural wind models developed over roughness elements in the first part of the working section can be passed over either topographical models of, for example, power station layouts for atmospheric dispersion studies".

The new building should be completed early next year, and the wind tunnel by the end of that year.

It is expected to have commercial application to the Australasian area.

 Left: Simulated atmospheric conditions over a complex terrain aid the study of dispersion of power station pollutants. Below:





Fesl masters long-dead language

Aboriginal languages in Victoria were deliberately and methodically destroyed by the scorn and ridicule of colonial Australia.



So says Mrs Eve Fesl, the first Aboriginal Masters graduate in linguistics, and the first Aboriginal Masters graduate at Monash, who has helped make amends for this by researching one of four extinct indigenous languages from Gippsland for her Masters thesis.

Her decision to research the language, Ganai, which was used in the Gippsland area, was given a boost by the interest of local Aboriginal people.

"I hoped the descendants of this language would be able to gain an idea of the Aboriginal world view, as told through the specific use of this language," said Ms Fesl, who is the director of the Aboriginal Research Centre.

An attempt was made to collect data which provided information on the semantics and use of Ganai, in the hope this would increase the knowledge of the language by triggering peoples' memories.

"I would never attempt to reconstruct a language, because the socio-historical events which may have changed the shape of the language are not known", she said.

Ms Fesl, who was awarded a Master's degree at an Arts graduation ceremony on June 4, plans to do her doctorate on policy and treatment in regard to Aboriginal and Islander languages.

She said this research would detail events leading up to the current situation in regard to recommendations for the National Language Policy.

The policy, recommended by the Senate Standing Committee in 1984 is presently being formulated and deals with the preservation of Aboriginal languages and their introduction into the school curriculum.

Ms Fesl recently organised a seminar at Monash for people concerned about the misconceptions of Aboriginal culture held by many non-Aboriginal people.

"There desperately needs to be public dissemination of accurate information if we are going to avoid exacerbating racial conflict," she said.

Those participating in the seminar included Mr Alf Bamblett (Victorian Aboriginal Education Association), Dr H.C. (Nugget) Coombs (former chairman of the Australian Council of Aboriginal Affairs), Mr Al Grassby (special adviser in Community Relations, NSW Premier's Department), Ms Pat O'Shane (director, Department of Aboriginal Affairs), and the Victorian Attorney-General, Mr Jim

Participants agreed to ask the Federal Attorney-General, Mr Lionel Bowen, to present the Racial Discrimination Act to the government for amendments which include penalty clauses for race defamation and incitement to racism.

MONASH REPORTER

Creating pictures of tertiary study

Secondary students no longer equate education with dimly lit rooms governed by black robed masters sporting canes -

In an attempt to dispel any misconceptions, the Education Faculty ran a threeday workshop last month for art students from Mordialloc High School.

They attended the same tutorials and practical exercises as Diploma of Education students studying to become science teachers.

The visitors enjoyed a faculty barbecue, were given the opportunity to go on university tours, to air their views on education, and offer suggestions for better schooling conditions.

Organiser, Dr Jeffrey Northfield, a senior lecturer, said the decision to mix people from science backgrounds with those in humanities was a deliberate one.

"Science teachers seldom come in contact with humanities students, and humanities students have a notion that science people are exceptionally bright.

'We hoped some of the ideas these secondary students had about further education and its worth could be corrected," he said.

Mordialloc High School teacher, Ms Jill Ashley, said some of the students might never have another opportunity to enter a tertiary institution.

"This exercise could help them develop a positive attitude towards post-secondary education."

The workshop was sponsored by the Silver Jubilee project fund.

"The most appropriate way the faculty could spend the money was to involve students from outside the university," Dr Northfield said.

"In response, the visitors are planning to paint a large mural of their impressions of university life, which will be donated to the faculty.



· Part-time lecturer in Education, Geoff White, applying a fake wound to the face of a student from Mordialloc High School as part of

Technology gains from the blending of disciplines: Jones

Interdisciplinary thinking played a pivotal role in the development and implementation of technology, said the Minister for Science and Technology, Mr Barry Jones, at a Graduate School of Environmental Science seminar.

A study in the United States showed the significance of interdisciplinary research to technological innovation.

One of the examples cited in the study was the video tape recorder, which was dependent on the merging of many streams of scientific and technological activity including control theory, magnetic and recording materials, magnetic theory, electronics and frequency modulation.

Another innovation was the oral contraceptive pill.

In this example, contributing fields to the innovation were endocrinology, steroid chemistry and the physiology of reproduction.

This pattern of the bringing together of different fields of study to solve a problem is common to many technological innovations.

Others that spring to mind are nuclear power generation, photography, computer-assisted manufacture and food processing, to name a few.

The spin-offs of recombinant DNA technology are already having a major impact in medicine and lesser but rapidly growing effects on, for example, agriculture and veterinary science.

Some recent applications of this technology include:

· Isolation of the interferon genes and expression of these in cultured cells. Interferon produced in this way has only been marketed in the last 12 months and is used for treatment of individuals with some types of tumors.

· Diagnostic techniques which utilise recombinant DNA probes for direct analysis of genetic material from early human foetuses. Using this technology, it is now possible to detect previously undiagnosable genetic disorders in

· Production of new plant varieties by direct injection of genetic material into cells, and regeneration of whole plants from the cells. This system has already been successful in trials with genes that confer drug resistance. In the future, it should be possible to introduce genes for pest or herbicide resistance into commercially-important plants.

· Development of new breeds of domestic animals by direct injection of new genes into fertilised eggs.

Effective gathering of information is an obvious and crucial first step in interdisciplinary and all other thinking.

The last decade or so has seen a revolution in the way we gather and process information, as a result of the advent of computer technology.

Interdisciplinary or not, our capacity to draw together and analyse information is now enormous. This does not mean we can solve all our problems tomorrow with computers, of course,

Because of their enormous impact, they have changed the rules; they have changed us to an "information society", with profound effect on our jobs, economy, and society as a whole.

We now analyse information and make decisions in a different framework as a result of the introduction of computers.

The challenge is to manage technologies and develop future technologies as our servants to achieve personal and community goals.

This requires an understanding, in the broadest terms, of the physical, biological and sociological aspects of our environment - interdisciplinary thinking on a macro scale.

Through the Australian Research Grants Scheme my department supports a major portion of Australia's basic research.

Perhaps it would be of benefit to develop a broader research support program which administers funds for a much wider spectrum of research than at present. Perhaps it could make special grants for interdisciplinary research.

Science and technology are now so complex that they present a major challenge in understanding them. The Parliament is no exception so I am pleased to announce that moves are almost completed to establish a Standing Committee on Science and Technology in the House of Representatives.

The committee will enable the house to consider science and technology issues in much more detail than has been possible

Another initiative about which I am very excited is the Commission for the Future.

I established the commission in 1985 and presented it with the challenge of increasing public awareness and discussion about the future and how we might mould this future to achieve maximum benefit.

A fair go for staff as well

 Sixty staff members have expressed their feelings about the invasion of their territory in this open letter to the Monash Association of Students, the Staff Association of Monash University and university publications including Sound, Monash Reporter and Lot's Wife.

to express our deep concern about the harassment. events of June 12, 13 and 16 arising out Library spending.

concern of all at the seriousness of the issues surrounding the Libraries' plight, contemplating further actions of this but make the point that none of us is nature give some consideration to the involved in the making or implementing rights and freedom of other, innocent, of decisions affecting the Library.

We should not then be singled out as



targets for demonstrations such as we experienced during those days.

For several hours on June 13 most members of staff were denied access to We, the undersigned members of staff their building and were thus denied their employed in the University Offices, wish right to pursue their occupation free of

Not only are such invasions distressing of protests against proposed cuts in to the occupants of the University Offices: they are unproductive, potentially divisive We wish to point out that we share the and likely to cause deep resentment.

We ask that students — and others

· See page 4

Square wave machine finds world market

Technicians in the university's Chemistry department have developed a high performance square wave generator which is being sought by laboratories world-wide.

Already the department has sold generators to research laboratories in West Germany, Italy and Canada, and it seems likely to get an order from Spain.

A product of pure research, the generator has become wholly an export item.

Designed for use in microwave spectroscopy, its performance far exceeds what is now available on the market and it enables whole new groups of molecules to be analysed.

Its development came about because

the Chemistry department's microwave spectroscopy group, headed by Professor Ron Brown and Dr Peter Godfrey, had been building molecules which could potentially occur in space.

The absorption of microwaves, however, is weak. Also, it varies according to the electric field in which molecules find themselves.

It turns out to be far easier to detect the change in absorption under a changing electric field than simply to measure the absorption itself. And that is where the square wave generator comes in.

Mains electricity in Australia comes as alternating current, the electric field at any one point varying constantly between positive and negative and back again in the form of a regular sine wave.

A square wave generator modifies that wave form so that there is an almost instantaneous change between full strength positive and full strength negative and back again. That makes it very much easier to detect the change of molecular absorption of microwaves.

In fact for microwave spectroscopy the variation used is between a zero-electric field and a highly positive field.

And in some cases, detection of molecules demands up to 3000 volts and tens of thousands of electric field reversals a second, performances far in excess of typical equipment available commercially.

So the group needed a high performance square wave generator to enhance its ability to detect these molecular fingerprints, but could not afford to buy such equipment.

It had confidence, however, that Mr Ron Beach and his workshop staff could produce what was wanted.

The most important problem to overcome was the rapid switching rate required.

This was solved by using banks of fast electric silicon-chip-controlled rectifiers.

As the only group in the Southern Hemisphere needing and using such equipment, the researchers were surprised at the level of interest shown overseas.

Compatible

Dr Godfrey said: "We'd be talking about our work at conferences and people would ask 'How did you do it?"

So about 18 months ago, the group wrote down the specifications of their equipment and began circulating it among their international colleagues. And the orders began to flow in.

The generators cost about \$A7000 each and are customised to users' needs. They can also be made compatible with existing equipment.

So far there has been little thought given to whether the generators could be produced on a commercial basis.

But square wave generators do have other applications. They are, for instance, an integral part of the motors used in the new Melbourne trams, and they also occur in some arc welders.

 The Vice-Chancellor, Professor Ray Martin, seals the box containing Monash Chemistry department's first export model of the new square-wave generator, bound for Bologna, watched by Mr Peter Wade, Comptroller, Professor Ron Brown, and Mr Ron Beach, head of the department's electronics lab. (Photo: Steve Morton). Below: Representations of 'square-wave' and 'sine



Red Cross honor for Louis Waller

Professor Louis Waller, now back at Monash after three years as Law Reform Commissioner and another year as first chairman of the Law Reform Commission, has been awarded the Australian Red Cross Society's highest honor — life membership.

In a citation for Professor Waller, the society said it was acknowledging his outstanding service as chairman of what has now become the society's International Humanitarian Law Committee.

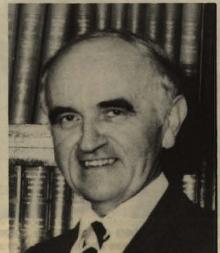
Professor Waller was a founding member of the joint Australian Government and Red Cross Committee on the Dissemination of International Humanitarian Law, as well as being appointed Law Reform Commissioner for Victoria.

During his eight years with the Red Cross, he helped develop four teaching kits on humanitarian law.

The society said it was his energy and far-sightedness which helped the Australian Red Cross to become one of the most respected societies, in both the quality of its work and its dissemination

Professor Louis Waller, now back at of the code of the Geneva conventions.

The Red Cross gave special thanks to Monash for its co-operation in allowing Professor Waller to work from the university in the first five years of his appointment.



· Louis Waller

Greetings from Queensland

Monash University received special greetings from the University of Queensland for its 25th anniversary.

They came in a bound document signed by the Chancellor, Sir James Foots, and the Vice-Chancellor, Professor Brian Wilson, and read as follows:

"The University of Queensland offers congratulations to its sister university on the high academic standards attained in its first 25 years and on the national and international recognition achieved by its staff through their scholarship and research".



'Tolerance a hallmark of student life'

In the light of recent events at this university, *Monash Reporter* presents guidelines set down by the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom.

Mr Maurice Shock, chairman of the CVCP, said the guidelines were "forthright and unequivocal in support of freedom of speech and lawful assembly and of the importance to be attached to them."

"There is not at present a general or acute problem of disruptive or intimidatory conduct in universities.

"A small number of well-publicised incidents should be set against the dozens of orderly political meetings which take place each week on university premises up and down the land," he said.

"Nothing excuses disruptive or intimidatory behavior but students must be able to protest as long as lawful freedom of speech and of assembly are not infringed.

"Mutual tolerance and freedom of argument are still the hallmarks of student life in the universities.

"It is of great importance for the universities themselves and in the wider interests of society more generally."

The Australian Vice-Chancellors' Committee recently distributed copies of the guidelines to all Australian universities.



Note: The following guidelines are based on a general overview of complicated and controversial questions of law. Universities must be ready to seek detailed legal advice on problem cases if they arise.

General Principles

Freedom of speech and the right of lawful assembly have fundamental importance for universities as places of education, learning, and the disinterested pursuit of truth. Universities have therefore a special responsibility to protect and advance them.

There is no absolute right under the laws of the United Kingdom to unfettered freedom of speech, nor are all forms of assembly lawful. Universities of their very nature ought always to lean in favour of extensive rather than restrictive interpretation of the legal scope of freedoms; subject to that, however, the duty of a university extends only to the protection of lawful forms of speech and lawful modes of assembly. A speaker who incites an audience to violence or to breach of the peace or to racial hatred, for example, transgresses the bounds of lawful speech. Assemblies of persons, whether or not directed to lawful purposes, cease to be lawful if they cause serious public disorder or breaches of the peace.

The Vice-Chancellors' Committee urges all universities to protect and promote lawful freedom of speech and of assembly and to take effective action against conduct which infringes these vitally important rights and

CHINA EXCHANGE

Nanjing University and Monash have concluded an agreement which provides for an exchange of not less than three months for staff or students from Victorian higher education institutions.

People who wish to pursue a language course must have studied Chinese for two full years.

Applications close on July 30 with The Executive Secretary, Victorian Vice-Chancellors' Committee, 40 Park St., South Melbourne, 3205.

A detailed information leaflet is available from Deans and Assistant Registrars in all faculties or from Mrs Barbara Linsten, Registrar's Department (ext. 2091).

their lawful exercise. Universities have the right to maintain good order on their premises, and in case of the more modern ones have frequently imposed upon them in their constitution a duty to do so. They have both right and power to regulate and, where necessary, to impose conditions or restrictions upon, the conduct of meetings, demonstrations and other like events on their premises. Their objectives should be jealously to protect the rightful freedom of all-members of the university and of lawful visitors to impart and to receive information and opinion. When opinions are in conflict each should be secured a hearing, or, at least, fair conditions for its lawful expression.

The prevention of disorder at meetings takes different forms according to whether or not they are public meetings or private meetings, and the law relative to meetings differs in different parts of the UK. In general, however, it may be said that firm and effective chairmanship and efficient stewarding are essential to the orderly conduct of meetings; and that when meetings are, in the legal sense, public meetings, the police have the power and, in cases where breaches of the peace are seriously apprehended, the duty to attend and to assist in, or in extreme cases, to take charge of, the maintenance of order.

Particular problems as to the exercise by universities of powers in respect of meetings and events on their premises may arise from the type and layout of buildings and open spaces, the ease of public access to them, and the necessity of free passage and circulation by members of staff and students for the ordinary purposes of a university. Moreover, universities lack internal policing systems such as would enable them to act directly against substantial groups of persons bent on disruption either of their own ordinary business or of public or private meetings taking place on their premises. Nor have they the resources either to identify all those taking part in such conduct, or (yet more crucially) to compel attendance of witnesses at subsequent disciplinary proceedings. It would be undesirable from the point of view both of economy and of liberty that they should seek or acquire enhanced legal powers in these

Where student unions (and other like associations) are owners or tenants of the premises they occupy, it is they rather than the university authorities which have, in respect of these premises, the primary responsibility for securing freedom of speech and assembly and for preventing unfairness or disorder in the conduct of meetings. Universities should ensure that student unions exercise their functions in accordance with such fundamental responsibilities of the university as those in favour of freedom of speech and of lawful assembly. If necessary universities should use their constitutional powers to bring this about.

Practical measures

- (a) Universities should check their disciplinary codes to ensure that they make adequate provision to protect freedom of speech and of lawful assembly in the spirit of this document; and that provisions as to penalties are adequate.
- (b) In respect of meetings in premises controlled by university authorities, the university authorities should permit the use of their premises only to organisers of meetings who undertake to, and who seem reasonably likely to, comply with all lawful instructions issued by the university authorities in relation to the location, arrangement and conduct of such meetings, including adequate stewarding and the provision of adequate control over entry.
 - It is essential that such arrangements be agreed in detail in cases in which it can reasonably be apprehended that there is a real possibility of disruption, or of some serious breakdown in good order. In such cases the university authorities themselves, if appropriate, should consult with the police. If the meeting is a public one, the police may be prepared to be present throughout to minimise the risk of disruption. At a private meeting this is much more problematic. When there is a known threat to public order in connection with any meeting, it may, therefore, be appropriate for the university auth orities to secure that the meeting is held on such terms as will ensure that it is a public meeting in the legal sense.
- (c) There should be provisions within universities whereby student unions or similar organisations, together with their constituent clubs and societies, may be called

- upon to provide advance notice to the university authorities of meetings to be addressed by visiting speakers, or visiting speakers of specified categories; in such cases clear advice should be given of any conditions or restrictions set by the university under (b) above.

 As an additional safeguard to ensure that
- (d) As an additional safeguard to ensure that university authorities can take reasonable steps to act against possible risks of disorder, it would be helpful if MPs and others prominent in public affairs would give university authorities adequate advance notice of any visit by such a person to address a meeting on university premises. Government Ministers have already given assurances that they will follow this procedure.
- (e) Nevertheless, since university authorities lack the physical and the legal capability to maintain public order in extreme circumstances; and since the police are not always ready to intervene on private premises, there may be cases of very high risk when universities may have to use their right of refusing permission for the holding of violently controversial meetings in university premises, without regard to the character of the parties to controversy.

Sanctions and penalties

Despite all reasonable precautions, and making all reasonable allowances for robust heckling in the traditions of democratic politics (and indeed of parliamentary debate), improper disruption of meetings and other infringement of free speech or other abuses of the right of assembly may occur.

Where this involves breach of the general criminal law, universities should in no way aim to secure for their members any privileges as against their fellow citizens. University authorities should be ready to assist prosecuting authorities to implement the processes of the criminal law and, if criminal charges are preferred, should stay disciplinary proceedings pending the outcome of any criminal proceedings.

Subject to this, where some breach of university disciplinary codes takes place in the disruption of a meeting, all reasonable steps should be taken to secure identification of persons committing offences and to press charges against them in accordance with the due process of the university disciplinary system.



• Freedom of speech, Monash-style: Students and others occupying the University Offices to protest about a financial crisis in the library system. Other people hold different views about the efficacy of this form of protest. See 'A fair go for staff as well', page 2. Photo — Tony Miller.

Offshore engineers discuss the local product

A recent workshop at Monash on offshore engineering stemmed from concern that Australian expertise had been under-utilised in developing our ocean resources, said Associate Professor Paul Grundy.

"The local suppliers and consultants have had little participation in an industry that will have a turnover of about \$12 billion between now and the year 2000," he said

"Offshore technology tends to be designed and developed overseas, but Australian conditions are unique.

"Australian consultants seem to get involved only when problems start to emerge — it's finger in the dyke stuff?"

The two-day workshop gathered together representatives from Government, research institutions and private enterprise.

It was co-sponsored by the Faculty of Engineering and the Victorian Department of Industry Technology and Resources, and organised by Associate Professor Grundy, Associate Professor Jon Hinwood and Mr Vechi Basharen from the department.

Associate Professor Grundy said that one likely result of the workshop would be the establishment of a national



 Associate Professor Jon Hinwood talks to a mystery frogman newly emerged from the depths of the Monash wave tank as part of the university's ongoing offshore engineering research effort.

standing committee on offshore engineering.

"I've been impressed by how organised the Brits are and how well the Norwegians have done in really participating.

"Here, there is a glaring lack of a national strategy; we are not looking ahead."

He said that part of the co-ordination problem was too many government departments and a division of responsibility between the Commonwealth and the States.

Nearly half the 65 workshop participants gave papers on topics ranging from the technical aspects of offshore development and oil recovery to government legislation and assistance.

The need for the workshop was well documented by the heated debate aroused by one topic — how best to ensure opportunities in the industry for Australian suppliers.

The Victorian and West Australian Governments in particular have been putting considerable pressure on offshore development companies to buy Australian manufactured goods and services.

But industry prefers to find its own suppliers.

Company executives, therefore, took great exception to a statement by the Director of the Victorian Government's Industrial Supplies Office, Mr Roy Lilley who said: "Every day some Australian manufacturers lose orders, not because their price is too high or their product is not of a high standard, but because some purchasing engineer or purchasing manager has written specifications of what to purchase in a way which ensures it will be imported rather than manufactured in Australia."

Representatives from Woodside Petroleum pointed out that they had had their fingers badly burned in attempting to comply with West Australian requests to use local manufacturers, paying up to half as much again as the import price for equipment.

Perhaps the most significant paper was delivered by Professor Val Pinczewski of the Centre for Petroleum Engineering at the University of New South Wales.

He pointed out that we are recovering on average less than one-third of the oil from the reservoirs we are tapping.

To enhance that recovery is possible, but it requires research, he said.

That research needed to be done now to avoid oil supply problems by the year 2000.

"With our energies so exclusively directed to solving today's pressing problems, the long term questions will remain on the shelf unless the consultation process started at this workshop continues," said Associate Professor Grundy.

Goethe prize winner



Torsten Weller, winner of the Goethe Prize as best first-year student of German in 1985, receives the book prize and certificate from Mr Wolfgang Will, a representative of the Consul General of the Federal Republic of Germany. Other book prizes, mostly donated by the Goethe Cultural Institute, were distributed to students for outstanding results in all years. Photo — Tony Miller

Bioethics talk by Baroness

Baroness Mary Warnock, chairman of the British Inquiry into Human Fertilisation and Embryology which produced the 1984 Warnock Report, will speak at Monash this month as part of the 1986 Bioethics Lunchtime Lecture Series.

The Baroness is Mistress of Girton College, Cambridge.

Her talk, Morality and the Law: Some new problems, will be given on Wednesday 16 July in Lecture Theatre R2 (Rotunda) starting at 1.05 pm.

Another lecture will be given the following week by Richard Ball, Professor of Psychiatry at Melbourne University.

Professor Ball will speak in Lecture Theatre R6 on Some ethical issues in psychiatric medicine.

Inquiries should be directed to Dr Helga Kuhse on ext. 3266.

Art bonanza night at Halls

The second Tom Roberts Lecture will be given by Jane Clark, curator of special exhibitions at the National Gallery of Victoria, in Richardson Dining Hall on Monday 21 July, in conjunction with the opening of the Oakleigh and Clayton Art Exhibition.

Ms Clark's lecture, titled The creation of a blockbuster: The Golden Summers exhibition, will begin at 8pm, following a special three course dinner in Deakin Hall.

Guests will later move to the Roberts Hall dining room, where Professor Margaret Plant of the Visual Arts department will open the first public exhibition of works of art from the combined collections of the City of Oakleigh and the Clayton Arts Council.

The exhibition will be open daily from 11am to 9pm, until Sunday 27 July, when it will be closed by the Mayor of Oakleigh at a public afternoon tea.

Bookings for the dinner (maximum 180) and lecture (200) can be made until 5pm on Wednesday 16 July, but will be processed strictly in order of receipt.

Invitations can be obtained by calling the Halls switchboard on ext. 2900 from 8.45am to 10pm weekdays, and from 9am to 9pm on Saturdays and Sundays.



You don't have to be crazy.

You had to be a good sport to enjoy the final event of last month's jubilee 25-athon — beer sculling and sausage gobbling.

But that was about as much as was required of your sporting abilities for this 25-event, almost-anything-goes contest.

Eight teams of eight competed in the finals for a trophy and a dinner at the Piano Bar restaurant, won by the Monash Athletics Club's team, the Phantoms. It was a hard road to victory with the wind and the rain adding to the perils for the 25 events, which including running on stilts, sack jumping, a human chariot race and a relay which required the passing of a very cold spoon between bare flesh and clothing.

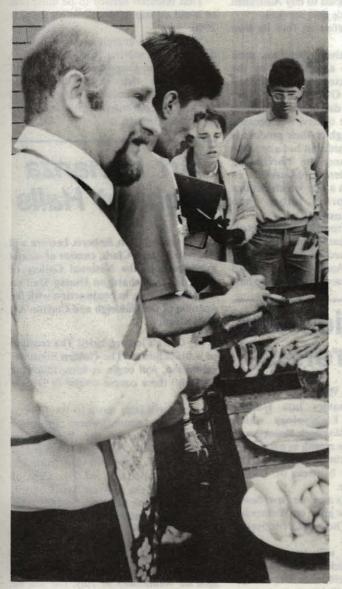
More than 100 spectators were thoroughly entertained, and all competitors were compensated with the gift of a 25-athon T-shirt

from the sponsors, the Tertiary Credit Union. The event was organised by Kerrin Fennessey as part of the Sports and Recreation Association's jubilee celebrations.

• Far left: Robyne Monseair gets into stride for the hockey club team, Adelaide Avengers. Left: The second prize winners, On Your Head, compete in Pass the Person. Below left: Guy Flavell, member services manager for the sponsors, Tertiary Credit Union, readies the fare for the ultimate event, the sausage gobble and beer scull. Below centre: The Cold Spoon Treatment for the On Your Head team. Below: An On Your Head competitor paddles hard for the Underwater Run. Right: An intimate moment in the Egg and Spoon Race for Phantoms' team members, Michael Bourke and Pip Binns. Photos — Richard Crompton.











but it certainly helps

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delaide in Pass consors, gobble ur Head erwater antoms compton.

, from left rear, Andrea Ollqvist, Michael Bourke, Nick Connell (almost obscured), Louise Partos, ter), Diane Gibbs (team marshall), Pip Binns. Centre: Denise Wong. Front, from left: Andrew Blight,



MONASH REPORTER



Winners of the Primitive Primordial Pristine Cupreous Bridge Competition of 1986, from left, Phillip Black, Marcus Leonard and Richard Green. The contest was organised by Professor Noel Murray as an assignment for first year students in Civil Engineering.

Phillip, Marcus and Richard each received a \$40 cash prize.

Their design was the lightest (63.8 grams) of the successful bridges, beating narrowly the entry from second prize winners, David Simpson and Rupert Rodrigues (65 grams).

These two groups were also co-winners of the Most Ingenious prize, awarded by visiting judge, Mr Milton Johnson, a consulting engineer.

Professor Murray said the winning bridge was made of single strands of copper wire which had been cold drawn and hand twisted, more than doubling their strength.

According to Richard Green (son of the Health Service director, Dr John Green) the three members of the winning team kept their construction methods a secret, and few of the 120 entries showed similar innovations.

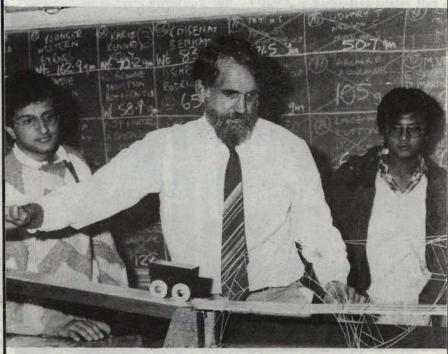
Third prize went to Pautelis Karos, David Kennedy and Edward Kelly, whose bridge weighed 70.2 grams.

An extra prize — Most Emotive bridge — was awarded to Christopher Alkemade, Andrew Glenk and Dietmar Jurgensen for their picturesque but heavy (138 grams) design, because it "was wonderful to look at", said Professor Murray.

The competition was the second organised by Professor Murray — the first was the Great Spaghetti Bridge Competition in 1985.

A third for the series has yet to be devised, but next year's new students are bound to be faced with some kind of unusual challenge.

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Professor Noel Murray tests the bridge which won the Most Emotive award.

Taking the clay out of Clayton

The following edited extract from Making Monash: A 25 year history, was taken from a section titled, The Grounds: An act of faith, by Professor of Botany, Martin Canny. Other sections of this jubilee publication are written by John Rickard, Conrad Hamann, David Bradley and Jenepher Duncan. Making Monash, edited by Bill Kent and David Cuthbert and designed by Elaine Merkus, is available from the University Bookshop for \$10 a copy.

The clay of Clayton, which every mention of the district conjures up for those who formed Monash, is uncompromising stuff.

Rock-hard when dry, clinging, buttery, puddled, when wet, it formed the bare grazing land of this hilltop, on which the O'Sheas lived in what is now the vice-chancellor's house. From about the forum eastwards, the Talbot Epileptic Colony shared the site.

On the clay both properties had established gardens of exotic trees which were stunted by drought in summer, by waterlogging in winter, and by the pruning winds. To moderate the devastating effects of the wind, lines of trees had been planted which were the main feature of the landscape.

The grass and trees had reached an uneasy truce with the clay and wind, the elements having the upper hand. To disturb this balance, particularly in the sphere of drainage, by constructing a university was, as foreseen by O'Shea, inviting trouble.

The small group who gathered on the hilltop to make Monash thought of themselves as practical people with a big job to do and the skills with which to do it.

Looking back, we can see that they were also idealists who suddenly had the chance to remould the sorry scheme of things.

They evolved a vision of university grounds that would be a great collection of Australian native plants and, arising from that, a home for myriads of native birds. It would also be beautiful in a rich variety of ways — a restful haven — besides being all the necessary things such as a traffic way for 15,000 pedestrians, a place to play sports or eat your lunch.

There would be water and wilderness, and a reserve for native animals. Jock Marshall, founding professor of Zoology and the prime mover of this vision, inspired enough of his colleagues to prevail over their critics.

We drew up plans and marked in species, we bought the plants, we planted them by the tends of thousands in the clay, and they died.

They died of drought in the dry, they drowned in the wet. The wind tore them to pieces. Insects arrived in hordes and ate them up.

A great grove of lemon-scented gums east of Engineering rotted in their holes in a sea of mud. The builders churned up the clay, buried the meagre topsoil, compacted the mixture with their machinery, and retired leaving buildings that excited the wind into whirlwinds.

We sought advice from more experts and followed it, in vain.

The first successes were in two courtyards, Engineering, where Ken Hunt had firmly chosen a garden of exotics, and Science (between the Chemistry and Physics wings) which, under Jock's eye, was all native.

Quarantine

Here, sheltered from the wind and focussed upon a fountain and a pond, grew up two very different, very attractive, gardens that encouraged our hopes.

In the Engineering garden was realised an imaginative element of (the founding Vice-Chancellor, Sir Louis) Matheson's vision. As an engineer himself, starting a university that was then thought of first of all as a technological institution, he conceived the plan of growing an apple tree descended from that tree of knowledge under which Newton sat, reasoning from the fall of an apple to the gravitation of the worlds.

His inquiries revealed that the original tree, in the grounds of Woolsthorpe Manor in Lincolnshire, was long dead but the clone of this ancient variety, Pride of Kent, was preserved.

Strict quarantine regulations prevented the importing of fruit trees, but he obtained seeds and passed them on to me to grow. I knew very well that apple trees



Sir Robert Menzies, Sir Louis Matheson and other guests pick their way through the mud at the opening of the Menzies Building, 1962.

are not propagated from seeds, indeed that varieties cannot be kept pure after the pollinations that form the seeds, but I did my best to germinate them.

After a decent interval I admitted failure and set about circumventing the bureaucracy. With the help of friends at the Plant Research Unit at Burnley, cuttings were obtained from the East Malling collection, grown in the quarantine glasshouses, and finally released to Monash without alerting the upper hierarchy.

With the passage of time we were able to dmit to the possession of this harmless tree and plant it with due ceremony in the Engineering garden.

The third early success grew up secretly behind high fences in the valley below the Halls of Residence — Snake Gully.

Here Marshall's vision of a wilderness for animals and zoologists was realised. A small lake was essential, was admitted to be feasible by the architects, and was made by damming the valley.

The existing native vegetation was thickened by plantings; kangaroos, emus, koalas were brought in; and the birds arrived as expected.

The Marshall Reserve was, and remains, accessible only to the zoologists. The rest of us glimpsed the koalas in the tree tops and, later, were provided with a viewing house outside the fence, overlooking the lake.

Meanwhile, in the open spaces managed by the Grounds Committee the planted natives continued to die. The forum was the most conspicuous failure.

The central circulation space through which we all passed several times a day, overlooked by the Union and the hundreds of rooms of the Menzies Building, the scene of vast gatherings of concerned students — the forum was an environmental disaster.

Treeless and flat, part grass and part uneven paving, it was an ordeal to cross in almost any weather.

The white concrete reflected the fierce sunlight, the rain lay in small lakes in the sunken paving, the grass shrivelled in the shallow soil, and the wind tore round thecorners of the Menzies Building and through the colonnade with such force that the swing doors became a serious danger and had to be replaced with mechanical sliding ones.

Present students must wonder at the permanent message on the central doors about a "High Wind Day".

The turning point was the appointment in late 1966 of the first Curator of Grounds, Alan Wrigley.

A thoroughly professional practical gardener, he set about changing the elemental forces of the hilltop. He installed extensive drainage in the clay, and simultaneously reticulations of water supply; he re-designed the levels of the swampy areas so that the water ran away; he raised the planting areas above the general level, and diversified the prevailing flatness with mounds and undulations. Then he set about taming the wind.

Bates, Smart and McCutcheon — the new university's architects — had planned a wide perimeter of small native trees such as acacias and boobiallas. By 1967 many of these were already coming to the end of their short natural lives.

Wrigley began his windbreaks out at the perimeter by planting large trees among these smaller ones. Then, in the shelter provided as these grew up, he planted, progressively inwards, more large trees.

Eucalypts can grow spectacularly quickly in Melbourne, and under his care this advancing forest soon began to moderate the wind in the central zone and allow the establishment of dense plantings of shrubs and trees there.

Early spring

So were established the sheltered groves between Science and the Union, further protecting the forum. When Wrigley left to manage the gardens of the City of Frankston, John Cranwell became Curator.

Under his care, until his retirement in 1984, the grounds have matured. The present site is indeed transformed from the prospect that was Clayton 25 years ago.

It is a place of perpetual flowers, and of a spring so early that it almost precedes winter — the great blooming of shrubs reaches a peak in June.

It is a sheltered, pleasant place to move or to rest, with water and shade, birdsong and green lawns, and an ever-changing, endless variety of plant life to observe.

There is still much to be done to make it a better garden. Two places where thousands pass each hour are unworthy deserts: the Great Windy Desert between the Library and the Menzies Building, and the Hot Walled Desert north of the Union. The Matheson Gum itself is surrounded by junk and threatened by burning rubbish.

As a symbol of the handing on of our traditions to those who will manage the next 25 years, trees grown from the seeds of the Matheson Gum are to be planted by the Chancellor and the Deputy Chancellor during the celebrations.

It is our hope that the trees will grow to be as grand and beautiful as the original tree and that others will find ways to do what we have failed to do.



• John Cranwell (centre) planting the Newton apple tree, 17 July 1975.

Fire burn and cauldron bubble

How to review a book as delightful and of such good value as the Botany department's Silver Jubilee Herb and Spice Book?

the good news because copies might become hard to obtain.

Then there is the question of doing justice to an unorthodox production which does not meet any criteria for an easy-to-manage, commercial-type cook book.

It has no index or table of contents, no slick binding with clean-wipe glossy cover and none of the standard photos.

It doesn't even have a pattern for entries - soups, main courses, desserts and beverages appear throughout.

What it does have, in abundance, is informative, entertaining and unusual methods of preparing foods to delight most palates.

There are immensely appetising and practical - though often bizarre recipes from Ancient Greece and Rome through to the Middle Ages, the Renaissance and the modern world.

According to editor, Dr Neil Hallam, almost all of the 200 or so recipes have been tried and tested in Botany department practical classes on culinary herbs and spices.

"The book is an aggregation of the efforts of staff and students at these classes over the past 12 years," he says.

The modern section includes dishes from Asia, India, the Mediterranean and the Middle East, and the book concludes with culinary oddities - elephants, guinea pig, hedgehog and so on followed by a listing of some grape varieties used for wine making in Victoria.

But that's not all - there is an extraordinarily good reference section in the beginning about herbs and spices, and entertaining items throughout provide an atmospheric setting for many dishes.

And now for the recipes - first some of the bizarre:

BLOOD PANCAKES

1/2 pint calf's or sheep's blood

I gill beer or kalja 1 egg

1 small onion

4 tablespoons rye flour

4 tablespoons barley flour pinch mixed herbs

2 teaspoons salt

cranberry jelly melted butter

2 oz pork fat for frying

Strain the blood into a bowl. Chop the onion finely, fry lightly and add to the blood with the beer or kalja, beaten egg, herbs, seasoning and flours. Stir well until the batter is smooth, then leave to stand for about 30 minutes. Pour a thin layer of batter into a small, hot, greased pan and fry on both sides until done. When all the butter is used up, serve the pancakes hot with cranberry jelly and melted butter.

CLOUD EARS IN HOI SIN SAUCE

1/2 cup dried wood fungus*

2 teaspoons hoi sin sauce (Singapore blends are

2 tablespoons light soy sauce

1 small clove garlic

I teaspoon sesame oil

1/4 cup water

1 teaspoon cornflour

2 teaspoons peanut oil 1 tablespoon cold water.

Wash the wood fungus and soak in hot water in a large bowl for one hour. The fungus will

For a start, there's reluctance to spread swell up to many times its original size. Rinse and cut off any frotty parts and then cut into bite-size pieces. Mix hoi sin sauce and soy sauce. Crush garlic. Heat both oils (sesame and peanut) and fry garlic over a low heat for a half. a minute. Add sauces and water, wood fungus and stir until heated through and boiling. Thicken liquid with cornflour mixed with cold water and serve with noodles. (Wood fungi has a flavourless resilience and is used more as a texture ingredient. Cook only for a minute or two after swelling.)

> Get wood ear, Jews ear or cloud ears - a dried fungus from a Chinese merchant. These names refer to Auricularia polytricha collected in China and dried for export. Auricularia auricula is a common species growing on elder in Europe and North America which can be used in place of A. polytricha but has less crunch. Australia Auricularia, possibly polytricha is edible and could also be used.

Now some of the practical:

EGGPLANT PATTIES

Eggplant, onion, parsley, grated cheese, wheatgerm, pepper and salt, beaten egg, wholemeal breadcrumbs and oil.

Chop eggplant in thick slices and simmer gently in salted water until medium soft. Drain, mash and put into basin. Add a small chopped onion, a lot of parsley, pepper and salt, and a fair amount of grated cheese. Add beaten egg. Mix in some wheatgerm to a reasonably handle able consistency. Make into patties and roll in wholemeal breadcrumbs. Fry in hot oil for a few minutes. Serve with hot brown rice or with a green salad.

BAKED FISH WITH FENNEL

4 whole cleaned and scaled fish, each about 500g (1 lb)

1/2 cup olive oil or melted butter 2 shallots

2 roots Florentine fennel, with leaves 2 lemons

salt and freshly ground pepper

chopped parsley for decoration. Remove leaves from fennel roots and reserve. Cut roots into thick slices and blanch in boiling, salted water for 2-3 minutes, then drain and reserve. Lay fennel leaves on the bottom of a greased baking dish. Lay fish on fennel leaves and make 3-4 diagonal cuts across flesh on both sides of fish. Remove pith and peel from lemons, slice and insert slices into the cuts. Chop shallots finely and arrange around fish with fennel root slices. Pour oil over the fish, season with salt and pepper, and cover loosely with brown paper. Bake in moderate oven (180°C-350°F) for about 1 hour or until fish is cooked, basting from time to time with the pan juices. Remove the brown paper for the last 15 mins. Garnish with parsley and serve.

And lastly, something exceptionally

CHICKEN CURRY OF 200 ALMONDS

4 chickens

4 cups desiccated coconut

2 onions, peeled, spiked with cloves

salt, pepper 200 almonds (1 lb)

30 chilli peppers

6 cloves garlic 2 tablespoons poppy seed

1 lb butter

2 cups tamarind juice

Put half the coconut aside and use the remainder to make coconut milk, i.e. take 2 cups of desiccated coconut and add 1 cup of warm water. Leave for 20 mins and then sieve or squeeze through muslin. Boil the chickens in plenty of water with the clove-spiked onion,



. "... and a touch of green pepper". Was Neil Hallam showing Margaret Clayton new ways with seaweed?

salt and pepper. When tender (approx. 1 hour) take out the chickens and remove meat. Keep the stock. Grind the almonds in a blender with chillis and garlic and the rest of the coconut with enough liquid to make a paste. Heat the butter in a frypan and lightly fry the paste. Add the chicken stock and coconut milk. Simmer till thick. Add the tamarind juice and chicken. Serve with boiled rice.

• The Silver Jubilee Herb and Spice Book can be bought for \$7.50 a copy from Botany laboratory manager, Annabel Pennell, ext. 3810. (Room 109, Biology building.)

* * *

Books on Southern Australian flora written by past and present staff members some books.

are among other works on sale from Ms Pennell's office in the Botany department.

The works, which include a set of six posters on fungi, wildflower posters, and books describing Victorian flora, are on display in the Biology building.

Staff members wrote four of the books: The saltmarsh plants of southern Australia by Bridgewater, Rosser and de Corona (\$5); The mosses of southern Australia by Scott, Stone and Rosser (\$18); Southern Australian liverworts by Scott (\$20); and The distribution of Victorian plants by Churchill and de Corona (\$1.50).

Student reductions are available on

First catch your fishfarm

A new industry developing in rural Victoria provides employment, supplies restaurants, supports the tourist industry and uses land which would otherwise be unproductive.

The industry is fish farming, and its potential has been outlined in a report by the Graduate School of Environmental

About 600 tonnes of rainbow trout worth \$4 million are produced in Victoria each year.

The state's trout production is 60 per cent of that for the whole of Australia, and the industry provides 40 full-time jobs and the same number of part-time ones on the 19 existing farms, says the report by Hania Bibrowska and Pattama

Semarat. "Fish farmers are a group of people with diverse backgrounds and work experience.

"For most, fish farming is not just another occupation; more than half

"Farmers believe that after some years of development, the industry is now established and ready for expanded production."

The report says fish farming in Victoria should be supported by the government through information, incentives and guidance on choice of sites.

Environmental Report No. 24, The

potential of trout farming in Victoria, is available from the Graduate School of

Environmental Science. Two other recent publications also available are Environmental Report No. 26, Energy autonomy for community buildings: A checklist for assessment, and Environmental Paper No. 5, Predicting householders' responses to energy conservation policies.

Marvellous Nowra

After many valiant attempts to retain its Marvellous Melbourne jubilee production, Student Theatre has abandoned this "theatrical extravaganza" for something a little more manageable.

Director Susan Bamford has taken on the mammoth task of preparing for Louis owra's Inside th performed in the Main Dining Room later this month.

The show will open on 25 July, and performance times are as follows: 25-26 July, 8 pm; 27 July, 5pm; 29-30 July, 8pm; 1-2 August 8pm.

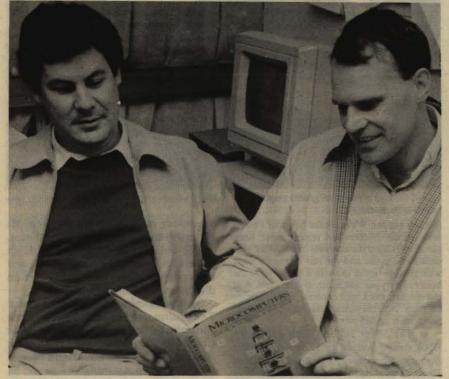
Inquiries should be directed to Sue Thomson, Student Theatre Co-ordinator, on ext. 3108.

Books Computing the costs for local government

A new book by Dr Michael Taylor, senior lecturer in Civil Engineering, and Dr Peter Newton, principal research scientist for the CSIRO, looks at the role and potential of microcomputers in local government. Dr Taylor discusses the problems facing local governments in the 1980s, when they are required to take on new roles and to supplement community services once provided by Federal or State bodies.

The very structure of, and interrelationships within, local government are under question, and the increased

responsibilities must often be faced from a static or even diminishing resource base. The microcomputer and associated



software represents a major means for local government to enhance productivity in the face of the growing demands upon its human and financial resources, and to enhance its capacity for innovative and responsive decision-making via information analysis and display, computer-aided design, interactive planning, graphics and other facilities.

Use of computers in local government is not a new phenomenon per se: a decade ago one in five municipalities in Australia owned a computer system, and a further one in five used a computer bureau

At that time computing was a central facility functionally linked to a limited array of financial-administrative activities and accessible to only a small elite within the EDP section.

There is now a clear break with this earlier pattern.

Personal computers are appearing in sections and departments, allowing technical groups such as planners, engineers and building surveyors to use a growing range of analytical packages in their work.

Software, most of it original and developed in this country, has application in data management and display, strategic planning, human services planning, engineering, construction management and maintenance scheduling, and financial management and control.

In keeping with the general develop-

· Peter Newton, left, and Michael Taylor.

ments in computer and information technology, software applications continue to lag behind the developments in computer hardware.

To a large part, this is due to the difficulties for practitioners from disciplines outside the computer field to learn about the possibilities offered by the state-of-the-art in microcomputing.

Microcomputers for Local Government Planning and Management attempts to overcome this communications gap, by providing information for professionals in all fields with interests in local government activities.

It presents a range of newly developed microcomputer software of practical relevance to practitioners in local and state government, and private sector consulting firms which service them, as a means of reducing this lag.

Crucial area

It further provides educators and students in areas such as civil engineering, planning, architecture, environmental science, computer science, economics, geography, sociology and accounting with insights into the structure and problems of contemporary local government, and the possible means offered by the new information technology to tackle these problems.

The discussion also includes the potential for individual and organisational dislocation which may result from the rapid introduction of microcomputers into an organisation, and the possibilities for minimising these effects.

The supply of microcomputers in local government is a crucial area of concern.

To the extent that advice can be given in such a rapidly changing technological environment, attempts are made to define the criteria of interest when acquiring microcomputer equipment.

Methods and working models are outlined for accommodating the vast amounts of information pertaining to any local area: its population, housing, industry, infrastructure and services.

In a section on strategic planning, the focus is on the longer view regarding local area development and change (as opposed to statutory planning).

In this context a number of microcomputer-based procedures capable of providing insights into probable future scenarios are described.

The book also considers means by which human factors can be accommodated in planning - through awareness of changes occurring in the local and surrounding region, and through seeking information from the community.

It deals, too, with more traditional issues confronting local authorities.

These include the management of road traffic in local areas, quality and protection of the environment, construction of buildings and facilities, energy conservation and solar access.

Methods for waste collection and disposal are outlined, as are methods for evaluating community-wide impacts of new retail centres.

The final part provides speculations about the next generation of planning models and procedures, which are likely to incorporate aspects of computer artificial intelligence in the context of computer-aided design and decisionmaking.

 Microcomputers for local government planning and management is published by Hargreen Publishing Co., Melbourne.

'Non-vocational' but very productive

In the face of a strong attack by the Federal Finance Ministry on "non-vocational courses such as Slavonic languages", the department of Slavic Languages has released three significant publications.

They include a special Monash edition of one of the two most important western academic journals of Ukrainian, the first western book on the Czech language to be published in Czech and a volume in English on Ukrainian settlement in Australia.

Monash scholars contributed almost all the papers in the Journal of Ukrainian Studies, Volume 10, Number 1.

In fact, the bulk of the journal was preedited by lecturer in Ukrainian, Dr Marko Pavlyshyn and Professor Jiri Marvan of Slavic Studies and sent off as a unit to the Canadian managing editor.

Dr Pavlyshyn said: "The reason we did it was to establish ourselves as a place where Ukrainian studies is taken seriously as an academic discipline.

"All of the academics in the department contributed, not just the Ukrainian

A reviewer in the Times Literary Supplement said the journal "continues to maintain a high academic standard, broad coverage and relative impartiality."

According to Professor Marvan, two scholars at Yale University found it difficult to believe he could write a whole book on one grammatical structure in

But that is exactly what he has done in Ceske Stupnovani (Degrees of comparison

The book is a study of Czech comparatives and superlatives as an example of a simple system of word inflection.

But Professor Marvan says it is much more than that.

"It represents a counterbalance to the approach to linguistics in Czechoslovakia, and should set up an important dialogue situation with scholars there.

"Also I hoped to stimulate interest in their language among Czechs in the West."

The book was published in Munich and is under review at present in West Germany, the US, Austria, Poland and the

In April, 1985, the department jointly sponsored a conference on Ukrainian settlement in Australia, with the Shevchenko Scientific (academic) Society, an organisation of Ukrainian scholars with a tradition extending back more than

Dr Pavlyshyn has now edited and published in English a selection of the papers from that conference.

The resulting book, Ukrainian Settlement in Australia, includes papers on Ukrainians in Australian society, their language, literature, people, institutions and scholarship.

"We wanted to get such a volume into Australian libraries, so that people interested in multicultural affairs would have something in English accessible to

Information on all three publications is available from the department of Slavic Languages, ext. 2258.



• Professor Marvan, left, and Dr Marko Pavlyshyn.

There are no perfect methods

Not only does The Complete Guide to Contraception and Family Planning contain much information that would simply not have been available a decade ago, but it is presented in an uncomplicated style that might not have been possible then.

Co-authored by senior lecturer in Obstetrics and Gynaecology, Dr Gabor Kovacs and science and medicine writer,

Monash scholars have made a series of

which

The predictions have been collected in a book called *Towards 2000* (sound

familiar?) which deals with the future of

education in Australian society.

predictions

Ann Westmore, the book is an unemotive, non-moralistic, readable and up-to-date survey of the methods of contraception now available, how they work and their strengths and weaknesses.

It is a fine example of how a new generation of Australian writers is capable of putting science and technology into intelligible language.

The book makes a number of impor-

Edited by Jenny Baldwin from the

Special attention is given to the challenge faced by people entering these

Mr Lionel Parrott, Officer-in-charge of

Careers and Appointments, said the book

was not intended as a drawcard for

It was aimed at Year 10 and above and

People don't realise there are hundreds

designed to encourage people to think

of possible scenarios for future social

The Minister for Science, Mr Barry

Jones, who wrote a foreword to the book,

said he was thrilled with the emphasis

placed on disciplines which dealt with

cultural enrichment and diversity, such as

anthropology, visual arts, and language

beyond the immediate future.

development", he said.

Careers and Appointments Service, and

sponsored by BHP, the book introduces

36 professional disciplines.

professions.

tertiary institutions.

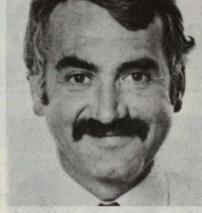
tant points: There is no perfect method of contraception - each one has its cost in efficiency, health and comfort.

The best method will vary between people and be different at different times.

And the risk of pregnancy and childbirth still tend to be greater than any form of contraception.

After a handy chart summarising the strengths and weaknesses of the readily available methods, the book begins with a number of case histories illustrating just how idiosyncratic contraceptive decisions

Next comes a look at the male and female reproductive systems and then the



Gab Kovacs

survey of contraceptive methods divided into three categories - short-acting, medium-term and permanent.

Finally, there are chapters on how to

decide which method is best for you, and likely developments in contraception.

Tim Thwaites

'The Complete Guide to Contraception and Family Planning' by Gab Kovacs and Ann Westmore is a paperback published by Hill of Content and sells for \$9.95.

A Monash graduate has started an international system which offers security of copyright to authors and composers.

Mr Savvas Christodoulou, a solicitor, barrister, and musical composer, is operating a scheme of voluntary copyright registration in which the author is also guaranteed legal services up to the value

The system is designed to provide evidence of ownership to authors and composers, in the absence of a government registrar like that available for

aware some years ago of the need for a central register when he was forced to defend copyright for his own musical

Register of copyrights

of \$5,000.

These services include drafting of documents relating to copyright, as well as the charges involved in defending a copyright challenge.

patents and trademarks.

Mr Christodoulou said he became

Doug Walters to visit club

Education into

the 21st century

could rival

Former Test Cricketer, Doug Walters, will be guest of honor at the University Club's Guest Night on Wednesday 23 July, between 5pm and 7pm.

Lionel Parrott

The evening has been arranged in association with Bond Brewing, and

Summer in Britain

Students wishing to work and travel in Britain during the summer vacation can apply for work placement through the Britain Australia Vocational Exchange

Successful applicants must meet travel costs to Britain, work for eight weeks, and pay accommodation costs. A minimum weekly wage of 90 pounds sterling is guaranteed.

Detailed information leaflets and application forms can be seen in the Information Office, University Offices.

FELLOWSHIPS

Medical Fellowships are available under the Commonwealth Scholarship and Fellowship Plan to teachers in medical disciplines for research in the United Kingdom. Applications must be made to Mr Clive Vernon, Graduate Scholarships Office, by July 18.

members will have the opportunity of tasting 2.2 Light on tap. A snack cooked with beer will be served free-of-charge.

The licensed club, which opened in 1976, welcomes inquiries about membership, facilities and take-away catering.

Facilities available include a snack bar and bistro, a la carte private dining-room, bar and bottleshop.

Further information can be obtained from the manager, Mr Paul Ricco, on ext. 3169.

Newman program

The Monash Newman Society's term two lecture series continues next Monday, with Father Patrick Laws speaking on the future of Catholic education.

The remainder of this month's program

14: Leo XIII: Modern industrial society, St Pius X: Modernism and Benedict XV: First World War.

Br Christian Moe.

21: Morality for persons: Embryo experimentation and euthanasia.

Dr Norman Ford.

28: Pius XI: Age of totalitarianism and Pius XII: The modern papacy at its acme.

- Br Christian Moe.

All lectures begin at 1.10 p.m. in R2 and admission is free.

More women for Rhodes

The Honorary Secretary of the Rhodes Scholarship Selection Committee for Victoria, Mr J.B. Potter, has urged academic staff to encourage more women

He said the scholarship was opened to women 10 years ago but some people could still be under the impression that it was restricted to men.

Since 1976 there have been three female Victorian Rhodes Scholars, the most recent being Lynne Sampson who won the scholarship last year.

"Women applicants are assessed in exactly the same way as men," Mr Potter

"They should be good all-rounders, with not only high academic achievements but also thoroughly involved in sport and community services."

Application forms for the Rhodes Scholarship are available from, and may be lodged with, the Registrar.

A Rhodes Scholar receives a personal allowance fixed by the trust.

In 1986-7 the allowance will be 4002 pounds a year. In addition all fees are paid by the Trust directly to the Scholar's College at Oxford. The Rhodes Trust will also help successful candidates with their travelling expenses to Britain.

IMPORTANT DATES

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

5 Mid-year break for B.Juris and LL.B. ends.

7 Lectures in subjects and units taught in the second half-year by the faculties of Arts and Economics and Politics begin. Second teaching round begins, Dip.Ed. Second half-year topics in Mathematics begin. Second half-year begins for LL.M. by coursework.

8 Publication of mid-year results - Law. 11 Publication of mid-year results Education.

12 Second Term ends for Medicine VI (Prince Henry's Hospital students).

14 Second half-year begins for B.Ed., B.Sp.Ed., Dip.Ed.Psych. and M.Ed.St. Second half-year begins for Medicine V. Last date for discontinuance of a subject or unit taught and assessed in Medicine III for it to be classified as discontinued. If a subject or unit is not discontinued by this date, 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 14 July and the end of the appropriate teaching period.

18 Last date for second half-year course/ subject/unit/changes (excluding the Faculty of Education, and the faculty of Economics and Politics where the change follows the release of results in mid-year tests). After 18 July no student may take up a new subject or unit taught in the second half of the year, except with the permission of the dean of the faculty, and on payment of a late change fee calculated at the rate of \$5 for up to one week late; \$10 for between one to two weeks late; \$20 for more than two weeks late. Last date for discontinuance of all studies by not-for-degree, diploma, bachelor degree and Master preliminary candidates, and by Master candidates defined as coursework candidates, to be eligible for 50% refund of the 1986 Union fees paid (not applicable to students taking Summer Term

19 Second Term ends for Medicine VI (Alfred Hospital students).

21 Third Term begins for Medicine VI (Prince Henry's Hospital students).

25 Closing date for change of course, subject or unit taught in the second half-year in the faculty of Education, or in Economics and Politics where the change follows the release of results in mid-year tests. Second teaching round

Signs of change

... and changing signs



 Could it be that The Herald has more influence than we do? A photo of our mystery Open Day visitor, above, was featured in one of its recent editions together with all the information we could not obtain. So it can now be revealed that he is Mr Ken Matthews, fitter and turner and collector of issues, who takes his sandwich board out most weekends with a new slogan attached.

When the university's architect, Rob Horsburgh, was asked to update the signposts around campus he found one basic problem.

There were virtually none to be worked on, apart from the main directional signs on the ring roads.

It seemed fitting that in the university's jubilee year the size and complexity of the present campus should be recognised by the provision of signposts.

The Silver Jubilee fund came up with the money, and after a detailed study of requirements like color, flexibility (to remove or add signs) and positioning, the system was installed just in time for Open Day.

To those who find the white lettering on the bright blue background a little out of tune with the native gardens, Mr Horsburgh says it was chosen for its legibility, particularly in fading light.

"It draws people's attention, it's reasonably easy on the eye, and it won't fade too much.

"Each sign is related to the others so wherever you are on campus you can be directed to any of the faculty precincts or to the most heavily used facilities," he said. said.

The signs have been placed at 27 points along the pedestrian network.

The next stage of Mr Horsburgh's plan will be to have signs erected at the entries to buildings indicating the departments housed within.

Monash Reporter

The next issue will be published in the second week of August, 1986.

Copy deadline is Friday, July 25 and early copy is much appreciated.

Contributions (letters, articles, photos) and suggestions should be addressed to the editor, Lisa Kelly, Information Office, University Offices, or ring ext. 2003.



JULY DIARY

The events listed below are open to the public. RBH throughout stands for Robert Blackwood Hall.

- 1: HISTORY & PHILOSOPHY OF SCIENCE LECTURES "Museum of Victoria Past, Present and Future", by Dr Hayden Downing, Museum of Victoria. JULY 8: "Writing about Science", by Dr Rosaleen Love, Swinburne Institute of Tech. JULY 15: "History of Mechanical Computing", by Mr Trevor Clarke, CSIRO. All lectures at 8.15 p.m. Senior Common Room, Mannix College. Admission free. Inquiries: ext. 3983.
- 2: ENVIRONMENTAL FORUM "Environmental Public Educational Materials: Their Nature and Assessment?", by Dorothy Evans. JULY 9: "Solar Green Houses", by Bob Fuller, Dept. of Agriculture. JULY 16: "War Culture", by John Hinkson, Education Dept. La Trobe. JULY 23: "Ethical Investment", by Henk Bak, School of Art and Design, CIT. JULY 30: "Teil Hard De Chardin and the Gaia Hypothesis: Linking Spirituality, Ecology and Politics", by John Andrews. Environmental Science Seminar Room. 5.15 p.m. Inquiries: ext. 3839
- 3: ABORIGINAL STUDIES
 LECTURES "Land ownership and
 the sacred sites Northern Territory",
 by Mr N. Wallace. JULY 10: "Urban
 Aboriginal relationship to the land", by
 Mr I. Brown. JULY 17: "Land rights
 Federal scene", Mr G. Clark. JULY
 24: "Land rights State", by Ms E.

- Fesl. JULY 31: "Land rights Government View" (or film). Admission free. 1 p.m. 2 p.m. Lecture Theatre R6. Inquiries: ext. 3348.
- Theatre R6. Inquiries: ext. 3348.

 3: RELIGIOUS CENTRE "Harpsichord Recital", by Margaret Sims. JULY 10: "Organ Recital", by Douglas Lawrence. JULY 17: "Lime", Improvisational Acoustic Ensemble. JULY 24: "Harpsichord Recital", by Harold Fabrikant. JULY 31: "Apollo Ensemble", Vocal Ensemble. Large Chapel, Religious Centre, 1.10 p.m. Admission free.
- 3: SOUTHEAST ASIAN STUDIES SEMINAR "Conceptualising Agrarian Structure in Colonial Indonesia", by Prof. Joel Kahn, Dept. of Anthropology. 11 a.m. Room 515, Menzies Building. Admission free. Inquiries: ext. 2197.
- 5: ARTS & CRAFTS Weekend Workshops in Calligraphy (Inter./Advanced), Painting and Drawing, Pot-Pourri and Fragrant Gift Making, etc, etc. For further information and free brochure, phone ext. 3180/3096.
- 5: EVENING CONCERT Monash University Choral Society together with the Zelman Memorial Orchestra conducted by Andre de Quadros present Haydn's "Creation". Admission: adults \$9, concession \$5. Phone bookings
- 8: GALA VARIETY CONCERT —
 Benefit concert for the Victorian
 College of the Arts Dance Tour Appeal.
 Featuring Johnny Young Talent School,
 VCA School of Dance, VCA School of
 Music, Alexander Theatre. Bookings
 phone 795-3011.

- 12: EVENING CONCERT ABC
 Perspectives Concert No. 4. The
 Melbourne Symphony Orchestra
 conducted by Hubert Soudant.
 Program: Symphony No. 25 Mozart,
 Suite concertante Moreno-Buendia.
 Soloist: Marisa Robles, Symphony No.
 3 Roussel. Admission: adults A Res.
 \$17.20, B Res. \$14, C Res. \$10.80,
 conc./pensioner A Res. \$14, B Res.
 \$10.80, C Res. \$9, Youth (under 21 yrs
 & full-time students to 25 yrs inc.) A
 Res. \$9, B Res. \$7.50, C Res. \$6. RBH.
- 14: MIGRANT STUDIES SEMINARS —
 "Inter-generational mobility in ethnic groups", by Prof. Burnley. JULY 28:
 "Play and friendships in a multicultural playground", by Heather Russell.
 7.30 p.m. R6. Inquiries: ext. 2245.
- 14: LUNCHTIME CONCERT Harold Fabrikant (organist), Program of works by Balbastre, Alain, Messiaen and Langlais. 1.15 p.m. Admission free. RBH.
- 16: BIOETHICS LECTURES "Morality and the Law: Some new problems", by Baroness Mary Warnock. Lecture Theatre R2. 1.05 p.m. JULY 23: "Some Ethical Issues in Psychiatric Medicine", by Professor Richard Ball, Melbourne University. Lecture Theatre R6. 1.05 p.m. Admission free. Inquiries: ext. 3266.
- 19-20: MONASH UNIVERSITY
 PARENTS GROUP Jubilee Art
 Exhibition and Sale. A unique
 opportunity to peruse and purchase the
 works of top Australian award-winning
 artists. 10 a.m.—8 p.m. Admission:

- adults \$1, students 50c. Also July 20, 11 a.m.—4 p.m. RBH.
 21: LUNCHTIME CONCERT Monash
- 21: LUNCHTIME CONCERT Monash University Gamelan Orchestra. 1.15 p.m. Admission free. RBH.
- 21: LECTURE & EXHIBITION Tom Roberts Lecture: "The creation of a blockbuster: The Golden Summers Exhibition", by Ms Jane Clark. 8 p.m. Richardson Hall dining room & opening of art exhibition by Prof. Margaret plant, Roberts Hall dining room. Preceded by a three course dinner. Open to public till July 27. Bookings close July 16. Inquiries: 544-8133.
- 24: SOUTHEAST ASIAN STUDIES WINTER LECTURES "The Early Twentieth Century Javanese Press", by John Paterson. "Malay Supplements in the Early Javanese Press", by Paul Tickell. JULY 31: "The Indonesian Press and Martial Law", by Andrew Goenawan. "Malari, Indonesia Raya and Dissent in Indonesia", by David Hill. 7.30 p.m. Lecture Theatre R6. Admission free. Inquiries: ext. 2197.
- 26: LUNCHTIME CONCERT "A Grand Band". Croydon and Eltham Concert Bands with guest artists: David Ashton-Smith, Carole McKenzie and Peter Jerabek. Admission: \$8, concession \$4. Groups of 15 or more \$4.
- 28: LUNCHTIME CONCERT Alison Myles (flute), Murray Sharp (piano). Program of works by Gaubert, Faure, Banks, Debussy and Martinu. 1.15 p.m. Admission free. RBH.