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'Put our oil \$s to better use': engineer urges

A senior lecturer in Electrical Engineering at Monash has warned Australia against being spendthrift with revenue from Bass Strait oil.

Dr Kevin Forward said recently that the special levy imposed on Bass Strait oil to bring its price in line with world prices was netting the Government in excess of \$1000m a year. This was going into general revenue.

Dr Forward said: "The oil is a finite resource. When it runs out there will be an enormous hole in revenue. Plus we may have to buy replacement energy from outside sources."

Dr Forward outlined his views at a recent meeting of a Monash new technology interest group. He elaborated on them for **Monash Reporter** afterwards.

He suggested that Australia might adopt a far wiser course by following the example of Britain in its deployment of revenue from North Sea oil.

He said that the British Government had legislated for profits from the oil to go into a special fund which would provide for the establishment of export-based industries. Earnings from these industries would help pay for the energy Britain had to buy from other sources.

Dr Forward said that the first investment from the fund had been in an electronics firm.

This firm — Inmos — has been set up under the direction of one of Britain's top computer technologists who has, as an incentive, a financial stake in its success.

The first activity of Inmos has been to go to the home of the most advanced computer technology research, the US, to recruit some of the best talent and establish a plant.

Dr Forward said the plan was to develop a new process, provide for the industry something which was not already being provided, export the know how back to Britain and establish a plant there parallel with the one in the US.

He said it was believed that the researchers were working on a microprocessor designed to manipulate alphabetic rather than numeric characters.

Dr Forward emphasised that the key element in the firm's strategy was the bid to do something which was not already being done.

He said that this aim should be borne in mind by those who advocated that Australia should not be importing technology but making its own equipment.

He said it would be senseless for a country like Australia to encourage home manufacturers to duplicate what was already on the market. In the two to three years it would take to set up a plant the overseas market leaders would be that much further advanced on the learning curve and would most probably have developed processes making the earlier ones obsolete.

Dr Forward said: "The computer industry is, however, one in which there are many discontinuities. The point is to identify and utilise one of these and find an advanced place along the learning curve to enter. It is a challenge for those with creative minds."

INSIDE: The new technology

Monash Reporter continues a series on campus debates and discussions which have been taking place on the new technology and its social impact. See pages 4 to 6.

Monash to take on Olympic air as we sit in on world fence

Monash University will take on the atmosphere of a mini Olympic village when the World Fencing Championships are staged here from August 18 to 28.

More than 500 competitors from over 30 nations will take part in the Championships which are being held in Australia for the first time.

The Championships — fencing's most prestigious event — will be watched keenly for pointers to form, prior to the Olympic Games in Moscow next year.

A total of eight titles will be decided: men's and ladies' foil, epee and sabre, individual and teams events. All the preliminary rounds will be held in the Monash Sports Centre, with the finals, in the evenings, at Robert Blackwood Hall.

During their stay at Monash the competitors will be housed in the Halls of Residence.

The Championships will provide one of the few occasions when Australia has been able to field full teams for all events... an invaluable opportunity for the Australian selectors to assess our Olympic potential.

Greg Benko and Helen Smith are likely to provide Australia's best chances for honors. Benko was a finalist at the Montreal Olympics and has been training since in the United States with Ernie Simon, the current Australian champion.

Helen Smith and another front-liner, Mitzi Ferguson, have both been gaining experience in Europe in recent months, and hopes are high that they will make a good showing in the ladies' foil event.

Tickets for the Championships are available at all Bass Ticket Agencies. Anyone interested in more details can contact Caryl Oliver on 49 1169.

Record enrolment in 'actual bodies' terms



Monash this year has its highest ever student enrolment (in 'body count' terms): 13,910 persons, compared with 13,698 last year.

Expressed in EFTS (equivalent full time students) terms, however, the 1979 student population officially is 12,863.

The apparent discrepancy in numbers is explained partly by an increase in the number of part-time students. These now account for 33.3% of the total enrolment, compared with 31.9% in 1978.

Figures taken out on the traditional 'stocktaking' day — April 30 — revealed:

● Intake of students for first year bachelor degree courses was above quota in all faculties.

● There was an overall increase in higher degree enrolments. These now total 2226 persons — or 16% of the total, compared with 15.1% in 1978.

● Female enrolments continue to grow as a percentage of the student population — 41.7% now as against 40% in 1978 — and the trend is likely to continue because girls completing HSC outnumber boys 52 to 48.

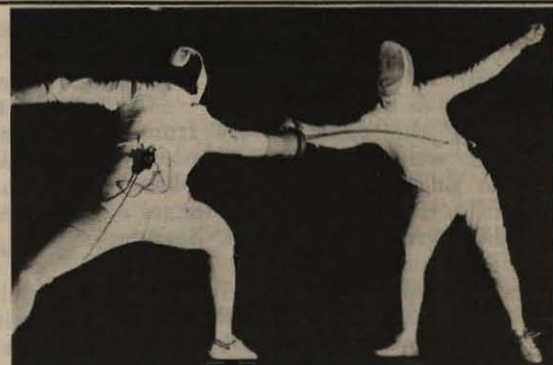
At its meeting on May 22, the Committee of Deans expressed satisfaction that the University had achieved an overall enrolment within the Tertiary Education Commission's target range (12,800-13,100), and within 0.5% of its own projected target of 12,925.

There was concern, however, that the upper enrolment limits imposed by the TEC virtually restricted any further growth in the Monash graduate school, particularly in regard to research degrees.

The Committee was also concerned about the continuing trend to part-time higher degree study, which accounted for most of the growth in higher degree enrolment.

Total EFTS enrolments (both undergraduate and higher degree) for all faculties for 1979 are:

Arts	3004 (2.1% below target)
Ecops	2374 (2.3% above target)
Education	1266 (1.3% above target)
Engineering	897 (0.8% above target)
Law	1197 (0.2% above target)
Medicine	1609 (1.4% below target)
Science	2615 (2.1% below target)



Discovering what the Dickens he had to do with Australia

“‘The’ Australian cricket entrepreneur is negotiating to bring to this country perhaps the biggest household name in the English speaking world, other than a politician, for a series of performances.”

Such news would not be meaningless on the front page of Melbourne newspapers today.

It made the front pages of 1862 also. The entrepreneur was Spiers and Pond who brought to Australia the first English test side; the “household name” was Charles Dickens.

The sum offered was 10,000 pounds for an eight month tour of a program, tentatively titled *The Uncommercial Traveller Upside Down*, in which Dickens would read from his work. (The author’s contemporary and biographer John Forster reveals that Dickens, ever the shrewd businessman, planned to reject the offer and take a percentage cut instead, designed to net him at least 12,000 pounds).

The trip was never made.

It was just eight years before his death and, although only 50 years old, he was unwell through overwork on his writing, editing and rigorous reading tours of England.

From all accounts Australian audiences missed out on an exercise in electrifying theatre. One passage he insisted on including in every performance was the Murder of Nancy from “*Oliver Twist*”. It is reported that during the reading, such was the emotion he put into it, his pulse beat at an unearthly rate and, when he left the stage, he was almost paralysed.

Although Dickens never made it to Australia he maintained an affinity with the country. That affinity is a subject of continuing interest to senior lecturer in English at Monash, Dr Alan Dilnot.

Dr Dilnot suggests that Dickens’s interest in Australia was greater than in any other country of the Empire.

The magazine he edited from 1850 to 1858, “*Household Words*”, averaged from four to five articles a year on Australia and the publication which followed, “*All the Year Round*”, carried a similar high number.

Among the contributors from Australia were people he had known well in England, including Caroline Chisholm, Horne (about whom former Monash writer-in-residence Barry Oakley wrote a play last year), Whitehead and Howitt.

Dr Dilnot says that perhaps the most telling demonstration of Dickens’s bond with Australia was his decision to send two of his sons here “to make their way in the world.”

Alfred d’Orsay Tennyson Dickens arrived in the colony in 1865. Edward Bulwer Lytton Dickens arrived in 1868, at age 16. Edward was Dickens’s youngest son and, it has been said, his best loved.

Dr Dilnot says that Dickens’s action in sending someone so young so far may seem harsh.

He says: “Dickens was determined that none of his children should stand on his reputation. In preventing this he was probably more severe than a less successful father would have been.”

If Australian audiences didn’t see the original they at least saw a close imitation. Alfred, who settled in the far west of NSW before moving to Hamilton in Victoria and then Melbourne, performed readings from his father’s works throughout Australia. He died in the US on his way “home” from a visit to England. The Dickens name from Alfred’s side does not live on: his grandchildren were all female.

Edward became a station manager at Wilcannia in New South Wales and, among other achievements, represented the area in Parliament and was a leading light in the Wilcannia cricket club. The name has survived with his descendants.

(An account of the two sons in Australia is given in a book written by Mary Lazarus.)

Dr Dilnot says that although Dickens was a prolific letter writer — he estimates the author wrote, on average, one and a third letters a day during his adult life — there are few of his letters in public institutions in Australia. The ones that do exist were written chiefly to people who had helped his sons.

He says that it is possible that others exist in private hands and re-

quests anyone with a Dickens memento to contact him. It would be particularly interesting, he says, to trace the correspondence with Spiers and Pond.

Dr Dilnot says that Australia rates a mention in most of Dickens’s novels with several of his notable characters coming here.

He traces a shift in attitude towards Australia in the novels, paralleling a shift in attitude of Britons generally.

In the earlier novels, like “*Oliver Twist*”, Australia is regarded fairly much in jocular terms and as a dumping ground — a fitting place for a miscreant such as the Artful Dodger to end his days, for example.

By the 1850s however — and in novels such as “*David Copperfield*” — it had become the country to which enterprising men might turn in order to become prosperous or a place to which a good hearted felon, like Abel Magwitch (“*Great Expectations*”), might go to expiate his offence and return with wealth.

There is a hint that Dickens himself thought about migrating. Biographer Forster talks about the author’s “old notion of having some slight idea of going to settle in Australia”.

He certainly encouraged others to do



● Charles Dickens ... Australia bound?

so. Dickens was on the board of management of a London home for “fallen women.” As part of the rehabilitation process the ex-prostitutes were encouraged to go to Australia to “make a fresh beginning”. Hundreds took the advice.

If Dickens had a soft spot for the colony then the feeling was mutual.

Barely a year after Melbourne was founded a paper published by one of its “fathers”, John Pascoe Fawkner, was running extracts from “*Pickwick Papers*.” Other Australian papers, operating outside vaguely drawn copyright laws, were pirating extracts from his books too.

Later, the business man Dickens interceded. “*Our Mutual Friend*” appeared in *The Australasian* “by agreement with Mr Dickens”.

Booksellers were doing a brisk trade wharveside in Dickens novels.

Within two years of Melbourne’s foundation a *Pickwick Cricket Club* had been formed. A ship which plied the route between Melbourne and Launceston was named *The Pickwick*.

No hard times for local devotees

Melbourne devotees of Charles Dickens this year celebrate the 75th anniversary of their special interest body, the Dickens Fellowship.

Several members of the Monash English department belong to the Fellowship which is now one of the few groups devoted to the study of a single author’s works still existing outside a university.

Dr Alan Dilnot has the task of writing a history of the Fellowship.

It was established in 1904, only months after the London body had been set up. Others were set up around the same time throughout the English speaking world. Many have fallen by the wayside, making the Melbourne group one of the longest surviving outside England.

The Fellowship exists to promote the study of Dickens’s

works and, as Dr Dilnot puts it, “to lend support to causes which would have been dear to his heart.”

“Although what he may have thought about, say, land rights, I’m not too sure!” he adds.

The Fellowship meets monthly to listen to papers on Dickens’s works and to discuss a book selected for special study. Once a year — on the author’s birthday, February 7 — a special dinner is held.

Dr Dilnot says that the Fellowship has been a lively body throughout the years and has even come to the aid of the country’s defence.

During World War I it published for sale a “*Dickens In Our Commonwealth*” booklet to raise money for the war effort and conducted fund-raising activities during World War II also.

Caring for second generation Monash

Not all members of the Monash community find contentment immersed in a learned journal or involved in work in the laboratory.

Some — and not only those who have come to a perverse conclusion on the worth of the pursuit of knowledge — find enjoyment in simpler activities, like finger painting, caring for pets and constructing castles with building blocks.

For the most part these uncomplicated pastimes take place in three buildings just off the northwest corner of the campus — Nos. 2, 16 and 18 Beddoe Avenue.

The houses form the Monash Creche, a registered children’s day care centre, which provides a service for

Monash students and staff and, if space permits, the general public.

The Creche provides full care for children up to five years old and also caters for school age children after school and during holidays.

“Care” includes hot lunches and morning and afternoon snacks as well as educational and stimulating play programs.

The houses at Nos. 2 and 18 care for children aged two to five. No. 16 is the “baby house”.

All three houses are supervised by mothercraft staff under the direction of Mrs Dorothy Hill, a nursing sister and mothercraft nurse.

Children are cared for on an hourly basis. Permanent bookings are normally required during term although

casual bookings are accepted if space is available. Casual bookings are taken during vacations.

The cost of the service varies for the three user groups — students, staff and general public. Students pay on a means-tested scale anything from five cents to \$1 an hour or \$12 to \$36 a week. Staff pay \$1.10 an hour or \$38 a week and the general public \$1.20 an hour or \$40 a week. For students and staff a second child is taken at half rate.

The Creche is a non-profit association and receives financial assistance from the University, the Union and the Department of Health.

For further information and bookings contact Mrs Hill on 544 4959.

Why Monash is not secular: honored churchman tells a divine story

Unlike Melbourne University, Monash is not, by constitution, a secular institution.

Its status was changed after a deputation consisting of Sir Edmund Herring and Archbishop Woods, with the support of Archbishop Mannix, met with Premier Bolte the day before the Monash University Act was to go before the Victorian Parliament in 1958.

The deputation sought — and obtained — the removal of a clause from the Act which would have excluded Monash from examining in Divinity. Such a clause is in the University of Melbourne Act upon which the Monash Act was modelled.

(Now) the Most Reverend Sir Frank Woods revealed details of this little known aspect of Monash's history in an occasional address to a recent Arts graduation ceremony. Sir Frank received an honorary Doctor of Laws degree at the ceremony.

This is how Sir Frank documented the history:

"My interest and involvement (with Monash) started in 1958 with a telephone call from Sir Edmund Herring, at that time Chief Justice and Deputy Governor of Victoria.

"He rang to tell me that on the following Tuesday (it was then, if I remember rightly, a Friday) the Monash University Bill was to come before the Victorian Parliament and that he had seen the text of it, and — this was what had disturbed him — that the Bill as it stood contained a clause prohibiting the University from examining in Divinity.



● Sir Frank Woods, former Anglican Archbishop of Melbourne and Primate of Australia.

"No other subject was excluded. "Sir Edmund thought — and I thoroughly agreed with him — that it would be a great pity if the Bill were passed with this exclusion in it and asked if I could do something about it. That something had to be done with speed.

"I immediately telephoned two people of influence in the community and in church circles, Dr McCaughey (Master of Ormond) and Mr (later Sir) Frank Rolland, asking their support for a petition to the Premier, Sir Henry Bolte, to have the offending clause excised from the Bill.

"It was essential that the petitioners should be thoroughly representative and that we had the support of the

redoubtable Archbishop Mannix. A personal visit, accompanied by Sir Edmund, secured that support and on the Monday Sir Edmund and I called on the Premier.

"I hope that my memory does not play me false that Sir Henry told us that the Bill had been based on the University of Melbourne Act, the wording of which had mostly been followed including the clause permitting the University to examine in all subjects but expressly excluding Divinity, so assuring the secular status of the University.

"He assured me that there would be no difficulty in excising the said clause. He doubted if anyone had given the matter serious consideration."

Sir Frank said the aim of seeking to change the University's status was not so that a Faculty of Divinity of the traditional kind — consisting of candidates for the church's ministry — could be set up.

He said: "What we wanted and hoped for was something wider."

A group was established to do some "thinking and planning". It consisted of Dr McCaughey, Mr Ronald Cowen, Dr (later Professor) Frederick, Dr (now Sir) James Darling, Sir Francis Rolland and Archbishop Woods.

Sir Frank said: "We were determined that whatever were eventually to be set up should be fully representative not only of the Christian traditions but should be a place where study and research would be facilitated for members of any and all religious traditions."

The interim Council of the University appointed a committee to receive the proposals and make recommendations to the Council.

The first plan was for a Chaplaincy Centre and Collegiate Library.

Professorial Board objected to the proposal for a library separate from the University library. But the Board supported the proposal for a Religious Centre.

"There was also some support for the appointment of a research professor or reader in religious studies," Sir Frank said.

An appeal was launched to raise funds for a single non-denominational chapel in 1966 with Mr John Parker, then treasurer of the Churches' Committee for Tertiary Education, playing a leading role in securing subscriptions.

The foundation stone of the Religious Centre was laid in 1967 and the building was completed the following year.

Sir Frank concluded his address by urging Monash to establish a readership in religious studies as soon as possible.

He said: "I know some of the difficulties of financing such a project. But so long as there is no such office there will be no students applying for the course.

"I believe that I am right in thinking that every one of the new universities in Great Britain offers such a course and that 99 per cent of the students are not candidates for the ministry of the church but ordinary men and women, laymen both to science and religion."



There was a pressing need to improve the standard of debate on economic policy in Australia, a Monash professor of econometrics, Professor David Giles, said recently.

Professor Giles was delivering the occasional address at an ECOPS graduation ceremony. He told the

Left: Professor Giles

Professor calls for improved debate on economic policy

graduates that there was much they could offer in meeting the need for improved debate.

(Professor Giles, at 29, is Monash's youngest professor.

He started his address by expressing doubts about his qualifications for the job as occasional speaker.

"My lack of age seems to preclude a certain type of address often associated with such occasions, despite my having been described as a 'young fogey' by one member of our faculty," he said.)

Professor Giles said there were two ways in which graduates could make a contribution toward improved debate:

- By pressing for a better base of data from which to draw the information needed in policy formation.
- By promoting the use of analytical quantitative techniques in the use of this information.

He said: "There is no doubt in my mind that despite considerable effort and expense on the part of successive governments the data set upon which so many important economic policy decisions are based is still quite inadequate. In many instances information is not available in the form needed to enable us to answer important questions.

"For example, an analysis of the policy implications of the observed shift in the saving ratio in this country is hindered by the fact that the published breakdown of private consumption expenditure is not compatible with the published breakdown of the Consumer Price Index."

He continued: "From a policymaking point of view a recurring problem is the delay so often associated with the release of new data. This alone can lead to poorly timed policy decisions and, when all of the lags associated with policy changes are taken into account, it is not uncommon for an intended stabilisation measure to be pro-cyclical rather than counter-cyclical in its effect.

"I believe that considerably more resources can be directed to improving the relevance and timeliness of our economic data before the marginal net cost equals the marginal net benefit of such an undertaking."

Professor Giles urged the graduates never to abandon their "formal tool kit" of analytical quantitative techniques in favor of "ad hocery".

He said: "If your training at this University has been successful then you should be able to recognise not only the merits of the tools that you have acquired but also their limitations."

Space physicist to lecture at Monash

A space physicist whose special field of research is the interaction between Earth and the Sun will deliver a public lecture at Monash this month.

He is Professor K. D. Cole, chairman of the Physics department at La Trobe University and head of the Division of Theoretical and Space Physics there, who will talk on *The Magnetosphere of the Earth* on Thursday, June 14 at 1.15 p.m. in lecture theatre S3.

The Division Professor Cole heads has been investigating plasma and atomic physics in the upper atmosphere as well as studying radio communication using the ionosphere

and theoretical work on transport properties and relativity.

He has concentrated on the interactions between Earth and the Sun, including weather and heating effects, as well as working on theories on Earth's ionosphere.

He is chairman of the local organising committee for the International Magnetospheric Study symposium to be held at La Trobe University in late November.

Articles by Professor Cole have appeared in *Nature*, *Planetary and Space Science*, *Space Science* and the *Australian Journal of Physics*.

He is a fellow of the Institute of Physics and the Australian Institute of Physics.

Technological future 'still ours to decide'

It is still within the power of people — through their government — to influence the nature of the technological changes that are taking place in society.

This was the message of hope that Professor Fred Jevons, Vice-Chancellor of Deakin University, had for a forum on "Employment in Universities and New Technology" held at Monash last month.

Professor Jevons was one of three principal speakers at the forum, sponsored jointly by the two Monash staff associations and two unions with members on campus.

The other speakers were Dr Russell Lansbury, senior lecturer in administration, and Mr Max Teichmann, senior lecturer in politics.

Professor Jevons said that most people seemed to take the view that "technological changes are coming — do what we may . . ."

Like weather

"This view is one that seems to me to make it rather like the weather, in that we can make forecasts — short-term and rather unreliable forecasts — about what is likely to happen," he said. "And we can decide what to do in the light of those forecasts, such as deciding whether to put on our winter woolies or our safari suits, but there's nothing we can do to change what is coming."

"I do not believe that is true. I believe that we can, collectively, influence the nature of the technological changes that are going to take place in our society."

He went on:

"Until the 1960s it was widely assumed that technological change is, in itself, a 'good thing', and there was a good deal of discussion about how we can promote technology, how we can stimulate innovation and so on."

"The assumption was that the changes would be good. But in and since the '60s people's attitudes have become more discriminating. They have taken more cognisance of the undesirable side effects that many technological changes have — in particular, such things as pollution."

Assessment

"And there sprang up a movement that has now come to be called the 'technology assessment movement' within universities in many countries, the basic thrust of which has been 'Let us try harder to foresee what the real effects of technological changes are going to be — not only the immediate effects, but also the more remote, second and higher order effects . . .'

"That movement is now something like ten years old and, to the best of my knowledge, employment prospects have not yet figured largely in the technology assessment considerations."

Professor Jevons said it was time that the 'technology assessment move-

ment' began to consider employment consequences as a major component in technology assessment.

"That is possible because technology creates jobs as well as displacing jobs."

"But there is a selective visibility effect here: it is easier to see jobs being displaced than new jobs being created."

"If we had been sitting here in 1879, it would have been very difficult to specify the kinds of jobs that were going to come into being during the next 100 years. Hence the selective visibility. And hence the overriding impression you get in public debate that technology has only one kind of effect on jobs and that is to destroy them . . ."

Professor Jevons said it was possible, in a general sort of way, to distinguish between the kinds of technological change that would create jobs and those that would destroy them.

"It seems to me a reasonable proposition that the federal government should, then, seek to stimulate the job-creating kind without at the same time stimulating the job-displacing kind," he said.

"Some economists would maintain that it is efficiency in industry that counts — and that philosophy is enshrined in the Department of Productivity."

"But if maximum productivity were to be the only consideration, why do we have pollution controls? There's no doubt that if industry weren't lumbered with pollution controls, it could make goods more cheaply than it does now."

"But we have decided, as a society, that we are not prepared to accept unlimited pollution. We're prepared to insist on pollution controls at the expense of the creation of wealth."

"You can say that unemployment is a form of social pollution and it is then reasonable to ask how much unemployment we're prepared to put up with."

"The government has at its disposal a whole armory of means of intervention in industry to bring about the kind of protection that's needed."

"I would mention two possible means: one is the system of research and development incentives, and the other is investment allowances, in the form of taxation allowances on investment in new machinery."

"The basis of my suggestion is extremely simple: all I am saying is that, in applying those two schemes, one might include employment consequences amongst the criteria."

"Why should the Commonwealth Government use our tax money to give incentives for the kinds of technology which are going to displace jobs at a time when many of us recognise unemployment as a major social problem. It just doesn't make sense."



The impact so far

In his opening address to the forum, Professor Bruce West, Pro-Vice-Chancellor, said that the teaching side of universities had yet to feel a great impact from the new technology.

There had, however, been enormous developments in the field of data acquisition and retrieval in other areas — in finance and accounting and in the libraries.

Another area that had just started to have an impact, though so far on a limited front, was that of word-processing.

At present in Monash there were about five word-processing machines, but their capacities were not yet fully appreciated by the teaching staff, Professor West said.

"There are a lot of activities that now take a long time to carry out — the production of notices, and of materials for teaching processes, that can now be done rather more quickly and efficiently with the aid of these newer, but certainly more expensive, machines."

"But behind these supposed advances there lies the worry, expressed

now publicly by a number of people and organisations, that the introduction of these faster, possibly cheaper techniques will bring in its wake the loss of employment opportunities.

"There appear to be two schools of thought about the implications of these developments."

"There are those who believe that the change that is coming about in society at large is of an apocalyptic kind, and it's being compared with the industrial revolution and the invention of the wheel. They see such major changes coming in the operation of most people's lives that there must be some kind of major, national review of the implications."

"As far as the university is concerned, however, we need to consider whether it is going to be 'apocalyptic', or whether the alternative view might be nearer the mark: that is that the opportunity to do certain kinds of activities more easily, more quickly, more efficiently is going to make the operation of our lives more complicated, but at the same time is likely to require, not fewer, but potentially even more people in employment."

New technology and industrial relations

Dr Lansbury looked at the problem from the point of view of a teacher of industrial relations.

He said the greatest impact of new technology on employment might not be just in terms of redundancy.

"I think the concern goes much further," he said. "It goes to the changing nature of work, to the way in which jobs are performed and, more particularly, to the changing attitudes that people hold towards the work they do."

Dr Lansbury said that the Australian labor market at the end of the second world war consisted of 50 per cent of people employed in the so-called tertiary sector and 50 per cent in the combination of primary and secondary industry.

"Today, only 20 per cent of the people are employed in what used to be called the 'productive' sector; the other 80 per cent of us are in the tertiary sector."

"Of the two million jobs that have been created in this country since the war, 83 per cent have been found in the tertiary area — but there is considerable doubt as to whether this broad sector can continue to absorb and to create the kinds of jobs it was responsible for in the past."

Dr Lansbury said there were two broad alternatives in determining the way in which society could manage technological change.

"One I would call the traditional

method in which there has been the unilateral introduction of new technology by management — often in a secretive fashion, often without consultation with the people for whom that technology is going to have such great impact.

"Little attention has been given to making a social assessment as well as a technological assessment, and out of this has grown critical industrial relations."

"If one looks at the changing pattern of strike statistics over the past year or two, one sees that more and more disputation is occurring in the area that is largely called managerial action. And often that has been due to the way in which new technology has been introduced — not because the technology itself was wrong."

"The alternative method does not necessarily involve turning one's back on new technology, but it does involve people taking responsibility for what happens in their plant . . . enterprise . . . university — and looking, from both a management and an employee point of view, at the social consequences of changes."

"It means management or administration attempting to forecast, and involving employees in the choices confronting them."

"We in the education industry have a great starting point. We have a

● Continued next page

Two recent art acquisitions

'A turning point' in collection

Professor McCaughey reviews Brack work

John Brack is one of the major figures in contemporary Australian painting.

Born in 1920, he was a participant in the famous Antipodean Exhibition in 1959, Head of the National Gallery of Victoria Art School during the 1960s and is represented in all major public collections of art throughout Australia.

His style is elegant yet forceful, direct yet perceptive. While he has been content to work within the boundaries of portraiture, still-life, the nude and other figurative subjects, the originality and penetration of his vision have given these subjects a new thrust and relevance.

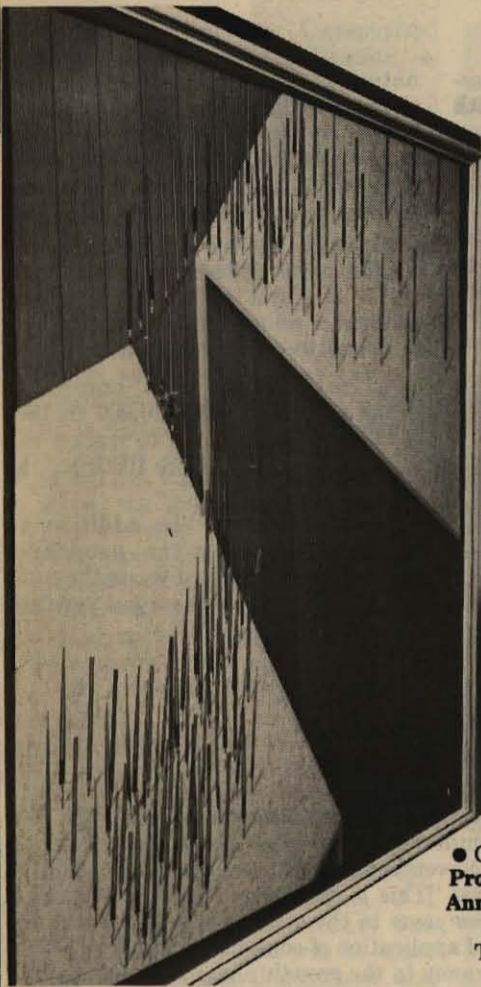
Thus the recent acquisition of his painting, *Crossing*, (1978) for the Monash Art Collection represents a turning point in the development of that collection.

It is not just "a good example" of John Brack but marks the climax of the series which he has worked on over the last few years. It might fairly be described as "the masterpiece" of this series in which the conventions of still-life painting are subverted to produce an eerie and irrational effect.

Still-life is almost exactly the wrong phrase for this painting as Brack brings inanimate objects to life, huddles the pencils and pens together or strings them out in precarious balance.

All this is accomplished with the greatest spareness and clarity. The more irrational the effect, the more lucid become Brack's forms. That combination of elegance and anarchy, of clarity and deception make for the irony of Brack's vision. For all its balanced austerity, there is a richness of content here, rarely found in contemporary painting.

This notable acquisition is currently on view in the Main Library.



● Chairman of the Monash Art Advisory Committee, Professor Jean Whyte, and third year Arts student, Annette Smith, view John Brack's "Crossing".

Photo: Adrian Featherston.

The reviewer is professor of Visual Arts at Monash.

Monash commissions Chancellor's portrait

Monash has commissioned a portrait of its Chancellor, Sir Richard Eggleston, by Melbourne artist, Bruce Fletcher.

Sir Richard has been Chancellor since late 1974. He is the University's third Chancellor, his predecessors being Sir Robert Blackwood and Sir Douglas Menzies.

Bruce Fletcher's work hangs in Buckingham Palace (one of his paintings was presented to Prince Charles in Melbourne in 1964), the Commonwealth Collection in Canberra, Melbourne University and in collections throughout the world.

A total of 35 of his paintings and 220 drawings hang in the Australian War Memorial: he was Australia's official

war artist in Vietnam.

Fletcher has exhibited extensively throughout Victoria and has won prizes at Albury, Malvern, Dandenong, Camberwell, Doncaster and Waverley. In 1970 he won the Elizabeth T. Greenshield Fellowship in Montreal against international competition.

Among his portraits are those of Sir Henry Bolte, Major-General Sir Alan Ramsay, Sir James and Lady Darling, Theodore Fink, Sir Harry Chauvel and Sir Russell Grimwade.

● Sir Richard and Lady Eggleston view the portrait of Sir Richard following a recent Monash graduation ceremony. The artist was Bruce Fletcher. The portrait will hang in Robert Blackwood Hall. Photo: Herve Alleaume.



Time may not be ripe for dissent

● From previous page

history of good industrial relations, but that history will become marred in the future — and in the very near future — unless we sit down and consult about these things. This forum is, I hope, the beginning of that kind of process."

Mr Teichmann was not fully persuaded that a "technology assessment movement", as described by Professor Jevons, would necessarily be an effective measure against unemployment at a time of low economic growth.

"These movements have come at a rather unfortunate time," he said.

"If the anti-pollution and environ-

ment protection movements are an analogy, it seems likely that they will lose support.

"It may be that society might not feel it can afford them. They might turn out to be luxuries accepted only in a period of high economic growth, and they might be the first kind of things to be shed — along with jobs.

"In other words, we're living in a situation where it's each man for himself, each employer for himself, and each economy for itself in a world of cost-cutting, competing economies."

Mr Teichmann said he was not happy about the "unseen hand" theory of new jobs being created as they were in

the past.

"It has been said that 100 years ago many of the jobs we have now didn't exist and that the last 100 years created them. Therefore we should look forward with reasonable confidence to the future resembling the past.

"I am not at all certain about this. I would like to see the argument unpacked a bit more than that.

"Because if we really believe that this is the case, why are we all, I think, agreed that unemployment is going to be a permanent fact of life?"

Mr Teichmann went on: "As far as Monash is concerned, you might say

we have a unique situation to challenge us. We live in a country with a low rate of economic growth; we are facing inroads of technology; we face increasing overseas competition not so much for the things that we sell as for the things that hitherto we have made and which have provided jobs.

"We face a situation where there's a great strain on public revenue. We are turning away from an increase in public spending — particularly from an increase in educational budgets. At the microcosmic level, there's a considerable resistance not so much to increasing, but just maintaining, university spending."

Growing support for view that computers cost jobs . . .

How valid is the proposition that computer technology is destroying jobs faster than it is creating them?

According to a lecturer in Computer Science, **Dr Gopal Gupta**, the weight of opinion in the computing community now agrees with the proposition. Dr Gupta is convener of a special interest group of the Australian Computer Society looking into the social implications of computers in Victoria. He led discussion at a recent gathering of the new technology interest group at Monash instigated by the late Associate Professor Ian Turner.

Dr Gupta quoted from a paper by I. M. Barron, an adviser to the previous UK Government on computer technology.

In it, Barron said: "It is facile to expect that the technology will create jobs faster than it destroys them or that workers can move from one job to another without trauma. It is equally facile to expect that the economic and social system is sufficiently self-regulatory that it can absorb the technology to the benefit of everyone.

"The development of the microcomputer and of electronic information systems poses serious questions which each of us needs to face and to answer.

"The first question is whether we can accept the human cost of this technology. The answer must be yes, because otherwise we must accept the even greater cost of not using the technology. Not only does it offer the prospect of reducing the burden of work on man, but it also, by improving the utilisation of resources, offers the

prospect of reducing the burden of man on the ecosphere. The consequences of such an answer are that we must positively plan and legislate for a period of change. It is no longer acceptable to allow the individual to suffer for the ultimate good of others.

"The second question is, therefore, what should be done about unemployment. It is unrealistic to expect that employment can be maintained, or that work can be shared equitably, given the varying impact of the technology on different jobs and on different sectors of the economy.

"What must be done is to make unemployment both socially and economically acceptable. This means a change to our social policies for unemployment, the provision of a living wage as a right and far more emphasis on retraining and reorientation."

Speaking after the discussion session, Dr Gupta said he agreed with contemporary analysis that the function of new computer technology had a shifting emphasis from a coping role to job replacement.

He said: "In the last 20 years businesses have used computers to enable them to perform new functions — to help them do what they wanted to do but weren't able, things like getting accounts out on time."

He said the focus was now shifting from supplementing the abilities of humans to replacing them.

"The aim now is to automate whole systems — like ordering, despatch and assembly — so that businesses do exactly what they were doing before but with fewer bodies."

Dr Gupta said the deciding factor in the introduction of new technology,

naturally enough, was cost effectiveness. And he pointed to some figures on the capability of computers in relation to cost which put them in the orbit of consideration of a growing number of businesses.

He said that the computing power available per dollar had gone up by a factor of about 10,000 in the last 20 years and would continue to rise by a factor of 10 every four to five years.

"That means that computer hardware which cost \$10,000 in 1960 now costs \$1; in four or so years it will cost 10c and by the late 1980s 1c," he said.

But, he added: "In addition to hardware, computer programs (software) are required to use the computers. The cost of these has been going down only slowly."

. . . but caution urged

A senior lecturer in Anthropology and Sociology at Monash has cautioned against laying too much "blame" at the feet of computer technology for unemployment in Australia — at least in the short term.

Dr Bob Birrell says: "It is dangerous to deduce from the current slowdown in the rate of creation of new jobs in Australia that the effects of computerisation are being felt."

Rather, he says, the unemployment can be explained largely in terms of the current slowdown in economic growth and the continued high rate of expansion of the labour supply in Australia.

He points to recent experience in the US — the most technologically advanced country in the world — which

reached its lowest point in the past recession in 1975. The total number employed in the civil labour force then was 84,783,000. By November 1978 it had grown to 95,735,000.

Dr Birrell says: "This is an increase of some 11 million new jobs in three years in the country which has seen the most widespread application of computers. It indicates that a capitalist economy in the growth phase can create jobs."

Dr Birrell says that while in the long term computerisation could well have serious job loss implications, there will be some compensating job creation from the wealth generated by increased productivity, and from the consumption and investment stimulus the production of new and cheaper products should bring.

New group aims to improve science-media relations

A new group aimed at improving communication and understanding between science and technology and the media held its inaugural meeting in Melbourne last month.

Called the Science and Technology Media Group, it has its origins in AN-ZAAS Section 33 (communication) and it seeks to foster greater personal contact between media people and workers in science and technology — from industry, government, universities and other educational and research institutions.

Among the founders of the group are **Dr Grisha Sklovsky**, president of AN-ZAAS Section 33, and **Frank Campbell**,* science writer for *The Herald*, Melbourne.

They say: "We believe the public is now as never before interested, and entitled, to know how science and technology will influence their lives: energy crises, medical advances, outer-space research, pollution, computerisation concern us all . . .

"Scientists and technologists are in the vanguard of these changes, and the media's role is to fully comprehend and communicate the changes . . . We feel the time is ripe for a forum at which scientists and media people can get to know more about each other's work, achievements and problems."

Guest speaker at the opening

luncheon on May 15 was **Professor George Seddon**, director of the Centre of Environmental Studies, University of Melbourne. More than 50 people attended.

Professor Seddon said that scientists frequently failed to understand that newspaper reporters worked to deadlines and that there was a limit to the amount of checking that could be done.

He suggested that instead of complaining that journalists misreported them, scientists should try drafting their own press releases. This would teach them the difficulties journalists faced in accurately and clearly reporting scientific subjects, and would assist journalists and the public to understand them.

Professor Seddon also criticised many young scientists for failing to communicate the results of research they undertook.

"The job is not done until it is communicated effectively," he said.

But Professor Seddon also had a word of criticism for the journalists who, he said, "persistently failed to understand" how vitally concerned scientists were with accuracy and their professional reputations.

And he added: "I think public taste is not as crude and wrapped up in sex and football as editors think. I believe

there is a real audience out there — it may be quite small, but the thirst for information is really quite strong."

The next meeting of the Science and Technology Media Group will be held in July.

Speakers at future luncheons will include **Mr Asbjorn Baklien**, research manager of ICI, on the future of pesticides; **Professor Max Charlesworth** (Deakin) and Profes-

or Jim Pittard (Melbourne) on genetic engineering; and **Professor Jim Morrison** (La Trobe) on making a profit from science.

(* **Frank Campbell** has been appointed to the staff of the Monash information office. He will take up his new position later this month. He will be primarily responsible for the production of the quarterly "Monash Review").

Social security explained

A seminar aimed at giving welfare workers a better understanding of the social security system will be held at Monash next month.

Organised by the Centre for Continuing Education, the seminar will look particularly at all aspects of entitlements and will attempt to deal with problems encountered by welfare workers. It will be held on Monday, July 16 from 4 p.m. to 9.45 p.m. The fee is \$20.

There will be two sessions. One will look at "the system" and cover such aspects as eligibility criteria, the mechanics of review and appeal, problems of administration with unemployment and sickness benefits,

work test guidelines and access to information.

The second session will look at some specific areas of concern including anomalies in benefits paid to single parents, special benefits on hardship grounds and resources for welfare workers.

Among the speakers will be **Mr Terry Carney**, lecturer in Law at Monash, and representatives of the Department of Social Security, the Brotherhood of St Laurence, the Council for the Single Mother and Child, and the Action and Resource Centre for Low Income Families.

For further information contact ext. 3718.



● Kieran Smark (left), student at Preshil, works with Stuart Rae, of Mt Waverley High School, in the Electrical Engineering department.

Glued to the screen — with blessings

Eight Victorian schoolchildren spent part of their recent holidays glued happily to the screen — with the blessing of no less bodies than the Victorian Association for Gifted and Talented Children and Monash's Faculty of Engineering.

The screen did not belong to a television domesticus, but was part of electronics equipment the students encountered during a stimulating vacation project.

The students — from public and state schools in Melbourne, and Stawell and Morwell high schools — spent three days in the Electrical Engineering department at Monash absorbing some electronics theory then tackling practical problems. The class was one of several sponsored by the Association for Gifted and Talented Children. Others included classes in creative writing and research at Melbourne Zoo.

When Reporter caught up with the students — one female and seven males ranging from second to fifth form — they were engaged in demonstrating the efficiency of loudspeaker crossover networks, under the supervision of Associate Professor E. M. Cherry and lecturer, Dr K. Dabke.

They were paid an informal visit by the Dean of Engineering, Professor Lance Endersbee, who stressed the importance to Australia's future of its technological research.

Concentration on their work, and not shyness, prevented many of the students from engaging in lengthy dialogue. Most said they had been invited by their teachers to join the class; all expressed their enthusiasm for such a way to spend a holiday and particularly for the opportunity afforded to use equipment they couldn't hope to encounter in their schools.

Monash poets flow fifth

The fifth issue of the magazine for Monash poets — Poetry Monash — is out now.

The publication, edited by senior lecturer in English, Dr Dennis Davison, celebrates its second anniversary this month.

The poets featured in the latest issue are Cecilia Morris, Margaret Kilpatrick, Pauline Kirk, Jennifer Strauss and Dennis Davison.

Copies cost \$1 each and may be obtained from the English department office, room 707 in the Humanities Building.

SCHOLARSHIPS

The Academic Registrar's department has been advised of the following scholarships. The Reporter presents a precis of the details. More information can be obtained from the Graduate Scholarships Office, ground floor, University Offices, extension 3055.

ERDC Education Research Training Fellowships, 1980/81
Tenable for up to two years, leading to the degree of Master. Stipend (tax free) \$5600-\$9410 p.a., plus other allowances. Information and application forms available from the Graduate Scholarships Office. Applications close in Canberra on June 15.

NH & MRC Public Health Travelling Fellowship
Valued at up to \$10,000. Tenable for up to 12 months overseas. Applications close at Monash June 22.

NH & MRC Medical and Dental Research Scholarships
Tenable for one to three years normally in Australia. \$10,145 to \$11,598 p.a. Applications close at Graduate Scholarships Office on June 22.

ABC schedules June chamber concert series at Monash

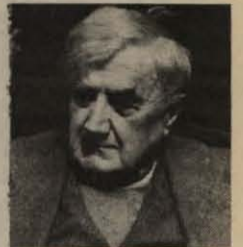
The ABC has finalised arrangements to present five chamber music concerts in Robert Blackwood Hall this month.

The concerts will feature musicians from the Melbourne Symphony Orchestra and will be introduced by John Harper, well known for his program "The Language of Music".

The difficulty in selecting dates in Robert Blackwood Hall's already full calendar and the orchestra's busy schedule prevented an announcement being made sooner. Programs were being finalised at time of going to press.

The dates chosen for the concerts are Sunday, June 10; Monday, June 11; Tuesday, June 12; Tuesday, June 26 and Thursday, June 28. Admission to the concerts is free. They will start at 8 p.m.

Voices sought for 'Pilgrim' opera first



● Vaughan Williams

Monash University Choral Society will present the first Melbourne performance of Ralph Vaughan Williams's opera, "The Pilgrim's Progress", in August.

The opera will be presented as a fully staged production at the Toorak State College Theatre on August 1, 3 and 4.

The society is looking for new voices for the opera, first performed in 1951, which is its second term project.

"The Pilgrim's Progress" has been described as a "Morality" rather than a conventional opera.

Book by Bunyan

Based on the book by John Bunyan, it is an allegory about a pilgrim on his way to the Celestial City and the trials he encounters on his travels.

In Vaughan Williams's work, we follow Pilgrim from the start of his journey to his first major scene, the 'House Beautiful', where he is clothed in a white robe and sent on his way.

After being armed, he sets out on the King's highway and travels to the Valley of Humiliation, where, with a crowd of Doleful Creatures (the chorus) looking on and sounding anything but encouraging, he has a battle with Apollyon (complete with an electronically synthesised voice) which Pilgrim wins.

Meets Lechery

Following more adventures, he arrives at Vanity Fair, where "all that the world can provide is for sale." One of the residents, Lord Lechery, delivers a long sales pitch, the general tone of which is to "get what you can while

you can." This is wasted on Pilgrim who tells them he "buys the Truth". He is duly condemned to death, but manages to escape, and, on the last leg of his journey, passes through the Delectable Mountains and reaches the Celestial City.

Most of the solo parts will be taken by members of the choir.

However, the work is full of choral singing, and a chorus of about 60 is required for the production.

The society rehearses every Tuesday night at 7 p.m. in the rehearsal room, Union basement. Lifts home after rehearsal can be arranged, and further enquiries may be directed to the secretary, Libby Nottle, on 24 4430.

Flexi Time — an office worker's joy

Now and then a show comes along which has appeal to a wider range of people than members of the narrow breed who call themselves "theatre goers."

Such a show is Flexi Time, which the Alexander Theatre is presenting in conjunction with the Victorian Arts Council between August 15 and September 8.

Flexi Time is a comedy about life in the public service and is of particular interest to anyone who has ever worked in an office.

The company will include Terry McDermott, well known from television series such as "Homicide" and "Bellbird" and live productions such as "Man of La Mancha" and "Oliver"; Anne Phelan, currently appearing in "Gentlemen Only" at the Playbox and formerly in "Bellbird"; and Sydney Conabere of the Melbourne Theatre Company.

Flexi Time is being directed by Don Mackay who was responsible for such productions as "Puckoon" and "Under Milk Wood" while he was artistic director of the Alexander Theatre Company. He is now executive director of the Victorian Arts Council.

Advance notice of the production has been given to organisations, professional associations and charities which may want to use a night of the season for fund raising or a social occasion. Attractive concessions are being offered to such organisations.

Inquiries should be made to Mr Ian Roberts, assistant director of the Victorian Arts Council, telephone 529 4355.

English Speaking Union Travelling Scholarship

For travel to English-speaking countries. No academic qualifications required. Valued at \$1,000. Open to persons between 21 and 35 on June 30, 1979, when applications close. Information available from Graduate Scholarships Office. German Government Scholarships 1980/81

For advanced study in Germany:
● Scholarship available to honours graduates who are Australian citizens. Value approximately 750DM per month, plus other allowances.
● Travel Grants available to Australian Postgraduate Research Award holders. Value: return economy air fare. Closing date July 13.

Australian Meat Research Committee
Applications for Postgraduate Scholarships, and Study Awards for senior scientists, tenable in 1980, close on July 24. Further information is available from Mrs L. Shiells (ext. 3073).
Phillips International Institute — Postgraduate Scholarship 1980

For graduates of electrical engineering, physics or related subjects. Tenable for one year in Holland. Fares, living allowance paid. Applications close August 1.

Royal Society of Victoria Medal
Awarded annually for scientific research. Nominations for persons publishing work in the biological sciences between January 1, 1973 and December 31, 1978, close on September 1.

A MUMCO invitation: come to the cabaret old chum

As second term begins, few members of the Monash community might share the sentiment that "Life is a cabaret, old chum".

But members of the Monash University Musical Theatre Company are inviting everyone to come to the "Cabaret", a production of which they will be staging from June 7 to 10 and then June 13 to 16 in the Alexander Theatre.

Several leading Melbourne theatre identities have joined with MUMCO to present this musical which depicts the experiences of an American cabaret performer in Berlin in the 1930s. The book of the musical is based on a story by Christopher Isherwood.

Director and choreographer is **Ron Challinor** who has performed in such shows as "Grease," "Applause" and "Godspell" and, with **Colette Mann**, devised and appeared in "Hats" at the Playbox.

Susie Fowle, who appeared in "The Getting of Wisdom", plays the female lead of Sally Bowles. **Derek Watkins** plays the Master of Ceremonies.

The musical director is **Roger Hilman**.

Tickets cost \$4 or \$2.50 for students and are available from the Alex. on 543 2828 or any BASS agency. On June 8 and 13 a wine and cheese supper will be served for an extra \$2.



Members of the "Cabaret" Kit Kat Klub team: (l to r): Vicki Pendavingh, Elizabeth Furlonger, Jenny Bromberger, Derek Watkins, Kathy Serpell and Lesley Eastop.

Newcomers take roles in 'Vanya'

"Visiting professor's young wife causes havoc".

This would be one way of describing the intrusion of Yeliena, beautiful young wife of Fine Arts Professor Serebriakov, into the peaceful household of Sonia and her uncle Johnny (or Vanya, as the Russians would say.)

The occasion is Chekhov's play, *Uncle Vanya*, which the Monash English department is presenting from June 19 to 22 in the Ground Floor Theatre, Humanities Building.

Three newcomers to the company are **Marion Amies**, who plays Yeliena; **Margaret Swan**, who plays Sonia, and **Malcolm Eliot**, the guitar-playing Telyeghin. The pompous professor is played by **David McLean**, and the impractical bluestocking by **Mimi Colligan**. **Barbara Calton** is the sympathetic nurse.

Davison is conserved

The main role of Vanya will be in the experienced hands of **Richard Pannell**, who has been seen in many major parts in Shakespearean and other productions.

Dr Astrov, the spokesman for surprisingly modern ideas on conservation, is being played by **Dennis Davison**, who founded the company some 15 years ago and is (he declares) reasonably conserved himself, considering the scores of plays he has directed at Monash.

The Ground Floor Theatre now has raised platforms for seating and is heated.

The Vera Moore Foundation provided a generous grant to aid the production, tickets for which may be obtained from room 707, Humanities Building, at \$2 (\$1 students). Enquiries on ext. 2140.

Dinner dance for Ex-Halls

A dinner dance for all ex-Halls of Residence students will be held in Deakin Hall at 7.30 p.m. on Saturday, July 28.

The dinner dance is being conducted by the Monash University Halls of Residence Association. Tickets, which cost \$12, cover a four-course meal and music. They are available from **Andrew Nunn**, telephone 240 0589 (after hours).

Arts and Crafts enrolments open

Second semester enrolments for the Clubs and Societies' arts and crafts program are now open.

Most of the courses will be conducted in the new Arts Centre which will be officially opened shortly.

The program offers an opportunity for the entire campus community to pursue interests and skills under the guidance of the best tutors, artists and instructors available.

Classes are informal, friendly and of a high standard.

The courses being offered are: weaving, spinning, sumi-e, life drawing and painting, jewellery and silverwork, book binding and repair, sewing, pottery, macrame, batik, stained glass windowmaking, effective reading, typing, first aid and leatherwork.

All enquiries should be directed to the Clubs and Societies' office, extension 3180.

JUNE DIARY

- 5-18: **EXHIBITION** — "Tauromaquia", series of etchings by Goya on loan from the National Gallery of Victoria. Pres. by Monash Department of Visual Arts. 10 a.m. - 5 p.m. Exhibition Gallery, Menzies Building. Admission free. Inquiries: ext. 2117.
- 5: **ABORIGINAL STUDIES LECTURE** — "The Changing Role of Women in Australia and the Ramifications for Aboriginal Women", by Ms Pat Grimshaw. Other lectures in series: 12: "Women's Role in European and Aboriginal Society: The Role Played by Aboriginal Women in Contemporary Society", by Ms Pat Turner; 19: "The Rise of Aboriginal Awareness and Its Effect on Non-Aborigines", by Ms Bobbi Sykes; 26: "Present Situation in Education", by Mr Colin Bourke. Pres. by Monash Centre for Research into Aboriginal Affairs. All lectures at 1 p.m. **Lecture Theatre R6**. Admission free. Inquiries: ext. 3346.
- 6: **INTRODUCTORY COURSE** in data processing and programming in COBOL, pres. by Monash Computer Centre. Weekly from June 6 — August 8. 7 p.m. - 9 p.m. **Computer Centre**. Fee: \$45. Inquiries: ext. 2765-2773.
- 8: **LECTURE** — "Mathematics of Winds and Currents", by Dr C.B. Fandry. Of interest to year 11 & 12 students. Pres. by Monash

- Department of Mathematics. 7 p.m. **Lecture Theatre R1**. Admission free. Inquiries: ext. 2550.
- 9: **SATURDAY CLUB** (Blue Series) — "Twice Upon a Time", two mini-operas by the Victorian Opera Company. 2.30 p.m. **Alex. Theatre**. Admission: adults \$4, children and students \$2.50.
- 9-16: **MUSICAL** — "Cabaret", presented by Monash University Musical Company. Nightly at 8 p.m. **Alex. Theatre**. Admission: adults \$4, children and students \$2.50.
- 11: **LUNCHTIME CONCERT** — "Hear Music Now" contemporary music directed by Keith Humble. 1.15 p.m. **RBH**. Admission free.
- 11: **MIGRANT STUDIES SEMINAR** — "The Changing Place of the Ethnic Ghetto in the American City Since 1850", by Prof. David Ward, University of Wisconsin. 7.30 p.m. **Lecture Theatre R3**. Admission free. Inquiries: ext. 2925.
- 14: **PUBLIC LECTURE** — "The Magnetosphere of the Earth", by Prof. K.D. Cole, Head, Space Physics Division, La Trobe University. Pres. by Monash Astronautical Society. 1.15 p.m. **Lecture Theatre S3**. Admission free.
- 15: **ORGAN RECITAL** by John Mallinson, organist, St. Patrick's Cathedral. 1.15 p.m. **Religious Centre**. Admission free.
- 15-17: **CONGRESS** — "Oceans '79" Underwater Congress and Film Festival. **RBH**. For further information and tickets write to P.O. Box 4606, Spencer Street, Melbourne 3001.
- 16: **SATURDAY CLUB** (Red Series) — "Frank-in-a-Box", songs, stories and fun with Francisus Henri. 2.30 p.m. **Alex. Theatre**. Admission: adults \$3.75, children \$2.75. Performance repeated June 30.

- Vacancies still available for 1979 Saturday Club Series — a perfect introduction to live theatre for children. Red Series — 5-8 year-olds, Blue Series — 8-13 year-olds.
- 19: **COURSE** — "Efficient Reading", led by Dr Peter Edwards, Monash Faculty of Education. An eight-session course pres. by Monash Centre for Continuing Education. 5 p.m. - 7 p.m. **Room 164, Education Building**. Fee: \$85. Further information: ext. 3717.
- SPACE FILMS** presented by Monash Astronautical Society. 8 p.m. **Lecture Theatre H6**. Admission free.
- 19-20: **SEMINAR** — William Glasser M.D., sponsored by the Educational and Sociological Resource Association. **RBH**. For further information and tickets contact Di Storey, 762 7285, 561 1280.
- 19-22: **PLAY** — "Uncle Vanya", directed by Dennis Davison. Pres. by Monash Department of English. 8 p.m. **Ground floor Theatre, Menzies Building**. Admission: \$2, students \$1. Inquiries: ext. 2140.
- 22: **LECTURE** — "Mechanics, a Central Science", by Prof. B.R. Morton. Of interest to year 11 & 12 students. Pres. by Monash Department of Mathematics. 7 p.m. **Lecture Theatre R1**. Admission free. Inquiries: ext. 2550.
- 23: **CONCERT** — "The Hunter Marries An Angel", presented by Monash Department of Music. A presentation through Gamelan music, puppetry and dance, of Jaka Tarub — a Javanese folk story. 8 p.m. **RBH**. Admission: adults \$3, students and pensioners \$1.50.
- 25: **LUNCHTIME CONCERT** — piano recital by Ronald Farren-Price. Works by Schumann. 1.15 p.m. **RBH**. Admission free.

- CONCERT** — "Marcia Hines in Concert" with Monalisa and Terry Young. 8 p.m. **RBH**. Admission: students \$5.50, non-students \$6.50.
- 27: **CONCERT** — ABC Gold Series No. 3. The Melbourne Symphony Orchestra. Conductor — Hirovuki Iwaki, with Maria Bieshu — soprano. 8 p.m. **RBH**. Admission: A. Res. \$7.70, B. Res. \$5.90, C. Res. \$4.10.
- 29: **CONCERT** — Smetana Quartet presented by Musica Viva Australia. Works by Beethoven, Smetana, Dvorak. 8.15 p.m. **RBH**. Tickets available from BASS agencies.
- 29: **ORGAN RECITAL** by Andre Blackburn with Jean Penney (flute) and Stephen Robinson (oboe). 1.15 p.m. **Religious Centre**. Admission free.

MONASH REPORTER

The next issue of Monash Reporter will be published in the first week of July, 1979.

Copy deadline is Friday, June 22.

Contributions (letters, articles, photos) and suggestions should be addressed to the editor (ext. 2003) c/- the information office, ground floor, University Offices.