

ANU Reporter



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\$75.293 million for ANU in 1978 – but in real terms a reduction

ANU will have about \$75,293,000 for its operation in 1978 – a reduction in real terms of somewhere less than four per cent on this year.

These estimates have been made by the Vice-Chancellor's Advisory Group and the Bursar, Mr John Coleman, following the tabling in Parliament two weeks ago of the Tertiary Education Commission's (TEC) *Recommendations for 1978*.

Commenting on the figures, Mr Coleman said that in real terms 'we have a reduction. It's not what we would like by a long shot'.

He said the absence during 1978 – in contrast with previous years – of supplementation for inflation of non-salary items 'will hit us hard'.

The Tertiary Education Commission's recommended grant to ANU for 1978 included \$66,645,000 as general recurrent funds and \$4,120,000 for equipment. These figures were at December quarter 1976 cost levels.

Expressed in terms of ANU-estimated June 1977 cost levels, the figures are \$70,310,000 (general recurrent grant) and \$4,463,000 (equipment grant) which, combined with other income of about \$520,000, total \$75,293,000 for 1978.

Before the release of the TEC recommendations, Mr Coleman had calculated that the University would have a total amount available of \$74,194,000 at June 1977 cost levels, including an equipment grant of \$4,014,000. The expected reduction in real terms, based on these preliminary figures, was about four per cent less in 1978 than in 1977.

The increase in the recommended grant, particularly in the equipment grant, as estimated from the TEC report means that the reduction in real terms will now be less than four per cent. But, as Mr Coleman points out, this is still a substantial reduction.

Mr Coleman has written to the University's Schools and Sections asking them to bear in mind the following guidelines when preparing their financial estimates for 1978:

Supplementation will continue to be provided for increases in the costs of

salaries and wages but it is not expected that this supplementation will cover increases in salaries and wages resulting from award decisions peculiar to ANU.

Allowance has to be made for the 'incremental creep' of salaries and wages within existing salaries and wages scales.

No supplementation will be provided for increases in 1978 in the costs of non-salary items (i.e., equipment, expendable research materials, movement costs such as the travel costs of people coming to ANU to take up appointments). Provision should be made for employer's contributions to the Commonwealth Superannuation Fund Reserve and also to the 1966 Supplementary Benefits Fund to be made at higher rates than previously.

Selected paragraphs and parts of tables from the TEC's *Recommendations for 1978* appear below:

2.8 The *Guidelines for 1977-79 Rolling Triennium* had indicated an increase in real expenditure for 1978 over 1977 of 2 per cent for universities and colleges of advanced education and 5 per cent for TAFE. Thus, universities and colleges of advanced education will receive in 1978 somewhat less than had been expected, whereas the technical and further education sector will receive rather more. Since Commonwealth expenditure on technical and further education is relatively small, the net effect has been to restrain total spending on tertiary education to a lower figure than had been originally indicated in the *Guidelines for 1977-79 Rolling Triennium*.

2.9 Although recurrent expenditure for universities and colleges, as set out in the *Guidelines*, shows a rise of 2 per cent between 1977 and 1978, the change in cost supplementation arrangements will reduce the increase to something like 1 per cent since cost increases will erode the real value of non-salary expenditure. In the technical and further education sector there will be a similar effect.

2.10 Moreover, since a large proportion of

the staff of universities and colleges is on incremental scales and the rate of recruitment of new staff will be very low, the movement of staff up these scales continues to impose additional costs on the institutions. Universities and colleges will therefore be under significant pressure to achieve economies in order to maintain their activities within their constrained finances.

4.9 The effect of the factors will be a reduction in real operating resources per student in 1978 compared with 1977. In view of this the (Universities) Council believes it should seek as far as possible to retain the provisional allocations of operating expenditure for 1978 which were made by the Universities Commission, despite the consequent effect on building expenditure. Small shortfalls in enrolments at some universities in 1977 and the agreement of other universities to reduce intakes in 1978 have, however, enabled the Council to propose some additional enrolments at Deakin University and Murdoch University, primarily to cater for external students, and to provide for some increase in the intake at Griffith University. General recurrent grants have been adjusted accordingly but no variations are proposed in the Universities Commission's provisional allocation of other grants for operating expenditure as set out in the *Report for 1977-79 Triennium*.

4.10 The funds allocated for building expenditure in the *Guidelines* are sufficient to meet existing commitments including those arising from the building program approved for 1976 (see the Universities Commission's *Report Recommendations for 1976*), together with a program of high priority minor works, site works and services at the level proposed for 1978 in the *Report for 1977-79 Triennium* (\$4.4 million in December 1976 prices). For the second year in succession, however, funds available are insufficient to enable any new building projects to commence in universities. As a result high priority projects recommended in the Universities Commission's *Sixth Report and Report for 1977-79 Triennium* will not proceed.

UNDERGRADUATE STUDENT NUMBERS, BY UNIVERSITY, ACTUAL 1975 TO 1977, PROPOSED 1978

University	1975	1976	1977	1978
Australian National				
School	5,116	5,231	4,993	5,315
Institute	...	20	12	20
AUSTRALIA	131,101	135,901	139,517	142,405

HIGHER DEGREE STUDENT NUMBERS, BY UNIVERSITY, ACTUAL 1975 TO 1977, PROPOSED 1978

University	1975	1976	1977	1978
Australian National				
School	442	468	459	460
Institute	328	383	429	420
AUSTRALIA	16,653	17,561	18,402	18,835

Staff Amenities Fund survey results being examined

The results of the recent staff Amenities Fund survey are in and are now being considered by the Staff Amenities Fund Committee.

The Committee commissioned the ANU Survey Research Centre to conduct the survey of all ANU staff to ascertain which major

project was most favoured to receive monies from the fund which now stands at about \$100,000.

Forty-three per cent of the staff responded. The Chairman of the Staff Amenities Fund Committee, the Assistant Vice-Chancellor, Mr Colin Plowman, says the results will be announced after the Committee has analysed them. He says a feasibility study will be made of the projects most preferred by the survey respondents.

Mr Plowman also raised the situation of the fund itself. He said some reports suggested that there is misconception about the source and purpose of the Staff Amenities Fund.

'The Staff Amenities Fund was created by the University Council in 1967', Mr Plowman said. 'At that time \$13,595 had accumulated

from commissions on group assurance and medical fund contributions deducted by the University on behalf of staff members through payroll. It was agreed that further commissions received on payroll deductions should be credited to the fund. Over the years, these commissions have accumulated until the fund now stands at \$100,000.

'Expenditure from the fund is approved by the Finance Committee of Council. However, to assist the Finance Committee in its deliberations, a consultative committee includes two representatives from each of the following organisations: the Health and Research Employees Association (HAREA); the ANU Administrative and Allied Officers Association (AAOA); and the Association of Architects, Engineers, Surveyors and Draughtsmen of

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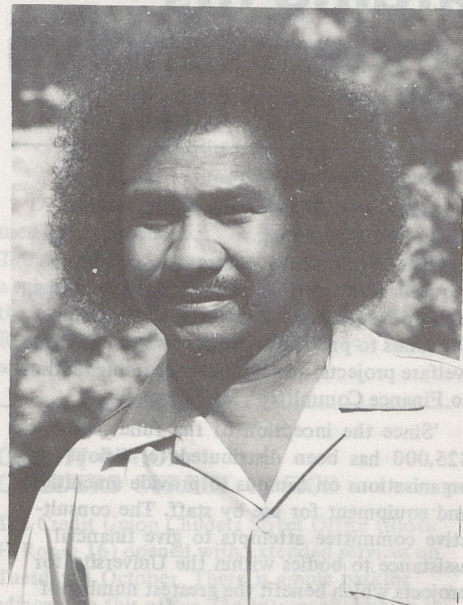
Mike Finn

Dr Peter Sainsbury. . . 'The popular explanation is that the English tend to destroy themselves with domestic gas'. The story is on page five.



Mike Finn

Professor Hans Mol. . . 'I can't think of any Australian universities where the study of religion is considered as important as the study of the economic, educational, or political segments of society'. Story page six.



David Fetherston, Photographic Services

Mr Renagi Lohia, the new Vice-Chancellor of the University of Papua New Guinea. Story page two.

Letters to the Editor

CARS VERSUS KIDS — PLEA FOR ALTERNATIVE ROAD ROUTE

The University Council appears to have adopted the kind of values we have come to expect from another major planning authority in Canberra. It has given priority to the building of roads for the convenience of cars, without thought for the resulting effects.

The proposal by the University Council's Building and Grounds Committee to upgrade Balmain Lane to full road status threatens the very existence of the Parents on Campus Co-Operative Creche (POCC). At the beginning of 1976, POCC moved from the somewhat primitive and temporary premises in Childers Street to what it believed to be a more

permanent structure, more suited to the requirements of a creche, at 22 Balmain Lane.

During its 18 month period of stability a lot of very busy student-parents' time, money and effort have been put into establishing suitable playgrounds and creating a creche-like atmosphere inside this old residence.

The proposed road, with its expected load of 400 cars per hour during peak periods will apparently extend right up to the present creche fence on the southwestern side, thus creating a severe safety hazard. It is a rare occasion that a child actually scales the fence, escaping the attention of the person on duty. However, access to the creche from the car park would be extremely hazardous for the parent carrying a baby under one arm and the numerous requirements for the duration of baby's stay in the other. In this sort of situation it is also physically impossible for the parent to have constant control over the actions of his/her older children (two to five-year-olds).

The noise factor would make it very difficult to carry out many activities. Such proximity to concentrated exhaust fumes would create an

extreme health hazard. Furthermore, the total environment is very important to the POCC philosophy of extended family child care.

The POCC satisfies a real need for ANU undergraduate students who have preschool age children. Because it is a co-operative creche organised by the parents who also participate in the care of the children, it provides low cost child care. Without it, these people could not continue their courses.

POCC members believe that the proposed road which is to act as a feeder road for the new Molonglo freeway to the University could be placed on an alternative route which would not disrupt any residence on the campus and would be equally convenient to car travellers.

— Judith Durston

'THANK YOU'

In July, the *ANU Reporter* published a letter describing the 'Tomlinson' Bantu School in South Africa, and the efforts of its Principal, Mr 'Dingiswayo' to overcome lack of money.

Brack exhibition: 'largest, most comprehensive'

Former Director of the National Gallery of Victoria, Mr Gordon Thomson, recently opened an exhibition of John Brack's paintings and drawings, 1945-1977, in ANU's Melville Hall. The exhibition, organised by ANU in association with the Arts Council of Australia, ACT Division, closes at 5 pm on Sunday. In his opening speech, reprinted below, Mr Thomson said the exhibition 'is the largest and most comprehensive of Brack's work yet to be shown'.

Not only am I to make a speech in a city whose main industry and most notable export is speeches, so that I must inevitably appear as a clumsy amateur in the territory of professionals. But also I am to do it in the presence of the artist himself, and he is easily the most articulate of all our artists and almost as distinguished in verbal as he is in plastic art. He proved that yesterday with a brilliant lecture which those of us who attended felt privileged to hear, and from which many of the comments I offer have been called. But fortunately, as well as being a generous and forgiving man I know how he feels about speeches. His advice yesterday was: 'Look at the pictures: don't listen to the patter'. These pictures certainly speak much more eloquently for themselves than I can, but there are still some peripheral comments which need to be made and perhaps justify my taking up your time.

Brack is a unique figure in Australian art and this is the largest and most comprehensive exhibition of his work yet to be shown. Secondly, it certainly must be said that Mr Sasha Grishin (Fellow in ANU's Humanities Research Centre and lecturer in charge of the

Fine Art courses, Faculty of Arts) has made an excellent job both of the presentation here and the catalogue. I am sure this will register itself as a most notable event in Canberra's art calendar.

Also, I feel I must say in this city where such things are decided that it is my opinion that Australian Art has benefitted enormously from the government's generosity in recent years. As none of this has reached John Brack it has nothing to do with the subject of the day, except perhaps that it has sharpened the competition. But I think all of use who get some sustenance and solace from works of art should try to reassure those in power that their attentions in this field are neither wasted nor unappreciated.

The art world, particularly here and especially now is a hazardous terrain. The scene is one of unceasing *sauve-qui-peut*, a struggle for survival as an artist. Brack chose early to abandon romanticism, the staple of Australian art because, as he says, 'I didn't want to be finished at 25' and this, of course is the sad fate of so many of our talented people. They set great store by talent and encourage the notion of genius only to fail to recover the raptures of their early careers 'Ecstasy in the presence of nature cannot survive into middle age' says Brack. His painting all the time strives to exclude the personal and the extent to which his personal feelings intrude he regards as the measure of his failure. He would say with Yeats: 'All that is personal soon rots. It must be packed with ice or salt'. And also with Yeats he aims at a 'poem cold and passionate as the dawn'.

When Oscar Wilde had to fill in his census paper, in the column marked 'Profession' he put 'Genius' and where it asked for a list of infirmities he put 'Talent'. It is this style which is regarded by John Brack as a most serious handicap to an artist's career, and he operates himself on the precept 'It is a great nuisance but knowledge can only be acquired by hard work'. And knowledge, the cerebral element is an important ingredient in his art. He is not content simply to reproduce or even to create



One of the John Brack works in the current Melville Hall exhibition — 'Nude with Chair and Carpet, 1974'.

beauty. He wishes to use it to get at something of the truth. He sees the world as filled with ironic antinomies and he sets them before us with sympathy and not without hope. He sees the world as going along in a series of stumbling lurches, but not collapsing, and he has chosen and developed as his method a cool deliberate formality knowing that even that is never free of paradox itself.

Pictures of the glimpse of an instant, a momentary balance in an unstable system are painted with meticulous care and time-consuming detail. His use of classic style, a rarity in his time and a great rarity in Australian art history only partly conceals the feeling of angst. Things are not as we want them to be. We cannot now produce things of the silence, peace and security of ancient Egyptian or Chinese Sculpture. There is always about us an awareness of hidden threat.

If my sketch of the artist seems a little down you have only to look around you to correct it. It is the work of a genial, warm and gently humorous man with deep concern for his fellows. Essentially a man is what he hides, a miserable little pile of secrets. This artist's penetrating observation reveals some of these and helps us to know what we are. He does not need to pretend we are all in the garden of Eden. 'We realise the woods are deaf, the sky nurses no-one and we are awake'.

John Brack's work is at once a celebration and a discovery. I think we should feel grateful to the artist for his gifts to our lives and to Mr Grishin and the University for presenting them so splendidly for our delectation.

Visit by new VC of UPNG aiding his understanding of own Uni.

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Australia (AAESDA). The Assistant Vice-Chancellor is chairman.

'The consultative committee considers requests from staff organisations, social clubs, welfare associations, and the like on campus for funds to provide amenities and to carry out welfare projects, and it makes recommendations to Finance Committee', Mr Plowman said.

'Since the inception of the fund, about \$25,000 has been distributed to various organisations on campus to provide amenities and equipment for use by staff. The consultative committee attempts to give financial assistance to bodies within the University for projects which benefit the greatest number of staff possible.

'The recent survey was an attempt to identify how this aim might be met', Mr Plowman said.

Mr Renagi Lohia, the newly-appointed Vice-Chancellor of the University of Papua New Guinea, sees his six-week visit to ANU as particularly beneficial in understanding the background and tradition from which the expatriate staff in his university come.

At ANU, as the guest of the Vice-Chancellor Professor Anthony Low, Mr Lohia is also renewing acquaintances. Over the years there has been a fairly regular flow of academic staff from ANU to the University of Papua New Guinea and several of them are now back at ANU.

Mr Lohia says that until quite recently, the PNG University relied almost exclusively on academic staff recruited from Australia. This picture has been changing in the last few years but the bulk of the staff, both academic and administrative, continues to be expatriate, representing a large number of countries. 'The staff structure of our University is cosmopolitan indeed', Mr Lohia says.

However, by sheer numbers Australians still dominate the staff structure. They have played a vital role in the development of university education in Papua New Guinea and generally laying down academic standards, Mr Lohia says. In more recent years they have led the way towards the university's 'nationalisation'. Mr Lohia sees the need now for a greater role in his university for academic staff from third world countries and those with greater experience in

third world countries.

And yet, despite the predominance of expatriate staff, Mr Lohia is very aware that the University of Papua New Guinea should be structured to the needs of that country.

'We welcome overseas staff and the transplant of ideas but at the same time we have to be careful that these are oriented to the aims and aspirations of our country which is at a crucial stage of development', he says.

'Although our university is based on the Australian model, essentially the British model, the circumstances in our country are very different to those in Australia or England. It is important that the university education system in our country evolves in response to the needs of our society and culture.'

The PNG University is young indeed and Mr Lohia himself is among the first six students who graduated from it in 1970. At 32, he is the second Papua New Guinean Vice-Chancellor of the University and so has the responsibility of guiding it through its formative years.

Mr Lohia started his career at the University of Papua New Guinea as a research assistant. The secondary social sciences syllabus he helped to develop, with others, in 1970 for Form 1 to 4 students is now accepted nationwide. In 1971 he received a British Commonwealth scholarship to study at the University of London.

He received his Diploma of Education from there in 1972 and MA in 1973. He returned

home in 1973 to become senior tutor at the University of Papua New Guinea, lecturer in 1974 and Dean of the Faculty of Education in 1975, and was Pro-Vice-Chancellor in 1976.

While at ANU he will be looking at the possibility of short term exchange of staff between the two universities. He has also been attending various University board and committee meetings and holding talks with senior staff members.

HANS HOLBEIN EXHIBITION OPENS TUESDAY AT MELVILLE HALL

ANU in association with the Arts Council, ACT Division, is mounting an exhibition of reproductions of drawings by Hans Holbein in Melville Hall between 19 October and 2 November.

The exhibition will be opened by Mr Udo Selbach, Director of the Canberra School of Art at 5 pm on Tuesday. It will be open Monday to Saturday from 10.30 am to 5 pm and Sunday 2 pm-5 pm.

There are 74 reproductions in all, most from works in the Royal Collection at Windsor, except for that of Queen Ann Boleyn. The original of this work was in the collection of the Earl of Bradford at Weston Park, but is now in the British Museum, having been acquired by it for \$70,000 in June 1975. Most are of people at the Court of Henry VIII, and part of Holbein's series of great court portraits. The exhibition is on loan from the British Council.

It has a long name but it helps cure cancers

A drug with a nearly unpronounceable name and discovered only in the last 10 years has already helped cure a number of cancerous tissues in humans and animals, according to Professor Surinder Aggarwal.

The drug, Cis-Dichlorodiamminoplatinum (II), or DDP, — a derivative of platinum — was discovered at Michigan State University where Professor Aggarwal is Professor of Zoology. He has been working on the platinum drug for several years.

Currently a Visiting Fellow in the Department of Experimental Pathology in ANU's John Curtin School of Medical Research, Professor Aggarwal is working with Senior Research Fellow in the Department, Dr Michael Whitehouse, who is looking at the contribution of inorganic complexes of copper and gold in curing arthritis. They will check their individual research for common ground in the two fields. (An article on Dr Whitehouse's research will appear in a future issue of *ANU Reporter*.)

Professor Aggarwal says that Professor Barnett Rosenberg at Michigan State University first 'stumbled' on to DDP while examining bacteria under an electrical field using platinum electrodes. The discovery stimulated considerable further research on the role of DDP in curing cancer but 'we in the Michigan State University were the nucleus', says Professor Aggarwal.

The compound blocks the replication of the cell's genetic material (DNA) so the cells cannot go ahead and divide, explains Professor Aggarwal. If the cell has already replicated its DNA, the drug still prevents its division by dissolving contractile proteins involved in cytoplasmic division. It appears that the

platinum drugs also increase the cells' antigenicity for the body's immune system to recognise the affected cells and destroy them.

The platinum in the drug binds to the surface of the tumorous cell more so than to the surface of normal cells so enabling the body's immune system to recognise the tumorous cells and destroy them selectively. Since tumorous cells, under examination, appear to carry surface DNA, Professor Aggarwal believes that 'if we can combine the platinum, which can be easily recognised, to DNA it will give us a tool to diagnose the affected cell under the electron microscope and determine whether the pathological condition is malignant or benign'.

It is eventually hoped to develop various platinum compounds which can bind themselves to the affected cell surfaces and effect their destruction by the immune system without penetrating or harming the normal cells. This will depend to a large extent on the confirmation about the presence of DNA on tumour cell and if this turns out to be a general characteristic of tumour cells, Professor Aggarwal says.

However, the administration of DDP has not been without side effects. Initially, the drug caused kidney toxicity but this has been overcome by chemicals which flush the kidneys. Another difficulty is that when the platinum enters the cell it immobilises the energy producing structures. 'To counter this we propose to synthesize the drugs which will stay on the surface and not enter the cell', Professor Aggarwal says.

This drug is presently in phase II of clinical trials at the National Institute of Health in the USA.



Visiting Fellow in JCSMR, Professor Surinder Aggarwal, examining cancerous tissue under an electron microscope.

ECONOMIST AT NEXT CONVOCATION LUNCHEON

Professor Warren Hogan, a PhD graduate of ANU who is Professor of Economics in the University of Sydney, will be guest speaker at the luncheon for Convocation members of the University next Thursday. Professor Hogan will speak and answer questions on current economic issues.

The luncheon will be in the Hall of University House from 12.30-2pm and each Convocation member is welcome to bring one guest. The cost is \$4 per person.

Send cheque (payable to ANU) together with name and telephone number to: Convocation Officer, ANU. Acceptances close Monday

17 October and telephone bookings are not taken (childminding and other inquiries ext. 4144/2229).

Mr Geoffrey Dutton, distinguished Australian historian and writer, who is a member of the University Council, will speak on republican sentiment in Australia at a Convocation luncheon on 10 November. More details of this occasion will be published in a later *Reporter*.

AAOA AG MEETING

The Australian National University Administrative and Allied Officers Association Annual General Meeting will be held on Thursday 10 November 1977 at 4pm in the H.C. Coombs Lecture Theatre.

Women scientists 'put in low rank positions'

Most women scientists in Australia are placed in positions of low rank without tenure within the scientific community. This was one of the conclusions drawn at a session of 'Women and Science' organised by an ANU sociologist during the recent ANZAAS Congress in Melbourne.

Dr Cora Baldock Senior Lecturer in the Department of Sociology, SGS, convened and chaired a morning session during which papers were read by educationists, sociologists and women scientists on the issues of science education in high school and university, and of job opportunities and discrimination experienced by women scientists in Australia.

Dr Baldock herself delivered a paper on 'Women Scientists in the Network of Scientific Communications', based partly on a study conducted by her and Mrs Clair Atkinson, also of the Department of Sociology, among women scientists at ANU. In this study, Dr Baldock and Mrs Atkinson argue that women scientists' low rank and non-tenured status affect the general visibility of their work and reduce their chances of making an impact on science as a whole.

'Women generally do not experience a sense of inequality, or lack of recognition, in their everyday interactions with other scientists', they write. 'But most of them are aware of discrimination against women as a group when it comes to job tenure and promotion. The handicaps are felt most strongly with regard to married women with children.'

As part of their study, Dr Baldock and Mrs Atkinson held informal interviews with 13 women scientists in five of the ANU Research Schools (excluding RSSS and RSPaS). The 13 women interviewed made up two-thirds of all female research scientists (including research officers) working in the five research schools.

Questions centred on productivity, recognition, communication and discrimination. The authors stress that only subjective views were sought. No 'objective' record was obtained, for example, of each woman's publications, awards or employment records.

Of the 13 ANU women scientists interviewed, four were single, four married without children, and five married with children. Only

three women had tenure, and of the non-tenured interviewees two were part-time. No woman interviewed ranked higher than Fellow.

All the women interviewed for the study, except one, said that their productivity was equal, or better, than that of males. Several said they had made original contributions in their field.

However, some obstacles to productivity were cited. One respondent had the impression that female Postdoctoral Fellows were not always given their own laboratories where their male counterparts had such facilities, and she added that women did not always get technical assistance. If women did not have sufficient technical assistance, said two of the women interviewed, they were forced to do a great deal of the physical work involved in experiments themselves. This would keep them from pursuing broader theoretical issues and from publishing.

All respondents felt they had received recognition for their work, but there were also some problems in this area. One woman recalled an instance where her work had been used without acknowledgment. Another woman said that she always published her work with initials only so that people would not know whether the author was female or not. Another warned that women working in the same field as their husbands should retain some separate interests and publish under their own (or maiden) name.

None of the women had ever had any opportunity as students to associate with successful women scientists; they had operated strictly in a male world.

At the same time of the study, only two of the women were involved in the supervision of postgraduate students. One of these specifically said that she supervised the female PhDs as it was assumed that males might not want a female supervisor.

Although nine out of the 13 women were relatively independent in their own research, only one (tenured) felt she had an impact on the decision taking in her department. Two women pointed out that one could only make an impact from a tenured position and they felt

it was women's low rank in the scientific community which prevented them from having such an impact on the 'politics of science'.

On the other hand, four women said they were not interested in committee work as at this stage of their career (being non-tenured) it would detract from research, or because they felt they were not good at committee work.

It was also noted that most of these women scientists seem to work in isolation. Only two of the women interviewed were part of a team, the others said they worked in a special area not related to that of any other academic in their department.

Respondents felt strongest about the issue of job opportunities in terms of rank and promotion. Even those who had never experienced personal problems in the past were worried about their future chances for a job.

All women commented on the difficulties experienced by a married woman who lacks geographic mobility and independence to branch out in her field. Six of the women interviewed were strongly aware of, or had personally experienced nepotism problems.

Two of the women had been forced to accept 'visiting fellowships' in the past and three were on visiting or honorary fellowships now, in order to be able to work in their husband's department. This means that they do not get any remuneration or recognition from the University for their contributions to science; all they receive is workspace, and in one case, the help of a technician.

The report lists some suggested policies for change which, it says, will not help to overcome basic prejudices in society, but may be of some value in overcoming problems faced by individual scientists. These include:

Women should be appointed to hiring committees to check tendencies of male colleagues to introduce private, family matters in job interviews.

Rosters should be compiled of women scientists available for academic positions to assist hiring committees in making positive efforts to appoint them.

Lists should be made of experienced women scientists who are available to serve on committees, including committees vetting research grant proposals.

A positive effort should be made to find women scientists willing to serve as

presidents of scholarly associations, editors of journals and other prestigious positions in the scientific community.

Women scientists should be invited to visit high schools to speak about their work, and data on women in social science and science should be included in high school studies. Textbooks on science should include more relevant data on women scientists.

Women scientists should be encouraged to write under their maiden name or use first name initials only, especially in the case of husband-and-wife teams, while married women working in the same area of specialisation as their husband should develop a separate interest and publish in that area.

The separation of rank from salary should be considered, especially in a tight market where many women (and men) have to accept positions ranking far below their qualifications and expertise because finance is unavailable for higher-rank appointments.

More extensive independent funding of research projects (as existing in the USA) should be considered to allow scientists to compete personally for such funds rather than funds being allowed by departments. This would enable men and women to continue important research independently in cases of nepotism and other dual-career problems.

All nepotism rules concerning husband and wife situations should be abolished.

Dr Baldock and Mrs Atkinson's report also used data collected for *The Role of Women in The Australian National University* in 1976 and a submission to the Committee of Inquiry into the Commonwealth Scientific and Industrial Research Organisation in 1976 as well as articles in *Coresearch*.

CREDIT UNION CHILDERS STREET OFFICE

The Credit Union Childers Street Office (Block F, Room 16) opened with extended services on Tuesday 4 October. There is ample parking adjacent to this office, the entrance to which is off Hutton Street. 'The Bus' passes this door on each run. Hours of business are: 9.30 am to 1.30 pm; 2.15 pm to 4pm.

This article by Dr Henry Pang argues that the limits of Western medicine are now sufficiently well documented to warrant intense study of health care alternatives. Attention is drawn to the remarkable achievements in health care in the People's Republic of China. There has been interest within ANU and this article is based on lectures given to the Human Sciences Program (Human Adaptability unit), the Department of Biochemistry (Perspectives in Biochemistry) and the Department of Zoology (Human Growth and Populations). Dr Pang is a community medical practitioner at the City Health Centre and is a part-time student in ANU's Faculty of Asian Studies completing an Arts degree in Modern Chinese.

The accompanying table displays the spectrum of biological organisation extending from the simple to the complex. The main thrust of the various components of healing streams is related to biological organisation. Western medicine is strongest when it deals with physical disorder. This is not surprising when one appreciates the relative simplicity of understanding molecular interactions compared with the complexities of the psycho-social area. The social sciences are only just beginning to have an impact on the understanding of health care systems. These and other characteristics of the Western medical system are well treated by Ivan Illich (*Limits to Medicine, Medical Nemesis, the expropriation of health*) and by Mark Diesendorf, editor (*The Magic Bullet, Social implications and limitations of modern medicine, an environmental approach* and its sequel, *The Impact of Environment and Lifestyle on Human Health*). Dr Mahler, Director-General of WHO has repeatedly criticised Western health care delivery systems for concentrating exclusively on disease technology rather than on the positive promotion of community health and says that this system is condemned to ultimate 'social irrelevance'.

Given the enormous problems of health care and preventive medicine as these relate to the total environment and against the background of considered opinion concerning the limitations of the Western medical system, it is not surprising that one is led to look at other societies which have attempted to meet this challenge and in particular to the achievements in the People's Republic of China. More than eight hundred million people have been provided with a level of health care delivery unknown before 1949 by virtue of a range of innovative measures. These include the concept of the 'barefoot doctor' where minimal training is given to locally elected people to provide the basic health needs at the grassroot level; a national directive of "serve the people" appears to have provided a family and commune social, welfare and health system which compares more than favourably with the complex Western system of social security; Chinese traditional medicine has been integrated with modern medicine so that indigenous low-cost herbal remedies and the ancient practice of acupuncture finds a significant place in the spectrum of healing; acupuncture anaesthesia with all its simplicity is offered as a worthy alternative to the drug and gas technique of the West. Whereas the Western medical system is a superstructure on the base of capitalism, the Chinese system is based on 'socialist reconstruction' and this alternative structure allows for a shift in values from the supremacy of the individual to that of the group. Under such a framework, many of the social diseases such as drug abuse, venereal disease, suicide, endemic infectious diseases, marital problems and crime appear to be effectively countered by the social system in its own right.

The Chinese experience in family planning and the eradication of opium addiction should be relevant to many areas of the world. World interest in population control in China derives from the almost incredible low birth rates achieved in the world's most populous country. The program included the policy of postponement of marriage, the ready availability of the whole range of contraceptives and while abortion and sterilisation are available, these are not central. What is impressive is the organisation and motivation, particularly at the grassroot level where, for example, commune members took it on themselves to monitor the regular observance of family planning measures and displayed the commune pattern of participation on public notice boards.

The eradication of opium addiction in China

Aust. health care alternatives: 'we should look to China'

is unique in the history of attempts to wipe out drug addiction in the modern world. Before 1949, the opium problem pervaded all levels of Chinese society. The number of opium addicts was estimated to be in the order of 40 million. Reports from a wide range of observers since 1949, are consistent in drawing attention to what appears to be the complete eradication of the opium problem. The story of the process whereby this remarkable achievement was effected has not yet been adequately docu-

Minister added that there could be few countries in the world - developing or developed - which could not learn valuable lessons from China in the fields of health and medicine'. On his return to Australia in August, Mr Hunt wrote a press article entitled 'What we can learn from China'. 'When I recently visited China to study that country's health services', he said, 'I was impressed by the concept of the "barefoot doctor", a generalist health worker at the community level. I was also reminded of the

the penholder grip and a game completely based on a 'cannonball' forehand drive.

The third era began in 1959, when first, Jung Kuo-tuan and then Chuang Tse-tung of the People's Republic of China dominated the world using the 'sandwich sponge' racket, with pips facing up, the penholder grip and incredible speed and agility.

The fourth era starts in 1971, when Bengtsson of Sweden competing against China and Japan, took the world title using the Western style, but with a training program specially focussed on meeting the challenge of the Asian style. The present position is swinging between East and West.

The point of this sports history is that whereas books on table tennis published before 1952 dealt only with the Western style, current books provide an equal section on the Asian style and there can be no question that the mixing of both technologies has greatly enriched the game of table tennis. Things are being done with the celluloid ball that were never previously thought possible. Surely a transcultural input into health services is now also possible.

In a personal communication, Stephen FitzGerald (Australia's first Ambassador to China) writes: 'I am convinced that Australia ought to be making a much greater effort to study what has been going on in the fields of public health and medicine in China since 1949. A number of western countries have already recognised the importance of developments in these fields in China and have made some efforts to develop research projects concerning them. It is by no means necessarily the case that everything that is done in China is relevant to Australian problems. But the general Chinese approach to the questions raised by you deserves our very close attention as models not only for developing countries but for developed countries as well. In particular, health care delivery and the positive assaults on major health problems arising from socio-economic causes (eradication of opium addiction and venereal disease being two prominent examples) has direct relevance to problems experienced in under developed pockets of developed societies. Ideally, I would like to see a long-term project devoted to all aspects of the Chinese experience in health care and preventive medicine'.

Illich introduces his book with the statement: 'The medical establishment has become a major threat to health'. He goes on and concludes by 'demonstrating that only a political program aimed at the limitation of professional medicine enables people to recover their power for health care'. I conclude this article by supporting Illich and suggest that one urgent initiative of any such 'political program' is the injection of the social sciences and the humanities into the health care decision making process.

THE SPECTRUM OF HEALING

Biological organisation	Western medicine	Other healing streams
Physical (atoms, molecules, cells, tissues, organs, whole body)	Drugs Anaesthesia Surgery	Chinese traditional medicine, Therapeutic acupuncture, Acupuncture anaesthesia, Chiropractic, osteopathy, homoeopathy, naturopathy
Mental (subconsciousness, consciousness, whole man, nuclear family)	Psychiatry General practice Nursing Social work	Hypnotherapy 'Barefoot doctors'
Social (extended family, community, world)	Voluntary and government agencies WHO Capitalism	Eastern family bonds Commune systems
Metaphysical (universe, spiritual)	Materialism	Socialism Maoism Meditation, yoga, the healing ministry

mented, but the main determinants include the transfer of the ownership of land from the landlord class to the peasants, the substitution of the opium poppy with other crops, the replacement of a corrupt administrative structure by one dedicated to national objectives, the termination of foreign concessions on mainland China, the effective control of illicit importation, intense anti-opium campaigns which included supportive measures and re-education of addicts; all these against a background of the intense fervour of 'China reconstructs'.

There have been many statements concerning the relevance of the Chinese experience to other cultures including Australia. Dr Gwyn Howells, Director-General, Department of Health wrote on his return from China in 1975: 'It can be seen that I was much impressed with what we saw. I am hopeful that official medical exchanges can continue and am confident that they will be of benefit to both nations. There are several areas of medicine where we should send clinicians to study the techniques. It was altogether a unique, rewarding and thought-provoking experience'. Mr Ralph Hunt, Minister for Health, in a press statement in Peking in July 1977 commented in particular on the 'widespread grassroots community health program in China, the heavy accent on preventive medicine, and the skilful integration of Chinese traditional and more modern Western medical techniques and methods. The

importance of the developing role of generalist community nurses in our own Australian society'.

While these words are encouraging, my own experience with the health care decision-making process has been fraught with difficulties. In spite of the increasing awareness of the limitations of the Western approach, a demand continues for 'the quantification of data' and for the subsequent analysis to be within 'acceptable mathematical and statistical standards'. The 'justification of the Chinese experience (social, cultural, political and economic) to Australian problems' continues to be a major obstacle to a transcultural input.

A very clear-cut example of this latter process was sufficiently well received by ANU students to warrant its inclusion here.

The history of world table tennis extends over 50 years. There are four eras. In the first 25 years, starting in 1927, the Western countries particularly Hungary and UK, completely dominated the championships. The Western style was based on the shake-hand grip, the 'normal rubber' racket with rubber pips facing upwards and a range of attack and defence strokes involving both backhand and forehand. Some of the great names of this era were Barna, Hergmann and Leach.

The second era started in 1952 when firstly, Satoh then Orimur and Tanska of Japan, swept the field with a new 'inverted sponge' rubber racket with the pips facing downwards,

Why do some plants produce root nodules and others don't? Answer is study aim

Why certain bacteria produce root nodules in certain plants and not in others is the object of Dr Peter Gresshoff's research. He says that an understanding of the process of nodulation may eventually help to improve plant vigour and yields without the use of chemical fertilisers.

Research Fellow in the Department of Genetics in ANU's Research School of Biological Sciences, Dr Gresshoff is concerned with the study of clover differentiation with special emphasis on nodulation. By using different mutants of white clover and studying their interaction with rhizobium bacteria, Dr Gresshoff hopes to establish a sequence map of the processes occurring during nodulation of legumes.

The clover plant, for example, draws nitrogen from air which is then converted by rhizobia in the nodule into ammonia. This is then used for making protein for the plant. The same process does not occur in most crop plants such as wheat and rice, so necessitating large amounts of nitrogenous (or artificial) fertilisers for healthier growth.

Advances in plant tissue culture now enable

these problems and processes to be studied in the laboratory. There is no need for an entire plant to be studied, Dr Gresshoff says. In tissue culture, plant cells are kept growing on defined nutrient media. Such cells can be put back into entire plants again, thereby allowing multiplication of one cell lineage in thousands of nearly identical copies.

Dr Gresshoff says that interest in tissue culture and nodulation is now international. Large groups in the USA, Canada, Japan, India, USSR, China and several other countries are engaged in this research. Likewise, several multinational companies, such as Shell, Monsanto, Unilever and Ciba-Geigy are engaged in active research. But there is no commitment in Australia yet.

Dr Gresshoff and his collaborator, Dr Barry Rolphe, are mainly concerned with the control of nitrogen fixation in the symbiotic relationship between clover and rhizobium. This symbiotic relationship represents a form of differentiation.

'I have been able to grow tissue cultures of white clover from seeds which we now store at

minus 196 degrees C in nitrogen liquid', Dr Gresshoff says. 'Such clover cell lines have been induced to redifferentiate into roots and little plantlets. Interestingly, the roots formed in such a way failed to form nodules when inoculated with rhizobium, indicating that certain specific substances or structures were not present. Such substances or structures are believed to be controlled by the growing plant.'

'We also started research into the state of differentiation of the bacteroids in the clover nodule. These were originally thought to be non-viable but by careful isolation and using protoplast techniques (stripping of cell wall by using digestive enzymes) and gentle isolation of bacteroids we showed that these indeed were viable.'

Dr Gresshoff says that although this research is very basic at this stage and mainly concerned with cell biology, it has the potential to provide experimental tools for future plant breeders by illustrating the potentialities and limitations of establishing nodulation and nitrogen fixation in non-legume crop plants.

Australia has much to learn from Nordic forest research

The general approach to forest research, teaching and management in Nordic countries is characterised by two major features which Australians could find of interest, says Mr Edwin Parkes, Lecturer in ANU's Department of Forestry.

Mr Parkes recently spent part of his study leave in Sweden, Norway and Finland looking at various aspects of forestry in those countries. He was most impressed by what he saw and says that some of the practices could be adopted here with benefit.

The first major feature is the substantial dependence of the Nordic countries on the export of forest products, says Mr Parkes. In Finland, for instance, more than 50 per cent of the total export income comes from forestry products. Their main markets in Europe are reasonably close but are highly competitive.

'The importance of the forestry sectors and dependence on exports in their economies have made the Nordic countries much more market-oriented than Australian forest research and philosophy have been in the past', Mr Parkes says. 'Australian forest philosophy has been dominated by the objective of self-sufficiency (through plantation development and tariff protection) which in many ways has resulted

in a negative rather than positive approach to solving a sectorial overseas trade deficit.'

Mr Parkes argues that the Nordic countries, by contrast, have to compete on European and other world markets and they have done so by developing large efficient industries which compete without tariff protection of their home markets. Their research activities reflect this economic necessity and a much greater portion of research expenditure goes into the logging and utilisation fields. Forestry education also has had a much greater emphasis on economic utilisation and marketing than has been possible until recently in Australia.

The second major feature noted by Mr Parkes was the high proportion of the Nordic forest land which is privately owned. In Australia the bulk of the forest land is publicly owned through the State Government forest services.

'The pattern of land ownership in the Nordic countries does not seem to have hindered the public use of forests nor has it proved to be as difficult for the governments to control and co-ordinate as many foresters in Australia would expect', Mr Parkes says.

'In fact, the one interesting feature of forestry in the Nordic countries is the extent to which forest management and utilisation

activities have been co-ordinated mainly through the very effective forestry co-operative organisations. In Finland alone, out of a total of 300,000 forest owners, more than 170,000 belong to the major forestry co-operative organisation and 130,000 of those are also members and shareholders in the co-operative's wood processing and marketing company.'

Not only are forest management, activities and utilisation plans co-ordinated (through the close relationship between the government and the producers) but the wood processing industries themselves co-ordinate their products and marketing activities to ensure the industry can compete effectively on the highly competitive European markets.

Mr Parkes says that in Australia, the Forwood Conference, authorised by the Forestry Council, held in Canberra in 1974 was an attempt to point the country in a similar direction but in essence was able to achieve little. 'The forest growing activities in Australia are largely State government activities while at the Federal level the growing and processing activities are handled by different Government departments which in a number of cases appear unable to get together to sort out what type of industry is best suited for Australia. Much more needs to be done in this area', Mr Parkes says.

Dramatic fall in the number of British destroying themselves

The dramatic fall in the number of suicides in Britain is one of the fields being investigated by Dr Peter Sainsbury, a leading British psychiatrist who spent last month with the National Health and Medical Research Council Social Psychiatry Unit at ANU.

The suicide rate in England and Wales dropped by more than 30 per cent between 1962 and 1972, according to Dr Sainsbury, who is a member of the British Medical Research Council and the Director of the Clinical Psychiatry Unit at Graylingwell Hospital in Chichester. Scotland is not included in these statistics and although there has been some decline in the suicide rate there it has not been consistent across age groups and sexes.

Dr Sainsbury, in collaboration with the World Health Organisation, is conducting an inquiry into the decline in suicide in Britain. He says the British suicide rate is now lower than in the Second World War, even though the suicide rate always goes down in wartime. This is in marked contrast to the rest of Europe where the suicide rate has gone up in 16 out of 17 countries, Greece being the only other country where it has gone down.

There are several possible reasons for this decline in Britain, Dr Sainsbury says. 'The popular explanation is that the English tend to destroy themselves with domestic gas. In the early 1960s, 40 to 50 per cent of suicides were by domestic gas, but most British homes have now been converted to natural gas.

'It is tempting to assume this is cause and effect as the conversion to natural gas and the drop in the suicide rate are so closely aligned', Dr Sainsbury says. 'But this is not a very satisfactory explanation from the psychiatric viewpoint and a study we have done shows it to be unlikely. By comparing towns which had been converted to natural gas and those which had not, we found that the decline in the suicide rate in both was the same.'

Likewise, research by Dr Sainsbury's unit has discounted another popular claim that the decline in the suicide rate has been due to the work of the Samaritans, a voluntary organisation similar to Life Line, which operates a telephone rescue service for potential suicides.

Another possible cause could be the improved psychiatric services in Britain which are now offering people more effective anti-depressive treatment. Dr Sainsbury's unit carried out a survey where they visited the homes of people who had committed suicide and interviewed their family and friends to obtain detailed accounts of their social history.

This survey found that 93 per cent of suicides had had manifest mental illnesses and

the majority of these were depressive illnesses which were treatable. However, their doctors, although recognising that their patients were mentally disturbed, were not treating them as depressives.

'So we have postulated that general practitioners are now more skilled at recognising and treating depression, which would account for the decline in suicides', Dr Sainsbury says.

His Unit has evidence that general practitioners are now seeing about twice as many psychiatric cases, or patients labelled as psychiatric, as they did in the past. While the general patient consultation rate did not change between 1955 and 1973, the patients with psychiatric disorders doubled. Also, more meaningful and sophisticated methods of classification are now being used so that cases once labelled as neurasthenic are today classified as depressive.

As well, the Clinical Psychiatry Unit is examining changes in social conditions which might affect suicide rates.

Dr Sainsbury says that until recently suicides were significantly over-represented in the affluent and educated upper classes in Britain, but there has been a big increase in suicides in the lower classes due to changing social conditions. Many have moved out of these classes, but others have found life very difficult and have not been able to cope.

Another group affected by changing social conditions is women, whose rate of suicide has been going up throughout Europe. In England, the female rate of suicide has fallen dramatically along with the general rate, but it still has not reduced to the rate at the beginning of this century he says.

His Unit is now trying to establish indicators of change in the role of women, the number of women in full-time occupations, their numbers of children and so on, and to relate these to the change in the suicide rate.

However, one of the main difficulties in an inquiry into suicide is finding and measuring data to test the various types of explanation. 'It is very hard to find good statistical indicators for the kind of social questions one is postulating as being "causes" for the decline in suicide', he says.

While visiting ANU, Dr Sainsbury has been discussing with Dr Scott Henderson, the Director of the Social Psychiatry Unit, some complementary aspects of their work, such as the social and clinical factors which make some people more likely to commit suicide or develop mental disorder. (See *ANU Reporter*, 29 April 1977).

'One's vulnerability or risk of committing

suicide or of developing neurotic symptoms is in some measure dependent on the kind of relationship one has with family, work, neighbourhood, or religious groups', Dr Sainsbury says. 'We have compared suicides and people in the population at large and what comes out very clearly is that the suicides have fewer links with their domestic and with their own social groups. They more often live alone, have fewer children, and are more often divorced and unemployed, for example.'

CONTACTS WITH THE AUSTRALIA/JAPAN ACADEMIC AND CULTURAL CENTRE

The Australia/Japan Academic and Cultural Centre was established by the Australian Government in Tokyo in November 1975, under the Cultural Agreement.

It operates for the benefit of Australians visiting Japan for academic and cultural purposes, and also to provide information to the Japanese about Australia, on academic and cultural topics, through its library and through lectures given by visiting Australian academics and others.

Academics intending to visit Japan should write to Professor Mikio Hiramatsu, Director of the Cultural Centre, in advance of their visit. This would assist him to facilitate contacts with other Australians in Japan for whom he has responsibilities through the Centre, and to arrange appropriate exposure to influential and interested Japanese audiences. The address of the Centre is: Room No. 302, Chisan Mansion, 24-8 Sakuragaoka-cho, Shibuya-ku, Tokyo.

The provision of any appropriate material on Australian academic and cultural developments which could be made available to Professor Hiramatsu would also be helpful.

STUDY LEAVE TO BE DISCUSSED AT ANUSA AGM

The latest developments on the future of study leave will be reported to the annual general meeting of the ANU Staff Association on 26 October (see Public Notices, this issue).

The Federation of Australian University Staff Associations, in its latest newsletter, reports that the Minister for Education, Senator Carrick, has undertaken to discuss the forthcoming report of a Universities Council inquiry into study leave before recommending action to Cabinet.

However, some press reports say that decisions have already been made.

Copies of the ANU Staff Association submissions to the study leave inquiry are obtainable from the Association secretary, Dr Campbell Macknight (ext. 4085).



Mr Edwin Parkes.

TUTORS WANTED FOR EXPANDED 1978 CCE PROGRAMS

The Centre for Continuing Education (CCE) is looking for tutors from among ANU academic staff and PhD students for its 1978 Continuing Education Program.

Next year the CCE is planning to make available to the Canberra community a wider range of the knowledge and expertise available within the University. Previously, the Continuing Education Program has consisted of courses and other activities generally of a non-vocational, non-specialised nature.

In 1978 it hopes to widen the program by offering courses, workshops and seminars in four different categories:

Non-vocational, general interest courses/workshops: These include Languages, Natural Science, Social Science, Arts and Literature, Mathematics, Philosophy, History, Geography and Law. No qualifications nor prior study will be required.

Advanced or refresher courses/workshops: These will require some experience and/or study in the area and are being included in the Program because of difficulties in previous years caused by class members having different educational levels. Examples of such courses are Advanced Statistics and Transport Economics.

Courses for different vocational groups: These are designed for vocational groups who require knowledge, often of an applied nature, in an area other than their own field. Examples of such courses are Statistics for Librarians and Law for Social Workers.

Seminars on social issues: The CCE will continue to develop community awareness by offering seminars or debates concerning our lifestyles, our local community and our national role, often using a multi-disciplinary approach. Examples of these could include Energy Futures; Uranium and Alternatives; Pollution, Environment, Science and Society; or The Foreign Aid Debate.

The Continuing Education Program is divided into two sections: an Autumn/Winter program running from March until August and a Spring program running from September until late November. The duration of courses can range from an intensive weekend to lectures or debates once or twice weekly continuing for as many weeks as the tutor prefers.

Anyone with ideas for courses, plus the time and interest to present them, is invited to call at the CCE or phone Ms Marg Bennet (ext. 3253), Ms Pauline Riddy (ext. 2888), Ms Angela Edwards (ext. 2888), or Ms Dorothy Davis specifically for refresher and vocational courses (ext. 4555).

NO HYPOTHESIS ABOUT WHEREABOUTS OF THESES

All requests for Masters and Doctoral theses should now be directed to the reference desk in the Library in the Menzies building.

The collection of about 700 Masters theses in both hard copy and microfilm, which were previously located in the Chifley building, have now been transferred to the Menzies building where they have been placed with the PhD theses. The amalgamation is designed to ensure efficiency and uniformity in the handling of theses.

Recent upsurge in two Christian movements quite important in psychological healing

The upsurge in the Charismatic and Evangelical Movements in the Christian religion over the past 10 years is much more important, both intellectually and as a psychological healing force, than is realised by the detractors of these two movements, according to visiting sociologist, Professor Hans Mol.

Professor Mol, Professor of the Department of Religious Studies at McMaster University, Ontario, Canada, is back at ANU after seven years as a Visiting Fellow in the Department of Sociology in the Research School of Social Sciences. He was a Fellow in the same department from 1963 to 1970 when he taught postgraduate courses in Sociological Theory and Sociology of Religion.

He says the Charismatic and Evangelical Movements, whose participants sometimes 'speak with tongues' and dance in the aisles during church services, reinforce commitment in their followers. A feeling of commitment is important for everything that we do, he maintains.

'All of us who are academics have a basic commitment to our speciality and to the method of our speciality', he says. 'And for us to think that we are completely rational beings is too narrow a vision of what we actually are. As a matter of fact our commitments have generally a much narrower focus than the cosmic ones of the sects.'

Yet the very feeling involved in the Charismatic and Evangelical Movements makes them

controversial and even despised by people who believe themselves to be rational, intellectual Christians, he says.

An important and sophisticated theme of these two religious movements, which has not yet been examined even by sociologists of religion, is the dialectic between wholeness and breakdown, he says.

'I have never been to a Charismatic or Evangelical service where salvation/sin, resurrection/crucifixion and heaven/hell have not been the central themes — they are always talking about things which make whole and things which divide. The direct translation of the word salvation in the Bible is wholeness, and sin in the Bible means the breakdown of order, the breakdown of the covenant between God and man.

'I translate this to mean that for these groups life is like a dialectic, a seesaw relationship oscillating between wholeness and change.

'To me as a sociologist, these people are talking about something very fundamental. The basic themes of wholeness and breakdown run right through physics, biology, ethology, ecology, psychology, anthropology and sociology, as well as ordinary life.

'There is a constant attempt to minimise breakdown and chaos and maintain wholeness on a social as well as a personal level. When we worry about alcoholism, drug addiction or the divorce rate we are worrying about something

which disrupts our personalities, our families, and our society. On a personal level, we all know people who have to undergo psychiatric treatment in order to be made whole again.'

Yet, Professor Mol says, psychiatrists can often only do a 'bandaid job' — repair on a short-term basis — whereas the 'whole-making', carried out by the Charismatic and Evangelical Movements, can have a more lasting effect.

'I am convinced that even the small percentage of the population which engages in these Christian movements are likely to do more good than the entire army of psychiatrists. This doesn't mean that psychiatrists are not very necessary, but they have not been able to do any preventative work, whereas in the Charismatic and Evangelical Movements people often become involved at a young age.'

Professor Mol says these two movements, which date back to Acts II in the early Christian religion, are world-wide and especially strong in the United States, Canada, New Zealand and Australia.

By contrast, religious liberalism is declining in the United States, Canada and Europe and, although he has not had time to examine the religious scene closely in Australia this time, he feels sure he would find as severe a decline in religious liberalism here.

He defines this type of liberalism as the deification or idolisation of man, as the treatment of one rational individual as though he

were the purpose of existence and the pinnacle of creation or evolution. It is an attempt to bend Christianity around so that it becomes intellectually acceptable and fits with the scientific outlook, he says.

'Yet this kind of liberalism is rapidly being thrown out of the window in North America. There is now an opening towards the wider vision of man's more humble place in the total scheme of things.

'It is declining rapidly because the major religions now talk about man as being both individualistic and social, as having both emotions and rationality. They believe that the future of evolution lies with the dialectic between feeling and rationality and the dialectic between the individual and society, rather than with the development of the rational, individual side only.'

The study of religion in the United States and Canada is considered just as important as other studies, he says. At McMaster University his Department of Religious Studies is as big and prominent as the departments of economics, political science, sociology, or anthropology and this is also true for a number of other universities.

'But I can't think of any Australian universities where the study of religion is considered as important as the study of the economic, educational, or political segments of society', Professor Mol says.

THE FIRST LINK IN LINK NOW BEING CIRCULATED

The first issue of *LINK*, the newsletter for the Learning Information Network on post-secondary learning opportunities in Canberra is now being circulated.

The Learning Information Network (or Link) was initiated recently by ANU's Centre for Continuing Education (CCE) and the Department of Education through TAFE under the co-ordination of Ms Ros Delaney, with the aims of establishing information outlets in Canberra and compiling a directory on post-secondary learning opportunities. (See *ANU Reporter*, 12 August 1977).

The Link newsletter is being written as an adjunct to the directory to keep the providers informed of adult education developments in the ACT. In the long term it is hoped that it will also supply information, on a regular four to six week basis, about forthcoming short courses (seminars, conferences, or workshops) to be held in Canberra.

A logo for the Learning Information Network has been designed by Mr John Reid, a current Creative Arts Fellow at ANU.

Ms Delaney says the LINK directory should be ready for distribution by late January 1978. Because of time limitations placed on this initial project, the main emphasis of the information gathering is on post-compulsory learning, and part-time, non-accredited courses. Information about formal, accredited and vocational courses offered by the TAFE institutions, ANU and the Canberra College of Advanced Education (CCA) will be listed separately as an attachment to the main directory.

Institutions, organisations and groups in Canberra who are providing short courses or more extended 'adult learning opportunities' are invited to contact Ms Delaney, c/- Centre for Continuing Education, ANU, PO Box 4, Canberra, 2600 or by phoning ext. 4556.

TASMANIAN WILDERNESS PAINTINGS ON SHOW

An exhibition of Tasmanian wilderness and coastal paintings by Max Angus was opened this week at Canberra's La Perouse Gallery by Dr Stephen Fitzgerald, a native-born Tasmanian who is Head of ANU's Department of Far Eastern History and Head of the Contemporary China Centre.

The exhibition will be open Thursdays to Sundays from 11am to 6pm until 30 October.

Max Angus is Tasmania's best-known painter. He is also widely known for his lectures

CONFERENCE ON RECENT CHANGES IN ASIA

Recent changes and current political, economic and social trends in Asia and how these affect Australia will be the subject of a two-day conference organised by the Centre for Continuing Education at ANU on Thursday and Friday 24 and 25 November.

The workshop-based conference, 'Recent changes in Asia: Australian responses', will concentrate on vital issues involving Australia-Asia relations. It should be of particular interest to public servants specialising in this area, Asian studies teachers and students, development aid agencies, trade and commerce representatives, and media and foreign correspondents.

Its approach will be interdisciplinary, involving economists, political scientists, sociologists, and experts on development studies and international relations.

Three main speakers will address the conference. Professor Ted Wheelwright of the University of Sydney will talk on 'Changes in Asia: Australian responses — A political economist's view', to be followed by Mr Malcolm Booker, a former Australian ambassador and the author of *The Last Domino* who will speak on 'The next 25 years in Asia'. Dr Debesh Bhattacharya of the Department of Economics at the University of Sydney will talk on 'Towards an understanding of change in Asia — a Third World point of view'.

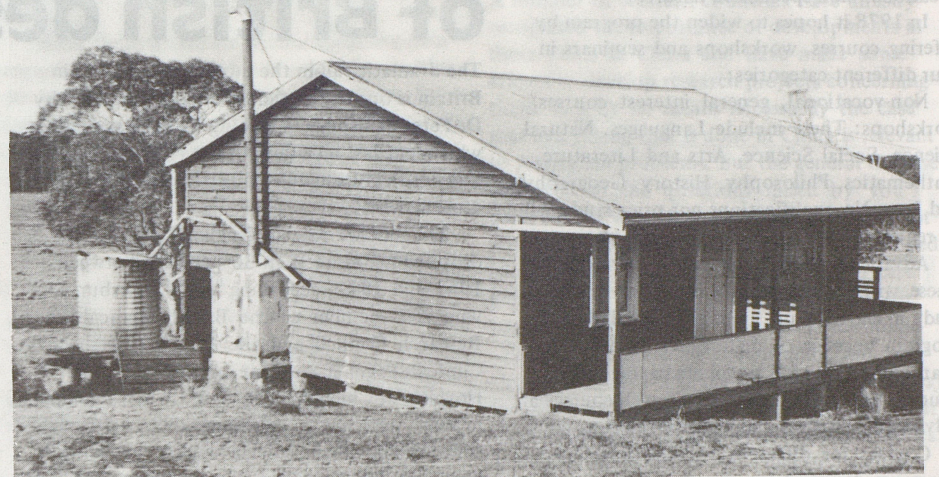
The major themes for the conference will be development co-operation, policies, resource diplomacy, law of the sea, new international economic order, and the role of the super-powers. Regional workshops on Japan, South Asia, China, Thailand, Indonesia, Indo-China and the Pacific Forum Region will also be held.

The conference will be held at Burgmann College and enrolments close on Friday 11 November.

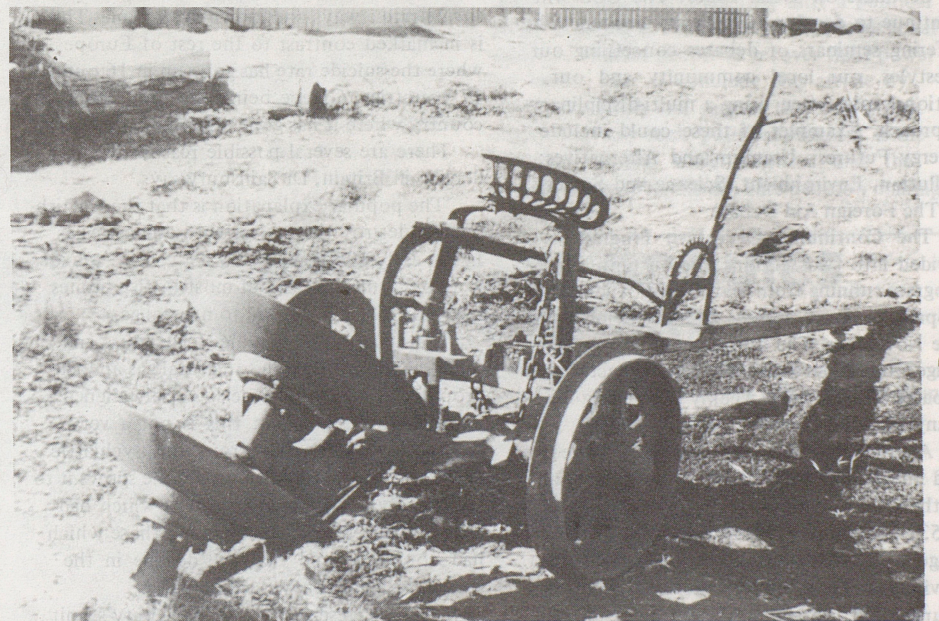
For further information on the conference program or registration forms contact Mrs Lesley Moon, Centre for Continuing Education, or phone ext. 2891.

on art through radio and television and is author of the memorial volume, *The World of Olegas Truchanas*, now in its third printing.

The La Perouse Gallery says the exhibition is being shown at a time when Tasmania's South-West National Park boundaries are being planned and being contested by both industrialists and conservationists. The Gallery adds that most of the Angus paintings have been inspired by Tasmania's South-West wilderness area whose 'beauty is threatened by irreversible intrusion'.



One of the several cottages constructed c1908 to house workers at the old Kioloa sawmill. It is envisaged that this building, one of several on the field station, will be restored as a museum with rooms displaying furniture and fittings of the period and exhibits of photographs, documents, tools and household objects of historic interest.



A heavy disk plough hauled by a team of two or more draught horses. The disks, which are shown in raised position, rotate through 90 degrees to the ploughing position, controlled by the handle on the shaft. The wheels are flanged to prevent lateral pressure from the disks against the soil from pushing the plough off course.

PICTURED OPPOSITE PAGE: (Top left) A pine wash stand with marble top and tiled back, typical of cottage bedroom furniture at the turn of the Century. (Top right) A cast-iron heating stove initially used in one of the cottages but more recently employed to heat cattle branding irons. (Bottom left) What looks like a 'six-holder' is actually the wash stand from the old Kioloa schoolhouse. Made entirely of Australian red cedar, it was set at a height convenient for children and each hole contained an enamel wash basin. The schoolhouse was recently moved from its original location to a site on the main avenue leading to the Kioloa homestead on the field station where it now provides bunking accommodation for 18 users. (Bottom right) An example of the fence-builder's art — a post and rail fence with rails split by mawl and wedges mortised into split posts.

PUFFING ANU OLDIES SOCCER IT TO THE CLEAN-SHAVEN, SHORNE AND MORE STREAMLINED RMC TEAM

The ANU versus RMC Ampol Cup semi-final took place at Deakin recently.

Despite the fact that the players from Duntroon were younger, fitter and more streamlined than the ANU team, ANU managed to score their first goal within five minutes of the start of the game. The first half was exciting by Canberra standards and the spectators enthusiastic, albeit for the clean-shaven and shorne RMC team.

Connell took the penalty kick which put ANU into a safe winning position of two-nil before half time. Evidently RMC's gangly goalkeeper just couldn't keep the ball out while the stockier ANU goalie had no intention of letting it in. There was some good play by Les Bee of hefty thigh fame (one day my eyes will reach his face), Fred Glczynski of the unpronounceable name and the supportive Robb Willink who ran his lovely legs off.

At this stage ANU were more concerned with the skills of the game, playing intelligently while RMC tended to boot the ball in the general direction of the net, invariably missing.

After half time and the third goal had been scored, play deteriorated and the tension which provided a hard game in the first half slackened together with the spectator's interest. The crushed RMC crowd turned their attention enviously to the gathering leather clad and bronzed Mediterranean hordes who were arriving to watch Juventus versus Olympics in the following game.

Just as people were lolling around in the sun and trying to think up some new ethnic jokes. Roger Jones went down writhing after a hefty boot in the butt. Would he ever walk again was the question on everybody's lips. Then as he rose to the thunderous applause from the several ANU supporters, RMC scored their first goal. This returned interest and sobriety to the game since up to this point both teams had been piddling around.

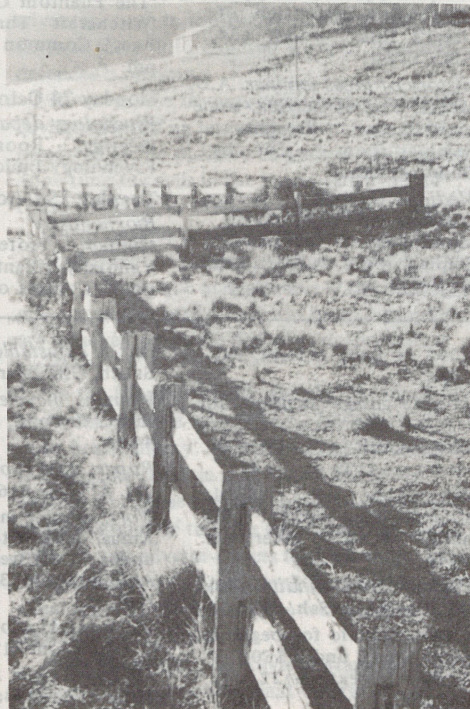
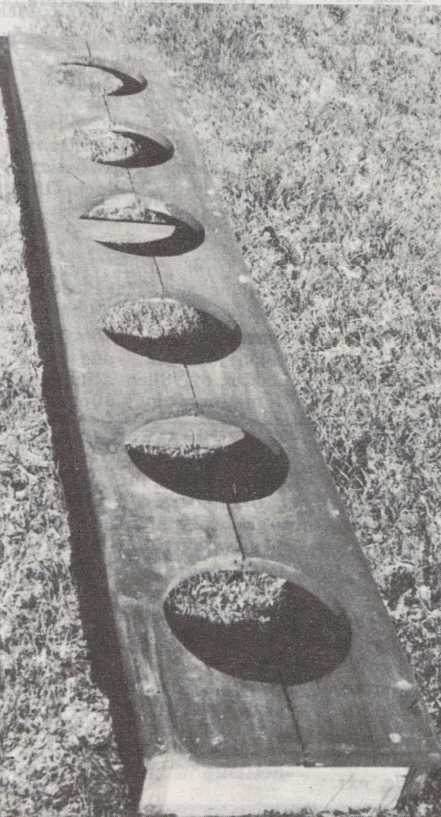
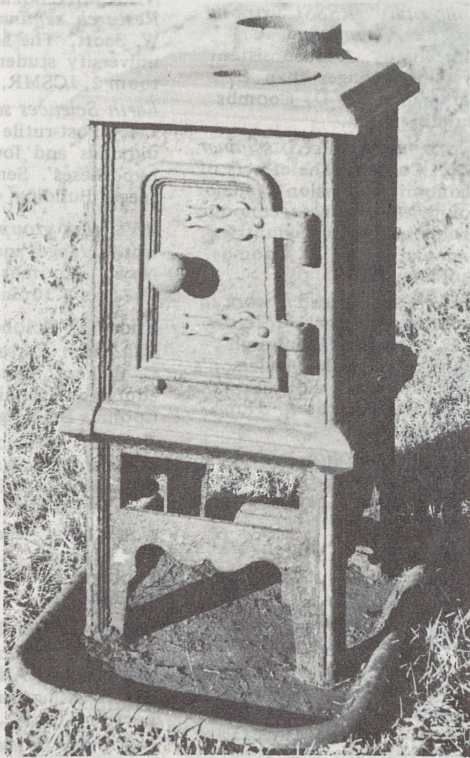
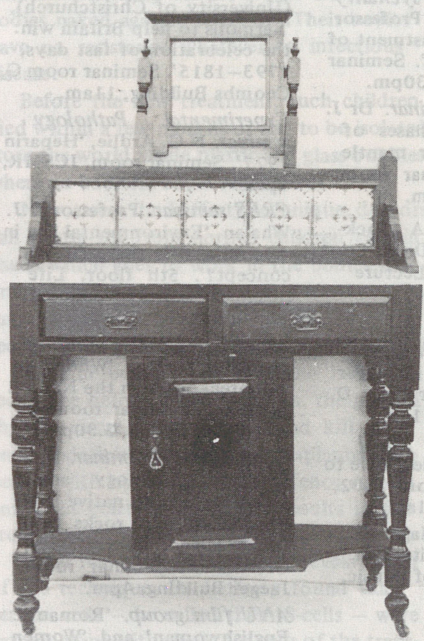
ANU's coach began sending on the substitutes in an attempt to arrest further scoring by RMC, but mainly to give some of the puffing ANU oldies a go at resuscitation on the line. First substitute was the gorgeous Graham Barnes whose youth brought tears to the eyes. Why wasn't he brought on sooner?

But all this was in vain as RMC didn't score again, leaving ANU to pass through to the final (4-1). — Anonymous

Dr Dent's discoveries — Kioloa yields its historical artifacts

ANU's Edith and Joy London Foundation field station at Kioloa on the NSW South Coast is yielding up a wealth of historical artifacts and adding a new dimension to the history of the area.

Dr Owen Dent, Lecturer in ANU's Department of Sociology, SGS, is also honorary Curator of Industrial Artifacts and Furniture at Kioloa. He has turned up at least 60 pieces of interesting furniture and several hundred tools, kitchen utensils, farming, sawmilling and blacksmithing equipment and hand-forged hardware from under, in and around buildings on the 348-hectare property. Much of the material gathered and described so far will go on public display at the field station in the Christmas-New Year period. More photographs of Dr Dent's discoveries will appear in future issues of *ANU Reporter*.



Classified cont.

Forrest, grad. couple or two single to share large house, 3 bathrooms, garden, rent about \$43 per couple, or \$27 single, plus prop. share of elect, gas, phone, ext. 2896 or 731147.

Holt, 4br, fully furn house, \$65 pw, beginning anytime after 1 Oct for one year or longer, family only, ext. 3187 or 544480ah.

House, 4/5br, unfurnished, carpets, drapes, close to ANU, lock up garage, carport, telephone, ensuite, long lease, suitable groups considered, 663136bh or 413560.

O'Connor, furn. 2/3br house available for 1 year from Dec, \$55 pw, 522433bh.

Turner, furn. house, 2br, sun-room, garage, \$52 pw, long lease, available early to mid Nov, ext. 4720 or 491250ah.

Weetangera, fully furn, 5br family house, avail. 12 months from Dec 13, 543793 or ext. 2064.

Well furn. house, convenient to city and Uni, 3br and study, garden cared for, six months lease with possible extension, 957738.

Accommodation Wanted

Accommodation wanted at coast, for 6 adults and 3 children, Jan 15 to 21, ext. 2291 or 514529ah.

Girl, 26 and dog want to share house with 2 or 3 people fairly close to Uni, Trisha, ext. 4493 or 865338ah.

Public Notices

Boat storage, storage space on steel racking available ANU Sailing Clubhouse, Yarralumla Bay for sailing dinghys, contact Dave Sadler ext. 3424.

House exchange, sought by Hobart family, 5 Jan-15 Feb

78, 543478.

Labrador-cross puppies, to be given away, 7 weeks old, Ron, ext. 2940 or 956204ah.

Preparation for Childbirth, Janette Hazlehurst, 813836.

Queensland holiday, Dr Bucknall, Griffith University Brisbane, seeks house in Canberra to exchange Jan 1-15 '78, write or phone (07) 2084842ah.

Student with ACT experience in architectural drafting will design home, garage, carport, house, extensions, plans, draw thesis graphs, reas. rates, 478536ah.

Typing, essays, letters, manuscripts, draft theses, reas. rates, ext. 3357.

Typing, theses, essays, etc, IBM golfball, reas. rates, efficient service, 474264, Lyn.

Typing, IBM golfball machine, essays, manuscripts, theses, etc, reas. rates, ext. 4452.

Typing, theses, essays, tables, mathematical typing, etc, IBM self-correcting electric typewriter, 888197.

Typing, IBM self-correcting machine, 10/12 pitch, theses, essays, manuscripts, etc, reas. rates, 881376.

Typing, IBM golfball, theses, essays, etc, reas. rates, 583079.

Typing, wanted, reas. rates, Wilson, ext. 2842.

Typing, theses, reports, essays, manuscripts by accurate and experienced typist on Adler electric typewriter, reas. rates, 881096.

The ANU Staff Association Annual General Meeting 1977 will be held at 1pm on Wednesday 26 October 1977 in the Haydon-Allen Lecture Theatre (the Tank).

Awards and Fellowships

The Swiss Government is offering a scholarship for post-graduate study in Switzerland commencing October, 1978. A good knowledge of either French or German is essential. Allowances for fees, books, and travel are available. (Closing date 28.10.77).

The National Heart Foundation of Australia is offering vacation scholarships to students in medicine or science. Tenable for six to eight weeks. \$60 per week. (Closing date 17.10.77).

F.G. Meade Scholarships are being offered to enable post-graduate students to study for a higher degree at the University of Queensland in the fields of Anatomy, Botany, Microbiology, Physics, Zoology. Tenure 3 years. Living allowance \$4,800 plus. (Closing date 31.10.77).

Aboriginal Overseas Study Awards Scheme offers up to 10 awards each year to enable persons of Aboriginal or Torres Strait Island origin to add to their skills and experience through short-term programs of study, observation and discussion overseas. Allowances for equipment, overseas travel, fees are available. Tenable one to six months.

St John's College, Cambridge invites applications for a Dr William Elgar Bank Memorial Studentship for post-doctoral research in Medicine or Surgery or some branch of Natural Science related thereto. Candidates must be male. Tenure one year. An allowance of \$3,119 is available. (Closing date 1.12.77).

The Weizmann Institute of Science is offering Post-doctoral Fellowships in Science Education and physics. The fellowships provide a 12 month stipend, relocation allowance and one-

way economy class airfare. (Closing date 15.11.77).

The N.S.W. Public Service Board is offering an incentive award for post-graduate research in Social Welfare. Value \$1,000. (Closing date 31.10.77).

Israel Government Scholarships 1978/79 are available for post-graduate study on research in the fields of Theology, Archaeology or Sociology. \$160 per month living allowance. (Closing date 15.11.77).

Beit Fellowships for Scientific Research are available at the Imperial College of Science and Technology, London. Value £2,000 per annum plus College fees. Tenable for one year. (Closing date 1.1.78).

Frank Knox Memorial Fellowships. Applications are invited for fellowships tenable at Harvard University during the academic year 1978/79. Value \$3,600 per annum plus tuition fees. Tenable up to 3 years. Further information from Miss J. Bruce, ext. 3557. (Closing date 28.10.77).

The University of Tasmania has available a Master of Environmental Studies course. Scholarships available.

The University of Newcastle is offering a Research Scholarship in Biology. Tenable for 3 years. Value \$4,000.

The Department of Environment, Housing and Community Development is offering a number of Fellowships each year to academics wishing to spend their study leave pursuing research in the fields of environment, housing urban affairs, etc. Tenable 6 to 12 months. (Closing date 28.10.77).

Some further information about the above and other fellowships, awards, scholarships, etc., is available from the Careers and Appointments Office, Sports Centre, North Road.

Australian-Asian Universities' Co-operation Scheme (AAUCS). The Standing Committee of the AAUCS

Agenda: Apologies; Election of ANUSA Officers for 1977-78; Minutes of Annual General Meeting 1976; Business arising from the minutes; Reports; ANUSA Membership Fee for 1977-78; Constitutional amendments as required for industrial registration; The future of study leave; Superannuation; Any other business.

The meeting has to elect a President, 2 Vice-presidents, Secretary, Treasurer and 2 Committee Members.

At a general meeting on 3 May 1977 it was resolved that the executive revise the constitution as appropriate for the purpose of seeking registration under the Conciliation and Arbitration Act 1904-1973. The executive is preparing a series of specific motions to this end and will distribute copies to members prior to the meeting.

— C.C. Mcknight Secretary

The Australian National University Union requires a Student Services Officer.

Duties will include the Management of an activities budget to provide entertainment for Union Members. The appointee will also be responsible for giving advice and assistance to student groups in the organisation of their various activities in the Union, to undertake general clerical duties as necessary and the promulgation of University Union information.

Salary \$8,254 p.a. Applications addressed to the Deputy Secretary, ANU Union, PO Box 4, Canberra, 2600, will close on Friday 28 October 1977.

invites inquiries from members of the staff of Australian universities who are interested in participating in its program in Indonesia, Malaysia and Singapore through the medium of:

- Visiting (Advisory) Assignments of up to 90 days in disciplines and supporting services covered by the on-going program.
- Visiting (Study Leave) Fellowships for periods of at least 90 days residence at an overseas university associated with the Scheme. These fellowships are available in disciplines which are, or have been, covered by the Scheme.
- Secondments for periods of one semester to three years under the provisions of AVCC Guidelines for the Secondment of Australian Academic Staff to Overseas Universities in disciplines covered by the on-going program.

Further information may be obtained from the AAUCS Administrative Liaison Officer, Mr D. Fraser (ext. 3692).

Corpus Christi College has for some years implemented a program under which Visiting Scholars from the UK or overseas who are planning to spend the year (or part of it) in Cambridge are welcomed to temporary guest-membership of the College. Preference is normally given to scholars with several years of academic experience. Four apartments belonging to the College are set aside for the occupation of such visitors at a reasonable rental.

Applications for this accommodation can be made at any time, but intending applicants are advised to apply as soon as their plans are known; a first allocation of accommodation will be made on applications received before 1 November 1977.

Further details can be obtained from L. Pitman, ANU Academic Staffing Section, ext. 4739.

Classified

The deadline for classified is 3pm on the Wednesday week before publication (Wednesday 19 October for the next issue Friday 28 October). They must reach the University Information Office at 28 Balmain Crescent by deadline. Reporter advertising is restricted to ANU staff, students or members of Convocation. All advertising should be brief and must carry the name, department and extension number of the advertiser regardless of whether or not it is included in the advertisement. Advertisements must not exceed 24 words (including numerals, prices, etc.) in length. Advertisements not conforming to these requirements will be rejected. Advertisements cannot be accepted by telephone.

For Sale

Almost complete set, of golf clubs, slazenger, 11 irons, 2 woods, very good nick, \$260 ono, ext. 4677.

Ansaheat oil heater, \$20; safe-n-sound car seat type xL, \$20; small dog kennel, \$5; Hollis, ext. 2425.

Armchairs, four and room-diver, ext. 3144 or 475008ah.

Baby bed, heavy duty, adjustable height, sliding sides, \$70; double bed and mattress, \$50; baby stroller, high chair, fireplace set; ext. 4147 or 413806.

Bike, 2 year old Malvern Star, \$80, ext. 3053 or 511973.

Bike, boys, 24", \$25; also bike frame 24", \$7; canoe, wooden good condit, \$65; 815447.

Camera, Praktika 11c 35mm, pancolar, 1.8/50mm and Pentacorn 2.8/135mm, Zeiss electric, lenses, extension rings for macrophotography, tripod, filters, \$200, Skotnicki, ext. 3087.

Camera, Cannon g117, \$120; flash, \$20; Pioneer stereo system, c5500 85w, \$240; 511406ah.

Chinese temple dog, (Shih-Tzu), pedigree male pup, fully vaccinated, adult height 8½", show \$185, pet \$120; 544800 or 6 Eaves St, Holt.

Colour TV, HMV, 43cm under warranty, with antenna, \$100 off new price; table, chip-board, plywood top, two drawers, as new, \$12; ext. 2375.

Cortina, xle, Dec 72, one owner, \$3200 ono, 547085.

Caravan, 20', exc. condit, 18 mths old, \$4500 ono, ext. 2954.

Desk, bookcase, pr of high back chairs, one carver, 4 foldable canvas director chairs and matching pine table, electric frypan, 318107ah.

Diahatsu car, 72, 2 stroke, tyres, mechanical OK, body fair, low mileage, 50mpg, \$800 ono, Lind, ext. 3768 or 512320ah.

Dimplex bathroom fan heater/light, \$30; Mistral 8" window fan, \$20; ext. 4275.

Electric stove, \$50; refrigerator, \$30; single bed, 3', \$15; all good condit, ext. 3128, 3219, Anna.

Fibreglass Spalding tennis racquet, light, 4½", \$25, Skotnicki, ext. 4211.

Fiat 128 sports, rego 75, exc. condit, radio, cassette, new tyres, mufflers, 44000kms, \$3200 ono, Sindy, Toad Hall, D102.

Fiat, 128, 74, 12 mths rego, stereo/radiocassette, 38000 mls, exc. condit, \$2800 ono, Peter Snow, ext. 4337 or 823416ah.

Fridge, freezer brand new, guaranteed, 5'9"x19"x21", 2 door, worth \$600, sell \$395; full set teflon coated saucepans, new, \$49; ext. 3397.

Girls bike, \$50; Yamaha guitar and bag, \$50; record player, \$200; leather coat, \$50; other items; 20 Banner St, O'Connor, Sat and Sun.

Glass airlocks, approx. 30 rubber plugs, 2 gln jars, suitable for wine making, ext. 2977 or 881417.

Goat, desexed male, almost 12 months old, very friendly and lovable, would make an ideal pet, \$20 to good home, Pam, ext. 2056 or Greg, ext. 2072.

Hang glider, cowen super 2, \$450, Gaye, ext. 4338.

Hardy Jet rod, hardy marquis 8/9 reel, hardy jet sinking tip line dt7, dam quick reel with cortland dt7 line, all \$100, C. Porter, ext. 2371, RSBS.

Honda Civic, 3 door, 75, low miles, exc. condit, service book, extras, \$3600, Bill, ext. 2286ah, 54 Ijong St, Braddon.

Honda Scamp, 72, 48000mls, returning to Canada this month, \$850, ext. 4130 or message, ext. 2220.

House, Downer, near shops, school, park, 4 bed, plenty builtins, large entry, sep din, kitchen and family area, sep shower, garage, patio, quiet location, \$37000, 476427ah.

House, Duffy, 4 bed, ensuite, bar/rumpus, double garage under, inground pool, wine cellar, lawn sprinkler system, views, immac, \$85000, ext. 4564.

House, 4br, established garden, Campbell, ext. 3609 before 3pm.

Holden, HD, 67, sedan, white, manual, 8 months rego, radio, 65000 miles, goes well, \$400 ono, 511406ah or ext. 4092 afternoon.

Holden, 68, low mileage, unbeatable, immac condit, new Goodyear s/b radials, 11 months rego, \$1450 ono, ext. 4261 or 882317.

Intracampus transport, mens bicycle, nothing fancy, new rubber, gear hub, \$40, Tony, ext. 4709.

Land, lot 379, Coogee St, Turross Heads, views, 58x125', services, cheaper and more elevated than new subdivision, ext. 4729, Bev Pope.

Lillipilli, block of land in Arbor Court, northern aspect, fine view, 200yds from beach, \$14000, ext. 3732 or 489960.

Leyland minivan, 75, white, rego Aug 78, exc. condit, what offer, 20 Banner St, O'Connor Sat and Sun or weekdays after 5pm.

Metal bed base, 3', \$20 ono, wooden headboard and 4" foam mattress, 511407ah.

Mini 1100, 68, newly spray-painted, interior and engine exc. condit, radio and heater, price negotiable, 514483ah.

Minolta, srt 101, \$150; stereo rotel 310 amplifier, connoisseur tt, seas speakers am/fm cassette recorder, all exc. condit, \$400; 522433.

Minolta, x1250 super 8 movie camera power zoom, dim existing light capacity, f1.2 lens, never used, under original guarantee, \$110, ext. 2416 or 958869.

Nylon tyres, 4, 750x16 Toyo, suit 4 wd vehicle, new, \$180; ext. 3785 or 823431ah.

One Indian raw silk kaftan, navy blue, \$25; typically Indian handcraft embroidered cushion covers, set of four, \$20; ext. 2169.

Pram, Cyclops Mini-bye, also converts to stroller, double handle shopping bag, as new condition, \$50 ono, maroon colour, 582013.

Potted plants, zelvova serrata, aristotelia serrata, cianthus puniceus, podocarpus dacrydioides, knightea excelsa, eleocharis dentatus, betula paprifolia, sophora

microphylla, beilschmeidia tavia, large, \$2, small \$1, ext. 3695.

Rear louvers, black, suit Mazda sedan, \$35; workshop manual engine, mazda rx3, \$5; R. Ritchie, 653732.

Renault, 12gl sedan, 75, bargain, \$3100 or best offer, exc. condit, white and brown trim, towbar, lam screen, heated rear window, radials, rego Mar 78, urgent sale, Neal, ext. 2492.

Simpson, semi-auto washing machine with built in heater, six years old, exc. condit, \$80, ext. 3084.

Ski boots, Nordica size 6, brand new - used once, \$40, ext. 4446.

Small white, glass topped dressing table with chair, \$25; 16' rotary hoist, \$30; window 6x5', screen, holland blind, \$40; cheap carpet, underfelt; 479408ah.

Steelcraft pram/pusher, \$15; bouncinette, \$5, good condit, and clean; Peter, ext. 4446.

Strollers, fold up, \$7, cyclops, \$12; steelcraft pram, as new, \$35; serviceable skis and stocks, \$12; Barton, ext. 3242, 412269.

Toyota Corona, sedan, 66, sound condit, \$450 ono, 546045.

Toyota Corona, 60, \$900; lounge/divan, \$95; record player, \$30; small tables; lampshades; jigsaw puzzles; Beanbag; Crockpot, \$25; Ged Martin, ext. 4282 or 885480.

Turner, 14sq, 3brs, sep living and dining, carport, large block, many trees, delightful outlook, easy walking distance from ANU, CSIRO, Civic, \$48000, 474936.

Two brand new highest quality handwoven Tientsin carpets, 12x9' imperial gold dragon design and 9x6' pale gold classical design, ext. 3188 or 814760.

Typewriter, IBM dual pitch golfball, ext. 4357 or 542649 ah.

TV, b/w, 12", best offer; kitchen stools, \$2 and \$5; flippers, \$9; strip radiator, suit bathroom, \$7; radio, \$3; ext. 4686, Mrs Lentsch.

Vacuum cleaner, Pye upright as new, \$35, Mrs Bennet, ext. 3079.

Valiant, vj, 73, 318, v8, auto, vinyl roof, t/bar, extras, exc. condit, recent NRMA report, \$3000 will trade, ext. 3515 or 4326 or Flat 20.1 McKay St, Turner.

VW camper dormobile, 1800cc, only 470000km, all extras, exc. condit, Krebs, ext. 2707 or 2832.

Volvo, 142s, 69 model, 4 speed manual, 2 door sedan, high mileage but good condit, must sell, owner will haggle, what offers, ext. 2571 or 732752ah.

Washing machine, Hoover twin-tub, perfect running order, \$40, 17 Scrivener St, O'Connor.

Weight lifting equipment, complete set of weights, plus barbells and dumbbells, \$50 ono, B. McKinlay, ext. 2518.

Wooden table, 4' diameter, \$15; washing machine, fully auto, 15 months old, \$510 new, sell for \$350, Ted, ext. 2096 or 888242ah.

Wanted
Black academic gown, cheap please, Peter Cooper, ext. 2394.

Girls bicycle, pref. 24", reas. condit, negot. price, B. Hall, Room 312 Burton Hall or message.

House, close to campus required for ANU holiday program playleader, Peggy Kernaghan over summer vacation, Anne Atkins, ext.

Diary of events

The deadline for diary notices is 3pm on the Wednesday week before publication (19 October for the next issue - which covers the period 31 October to 13 November). Diary items should be written legibly and sent to ANU Reporter, University Information. They cannot be accepted by telephone.

Monday 17 October

Urban Research seminar. R. Archer (Department of Housing, Environment and Community Affairs), 'Problems of urban renewal under the land markets and statutory controls'. Seminar room D, Coombs Building, 2pm.

Psychology seminar. Professor W. Scott, 'Research on variable properties of groups'. Room 210, Physics Building, 3.30pm.

Tuesday 18 October

Germanic Languages seminar. Professor V. Lange, 'Musil: Das Fliegenpapier'. Room 2143, Dedman Building, 10am.

Far Eastern History seminar. J. Cushman, 'Duke Ch'ing-fu deliberates: a mid-eighteenth century reassessment of Sino-Nan-yang commercial relations'. Seminar room E, Coombs Building, 11am.

Physical and Theoretical Chemistry seminar. Professor B.F. Gray (Macquarie University), 'The chemical physics of muscle contraction'. Room 57, RSC, 11am.

Philosophy (RSSS) work-in-progress seminar. C. Mortensen, 'Paraconsistent systems stronger than C₁'. Seminar room D, Coombs Building, 2pm.

Economics (RSPACS) seminar. W.M. Corden, 'The effects of economic expansion in major countries on macroeconomic problems in other countries'. Seminar room B, Coombs Building, 2pm.

Humanities Research work-in-progress seminar. Professor G.E. Davie (Edinburgh University), 'John Anderson's Philosophy of Education'. HRC reading room, Hope Building, 4pm.

ANU film group. 'Mildred Pierce' and 'The Spiral Staircase'. Coombs Lecture Theatre 7.30pm.

Wednesday 19 October
Anthropology (RSPACS) seminar. S. Gell, 'Muria marriage'. Nadel room, Coombs Building, 9.30am.

Inorganic Chemistry seminar. Dr W. Steffen, 'Stereochemistry of eight - coordinate dodecahedral complexes of the type MX₄Y₄. A limitation of Orgel's Rule'. Room 134, RSC, 11am.

History of Ideas seminar. A.D. Megill, 'Jaques Derrida: some preliminary thoughts'. Seminar room A, Coombs Building, 11am.

Medical Chemistry Group seminar. Dr G.B. Barlin, 'Syntheses of pyrazines'. Seminar room, JCSMR, 11am.

History (SGS) seminar. 2392 or Sally O'Neill, ext. 4365.

Lockup garage facilities, for Datsun 180B from 17 Dec to early March, will pay reas. rent, ext. 4273 or 816447.

Microscope, for medical student, also wooden table about 32"x42", Peter, ext. 4446.

Piano in good condition, ext. 2268 or 581095ah.

Piano, suitable for beginner, good condit, under \$500, K. Robinson, ext. 4122 or 888665.

Professor H. Thomas, 'The Cuban Revolution'. Room 1133, Haydon-Allen Building, 2pm.

University House dinner, hall, 6.30pm.

Thursday 20 October

Organic Chemistry (joint RSC, SGS, CSIRO) seminar. Professor A. Albert, 'Current work on polyaza-heterocycles'. Room 134, RSC, 11am.

History (RSSS) seminar. Professor B. Thomas (University of Reading), Political and social consequences of the Spanish Civil War'. Seminar room G, Coombs Building, 11am.

Convocation luncheon. Professor W. Hogan (University of Sydney), 'The economy'. Hall of University House, 12.30-2pm. Acceptances (\$4 per person) to Convocation Officer by 17 October. (Inquiries ext. 4144/2229).

CRES seminar. Dr D. F. McMichael (Department of Environment, Housing and Community Development), 'Planning and managing the Great Barrier Reef as a marine park'. 5th floor, Life Sciences Library Building, 12.30pm.

Experimental Pathology seminar. G.I. Schoeffl, 'Vascular casts'. Seminar room 1, JCSMR, 1pm.

Sociology (RSSS) seminar. T. Sheppard, 'Interpersonal relations and academic performance'. Seminar room D, Coombs Building, 3.30pm.

NH & MRC Social Psychiatry Research seminar. Professor W. Scott, 'The adjustment of university students'. Seminar room 2, JCSMR, 2.30pm.

Earth Sciences seminar. Dr J. Liu, 'Post-rutile phases of dioxides and lower mantle hypotheses'. Seminar room, Jaeger Building, 4pm.

ANU film group. 'A Clockwork Orange' and 'Don't Look Now'. Coombs Lecture Theatre, 7.30pm.

Friday 21 October
Education Research seminar. C. Blakers, 'Issues in career education'. Seminar room D, Coombs Building, 11am.

Political Science (SGS) seminar. Mr I. Warden, title to be announced. Room 1002, Arts III Building, 11am.

Opera films. 'The Magic Flute' by Mozart. Auditorium, Canberra School of Music, 7.30pm.

Sunday 23 October
ANU film group. 'Bring Me The Head of Alfredo Garcia' and 'Walking Tall'. Coombs Lecture Theatre, 1.30pm.

University House film group. 'The Phantom Carriage' and 'Witchcraft Through The Ages'. Common room, 8.30 pm.

Monday 24 October
Psychology departmental staff meeting. Room 105, Psychology Building, 3.30pm.

Tuesday 25 October
Biochemistry (JCSMR) seminar. Professor C. Yanofsky (Stanford University), 'Control of expression

Pair of adjustable roller skates, Smith, Uni. Pharmacy.

Womans bicycle, with gear shifts, P. Cook, ext. 2130 or 4415.

Rupert Bear books, or annuals, ext. 4273 or 816447.

Work, staying in Canb. over Xmas, look after children under 3, all weekdays, A. Abidin, room 332, Garran Hall.

Work any kind over Christmas, B. Hall, room 312 Burton Hall.

10 speed gents bicycle, ext. 3357 or 823494ah.

of the tryptophan operon of *E.coli* by transcription attenuation'. Seminar room 1, JCSMR, 1pm.

ANU film group. 'Belle de Jour' and 'Los Olivados'. Coombs Lecture Theatre, 7.30pm.

Wednesday 26 October
Anthropology (RSPACS) seminar. L. Cromwell, 'Preparatory research on the Torres Strait Islanders in Townsville: an urbanising ethnic minority'. Nadel Room, Coombs Building, 9.30am.

Inorganic Chemistry seminar. Dr T. Rauchfuss, 'Synthesis of porphyrins with sulphur ligands'. Room 134, RSC, 11am.

Centre for Research on Federal Financial Relations seminar. Mr D. Scafton (Director-general of Transport, Adelaide), 'Urban transport policy formulation and co-ordination'. Room 2071, Copland Building, 12.30pm.

History seminar. J. Fitzpatrick 'The bicycle in rural Australia 1890-1920'. Room 1133, Haydon-Allen Building, 2pm.

University House dinner, hall, 6.30pm.

Thursday 27 October
Organic Chemistry (joint RSC, SGS, CSIRO) seminar. Mr R.Y.S. Tan, 'Recent aspects of the reaction of peracids or oxygen with olefinic substrates'. Room 134, RSC, 11am.

History (RSSS) work-in-progress seminar. J. Cookson (University of Christchurch), 'Sermons to help Britain win: the celebration of fast days, 1793-1815'. Seminar room G, Coombs Building, 11am.

Experimental Pathology seminar. N.G. Ardlie, 'Heparin 1977'. Seminar room, JCSMR, 1pm.

CRES seminar. Professor D.J. Whalan, 'Environmental law in Australia - is there such a concept?'. 5th floor, Life Sciences Library Building, 12.30pm.

Sociology (RSSS) seminar. Professor H. Mol, 'Wholeness and breakdown in the Natural Sciences'. Seminar room D, Coombs Building, 3.30pm.

Earth Sciences seminar. Dr A. Pedersen, 'Geology and petrology of the native iron bearing volcanic rocks from Disko Island, Central West Greenland'. Seminar room, Jaeger Building, 4pm.

ANU film group. 'Romantic Englishwoman' and 'Women in Love'. Coombs Lecture Theatre, 7.30pm.

Friday 28 October
Development Studies discussion group. Mr V. Eri (Papua New Guinea's High Commissioner to Australia), 'Representing a new nation'. Lecture room, B Block, OHB, 12.30pm.

Sunday 30 October
ANU film group. 'Silent Running' and 'Snake'. Coombs Lecture Theatre, 1.30pm.

University House film group. 'Silent Running' and 'The Making of "Silent Running"'. Common room, 8.30pm.

Accommodation Available
Chapman, 4br furn, family or two adults required to share with owner, mid Dec-Jan 79, \$40 pw, ext. 2836 or 882783.

Coast house, for holidays, sleeps 5-6, secluded bush, short walk to beach, wildlife nearby, no pets, 480801, No Dec/Jan.

Deakin, furnished house with deck and pleasant garden, 6 Nov to 25 Feb 78, \$50 pw, ext. 3201 or 822945.