ANU Reporter



Government response to Chubb today

On the eve of the Federal Government's response to the controversial Chubb report on the future of the ANU, criticism of the report, and support for the University's opposition to it, continue to pour in.

At the time the ANU Reporter went to press, it was expected that the Minister for Higher Education and Employment Services, Mr Peter Baldwin, would release the Government's reaction to both the Chubb proposals and the Stephen Committee report today (Wednesday 27

The Board of the Canberra Institute of the Arts has told Mr Baldwin, that the Chubb proposal to separate The Faculties and the Institute of Advanced Studies at the ANU, and amalgamate The Faculties with the University of Canberra, would not be in the interests of the ACT or Australia.

In a letter to Mr Baldwin, the Board's Executive Director and former Vice-Chancellor of the ANU, Professor Peter Karmel, said the ACT would lose a major educational asset if the ANU were split - and it would be a long time, if ever, before university education in the ACT achieved the status it currently had through the ANU.

In a letter to the Minister for Education, Mr Dawkins, another former Vice-Chancellor of the ANU, Professor Anthony Low, said: 'I can't think that one person's brief investigation should tear apart three decades of work of so many others'.

Professor Low, who is now President of Clare Hall at Cambridge University, said it would be 'appalling to cauterize a quite remarkable institution when other options - including leaving things as they are - are available'.

Emeritus Professor John Legge from Monash University's Centre of Southeast Asian Studies, in a letter to Mr Baldwin earlier this month, said of the Chubb proposals: 'You should know...that this



The Education Spokesperson for the Australia Democrats, Senator Robert Bell, told a recent luinchtime rally in Union Court that his party would block the Chubb proposals if they came before the Senate

course of action, if pursued, will appear to the overwhelming majority of the academic community within Australia, and also internationally, as an act of vandalism, perpetrated by people who have no real understanding of the nature of the institutions which they are proposing to dismember nor of the fragile character of academic structures.'

The Visiting Professor of Australian Studies at Harvard University, Professor L R Hiatt, has condemned the Chubb proposals as 'misguided' and says they will achieve nothing for the ACT or the

In a letter to Mr Baldwin, the Professor of Physics at the State University of New York, Professor Barry McCoy, said the ANU was the only institution of higher learning in Australia with an international reputation.

Professor McCoy said the Chubb proposals for separation and amalgamation would 'take an exceptionally well functioning administrative system and subject it to serious damage.

'Surely the UK profits from Cambridge and Oxford and Japan profits from the University of Kyoto and the University of Tokyo.

'Your Ministry should take pride in the fact that the ANU is in constant contact with them and all other world institutions of higher learning.

'The proposals now before your Ministry will, if adopted, seriously damage these international contacts. It can surely not be in Australia's best interest to destroy her best institution of higher

The editors of the prestigious international journal Cambridge Review, produced by Cambridge University, wrote to Mr Baldwin earlier this month saying proponents of the Chubb proposals were under-informed both about the present standing of the ANU and of the likely reaction from the international academic community to its dismemberment.

(The ANU's) existence and reputation has a disproportionate effect on the standard and reception of Australian research and scholarship elsewhere.'

In a letter to the Vice-Chancellor Professor Laurie Nichol, the Professor of Biomedical Sciences at the Institute of Advanced Studies University of Malaya, Professor Tikki Pang, said it was unthinkable that the Australian Government was seriously considering the dismantling of 'such a prestigious, unique, effective and internationally recognised institution.'

Australian Conservation Foundation's national lobbyist, Mr Paul Rutherford, wrote to Mr Baldwin last month asking him to reject the Chubb proposals.

'The outstanding contribution of the ANU in many fields stems in no small part from the close links between The Faculties and the Institute.

'Destruction of one of Australia's leading universities, which is recognised as such internationally, would almost certainly follow from implementation of the Chubb report recommendations.'

The Trades and Labor Council of the ACT has called on the Minister to confirm the ANU as a national university composed of both research and teaching

- Peter Cotton

Employment flows from Research Centres

hundred new jobs and a strong R&D base following the award to the ANU of two new Cooperative Research Centres (CRCs) to be based in Canberra.

The Minister for Science and Technology, Mr Simon Crean, recently announced the successful first-round CRC proposals. Each Centre would have an annual budget of about \$4-5 million, and employ approximately 15 to 20 scientists plus support staff and students.

The business and industry adviser to the ACT Government, Mr Fulton Muir, told ANU Reporter that the two new atres would not only mean more

positions for the Territory, but also would generate flow-on employment in various ACT industries. These included finance and business services, retailing and wholesaling, entertainment and personal services and manufacturing.

Mr Muir said there were also potential valuable gains to the Territory from commercialisation of the Centres' research, and through educational programs. The Plant Science Centre in particular would bring with it advantages for the ACT primary and secondary school systems, Mr Muir said.

The five year \$100 million CRC program administered by the Office of

The ACT could gain up to several direct scientific and research support the Chief Scientist aims ultimately to set Research Schools of Biological Sciences up 50 such Centres, 15 in the first year. The scheme is designed to enhance the Division of Life Sciences in The scientific and engineering excellence in Faculties, the CSIRO, and a new research and teaching in Australia, and to promote closer links between scientific research and industry.

> The Vice-Chancellor of the ANU, Professor Laurie Nichol, said the two ANU Cooperative Research Centres brought together a concentration of talent which would be difficult to match.

> The Plant Science Centre has a world class team of plant scientists who will carry out research to design and engineer new plant varieties for future agricultural, environmental and industrial needs. Centre partners are the

(RSBS) and Chemistry (RSC) in the IAS, Australian biotechnology company, Biocem Pacific Pty Ltd.

The Centre's Co-Directors are the Acting Head of the Research School of Biological Sciences, Professor Brian Gunning, and ANU Adjunct Professor, Dr Jim Peacock, from CSIRO's Division of Plant Industry.

The scientific principals in the new Centre are: Dr David Day and Dr Angela

Continued on Page 7

- Marietta McGregor

The challenges ahead for tertiary education

by Richard Johnson*

While Australia was at the beach over summer, the Higher Education Council published its vision of the medium-term future for the sector.

It is two and a half years since the Federal Government's White Paper on Higher Education, and this indication of current thinking is timely. Whether it is welcome remains to be seen.

One thing welcome, after all the academic-bashing of recent years, is to read Mr Dawkins' senior advisers saying: 'The higher education sector has responded effectively' to the White Paper, (p 2); and 'the quality of Australian graduates is high'. (p19); and mentioning 'the current high standards' of the higher education system (p 18).

This paper gives a good idea of the Council's thinking about education and its place in Australia today as well as conveying a number of fairly pointed recommendations to institutions and to government. In looking at the national and international contexts of Australian higher education, it emphasises that we need to be not only a clever country but cleverer than other countries: we are in a world competitive as never before.

To achieve what the Council calls 'a new vision for Australia', will require even larger numbers of students in higher education, and with the temporary diminution of the school-leaver cohort in the next few years there will be scope and need to enrol more of the older cohorts.

Two conclusions are drawn from this position: first, that the government should not reduce funding for higher education simply because of the shrinkage of the younger cohort; a target rate for the entire 17-64 year old group should be set nationally and enrolments should be kept up to that target, with varying proportions of age groups according to circumstance.

Second, there will be much greater diversity of backgrounds and previous learning among the student population and institutions will have to take more special measures than in the past to ensure that these people succeed in their

The paper presents a number of areas where institutions are urged to lift their game: quality of teaching, with some attention to training academics in basic pedagogy; planning, especially to overcome the predicted shortages of academic staff; staff development; and better management of institutions.

It then turns to some of the nitty-gritty of higher education: admissions procedures (should be much more flexible and perceptive, not relying on a single number as the basis for admission to high-demand courses); credit transfer

Comment

within and between sectors, and recognition of prior experiential learning, on grounds of both equity and efficiency; the design of courses to ensure general as well as vocational learning; modularisation of courses, combined with rigour; accreditation and the role of professional bodies in this process. The paper looks also at cooperative education (with industries or with other institutions), at the use of technology for course delivery, and at distance education.



Professor Johnson

The final chapter is concerned with research, its place in higher education, its funding and management.

After endless argument in the past three years over amalgamations and other issues of structures and funding, it is a relief to read a paper that is concerned with educational issues. It discusses the relationship between research and quality of teaching and clearly does not accept that every academic should be engaged all the time in research: 'Few academics are involved unremittingly in quality research throughout their working lives . . . University academics must all be familiar with the way knowledge is structured, questioned and developed or generated' (pp.37-38).

It recommends that much more be done to foster good teaching by academics, that teaching-related development programs be established, and that recognition and rewards be developed for high performance in teaching and

professional and public service as well as research, especially for senior staff for whom promotion is no longer available.

One of its recurrent themes is the great diversity of students' educational and social backgrounds that will result from extending access. This diversity will pose special challenges for institutions in providing support for students, and for academic staff in adjusting their teaching styles to a more diverse intake. It will also mean providing courses or units more in accord with what the students seek than what the academics wish to provide. There will need to be programs of staff development to assist with these

A philosophy of openness informs the paper. This comes out most clearly in the short section on modes of delivery: 'The diversity of the student body will require institutions to use different methods to deliver higher education. The explosive development of the information technologies enables higher education to be, to a large extent, freed from location and time constraints . . . There is no reason why the techniques developed for distance or off-campus learning cannot be used for on-campus

The paper notes the decline in the 17-19 year-old population in a few years' time but says this should not lead to a decline in funding, since we will need to admit increasing numbers of older students to higher education and re-education. It tells the government firmly that there is no cheap way to safeguard quality in an efficient higher education system. On the other hand it does not see all funding as coming from government, and sees a variety of funding sources as a

Its strongest recommendations relate to planning and management within institutions, and it even offers institutions a little tutorial on 'four key management processes' (pp.23-24) - in summary, goals, budgets, staffing, progamming.

protection of institutional independence.

The Council does not see the Unified System as being uniform. It values the diversity of institutions and approaches and will work to maintain it. This gives opportunities especially for smaller institutions or components to develop their niches under a benign eye.

Altogether the paper is a statement of the Council's policies which will be a useful guide for institutions, whether they like its elements or not. Much of it, apart from the funding recommendations, has been endorsed by NBEET and passed to the Minister for his consideration. The Council thinks that after the turmoil of the last few years the system needs time to settle down. One hopes it gets it.

* Emeritus Professor Johnson is a Visiting Fellow in the ANU's Centre for Continuing

Letter

Union area 'foul'

Cycling into the campus on a pristine March morning via the Union area I thought I had taken a wrong turning and ended up at the Belconnen tip.

The horrendous sight which met my eyes was sickening - obviously the result of a night of 'revelry' - broken bottles strewn from paths to lawns, crumpled 'tinnies', ripped cigarette packs and other detritus from human beings and the 'good life'.

If 'life is an attitude' then God help us when those responsible pass their exams and move from this beautiful campus into the 'real world'. I trust they were all dragged from their drunken sleep and made to clean up their foul mess (but that's too much to hope for).

Stephanie Williams Management Information Systems Division

(Buildings and Grounds Division was invited to repond to this letter but declined - Ed.)

Correction

An article in the most recent edition of ANU Reporter (13 March) in the briefly section contained some inaccuracies.

The NHMRC grant referred to in the article was awarded to Dr Bill Cowden. as well as Drs Alistair Ramsey and Professor Robert Blanden.

The grant was for a project entitled T cell immunity to predicted T cell epitopes of env and gag proteins of HIV, and not Development of AIDS vaccine using synthesized peptides.

The ANU Reporter story was based on information supplied.

1991 IBM Conservation Award

Submissions are invited for the 1991 IBM Conservation Award, which is a joint initiative of IBM Australia and the Zoological Parks Board of New South

The Award aims to recognise significant achievement in advancing the conservation of the natural environment. It seeks to promote greater awareness of activities aimed at long term environmental conservation and to stimulate research to advance conservation.

The 1991 winner will receive \$35,000, and five additional prizes of \$1,000 each may also be awarded. The winner/s will be announced at an Award Presentation to be held in Sydney in October.

Submissions must be in writing but are not limited to this medium. Video, audiotape, still pictures and film are acceptable but must be accompanied by a written structured summary.

Closing date for submissions is 1 June 1991. Nominations should be addressed The Chairman, 1991 IBM Conservation Award Review Committee, Taronga Zoo, PO Box 20 Mosman NSW 2088. For inquiries, please contact Dr Jack Giles at the above address.

A rich collaboration between Research Schools and Faculty

A new undergraduate course in the He said it had been hoped that RSSS; Dr Stephen Nicholas, Australia-Faculty of Arts has already attracted many new students and, according to its convenor, is a shining example of collaboration between the research schools and the faculties.

Dr John Eddy, a senior fellow in History at the Research School of Social Sciences, said all lecturers involved in the course were from the University's Institute of Advanced Studies and most of them were 'world' authorities teaching from their own research and publications.

between 40 and 50 students might enrol for the course, but its popularity had outstripped expectations and 70 students were now attending lectures.

The course is a general survey of the people in Australia from 1788 to the present with a special focus on English, Scots and Irish emigration to Australia and on non-British migration since 1945.

Lecturers in the course include: Dr John Eddy, History RSSS; Emeritus Professor Noel Butlin, Economic History Japan Research Centre, RSPacS and Economic History RSSS; Mr Richard Reid, History RSSS; Dr David Pope, Economic History RSSS; Dr James Jupp, Centre for Immigration and Multicultural Studies RSSS; Emeritus Professor Jerzy Zubrzycki, Demography RSSS; Emeritus Professor Oliver Macdonagh, History RSSS; Dr David Fitzpatrick, Trinity College, Dublin and History RSSS; and Dr Charles Price, Demography RSSS.

ANU Reporter is published by University Public Relations (Editor: Peter Cotton; Staff writer Marietta McGregor), 28 Balmain Crescent, Canberra, 2601. Telephone (06) 249 2229, Fax (06) 249 5568. ANU Reporter is published twenty times a year, on the second and fourth Wednesday of the month during the academic year. Editorial inquiries should be made on (06) 249 4171; inquiries about classifieds, diary, arts, awards, meetings, visitors, mailing lists, circulation, etc., should be made to Susan White on (06) 249 2106. A limited amount of paid advertising is accepted providing it meets the criteria of interest and benefit to members of the ANU community.

Printed by National Capital Printing, Fyshwick,

Powerful new lasers for ANU

One of the most powerful lasers in the world is now being assembled in the Laser Physics Centre at the ANU.

The new machine has been made possible by a recent grant from the ANU's Large Equipment Committee. The grant has been used to purchase several pieces of new laser equipment for the Research School of Physical Sciences and Engineering (RSPhysSE).

The first of these is a high resolution titanium sapphire laser which will support the School's spectroscopy work, particularly on semiconductors such as gallium arsenide. It will be dedicated to joint projects between the Laser Physics Centre and the Department of Electronic Materials Engineering.

The other new laser is a very stable mode-locked neodymium-doped yttrium-lithium-fluoride laser which will be used in conjunction with existing equipment to generate high intensity beams of coherent laser light with more than two terawatts (two million megawatts) of peak power. By way of comparison, one of the world's major laser research centres, the Lawrence Livermore National Laboratories in the USA, has a 10-15 terawatt (10 to 15 million million megawatt) machine.

The Head of the Laser Physics Centre, Dr Barry Luther-Davies, said that the ANU machine would eventually have almost the same power as the Livermore laser once an ingenious techique for increasing the laser's power, developed at the ANU, was introduced.

The technique was successfully tested by PhD student, Mr Yanjie Wang of RSPhysSE, at the University of Rochester, USA, late last year. Dr Luther-Davies said the method was a very cost effective way of boosting beam power, and also had the desirable effect of simultaneously reducing the laser pulse duration.

Essentially, the researchers have found a physical mechanism which causes an increase in beam power when the frequency of the laser is doubled in a crystal. The ANU idea is an extension of a technique called 'frequency doubling' which adds two infrared photons to produce one frequency-doubled green photon. According to Dr Luther-Davies, theory and experiment have confirmed that by using the new method, laser power could be boosted by a factor of five to 10 million megawatts.

The trick the ANU researchers are using is to split the infrared light beam into separate pulses which travel at different speeds when they are shone into a large potassium dihydrogen phosphate (KDP)

Acting Master

Dr Rafe de Crespigny has been ap-

pointed acting Master of University

This follows the resignation of the

former Master, Dr Susan Bambrick, who

has accepted the position of Director of

the Coffs Harbour campus of the

Dr de Crespigny will continue to de-

vote a portion of his time to his duties as

a Reader in the China Centre, Faculty of

An electoral committee, headed by the

Vice-Chancellor, will make a

recommendation to Council on the

pointment of a new Master.

University of New England.

crystal. The slowest pulse is sent through the crystal first, followed by the faster wave, which is deliberately delayed so it catches up and eventually 'overtakes' the slower wave.

Both waves are required for 'frequency doubling' which occurs preferentially when the product of the two wave intensities is highest. As one wave overtakes the other that optimum time sweeps through both pulses and transfers all the infra-red laser energy into a shorter, frequency doubled, green light pulse.

Dr Luther-Davies said that when the ANU laser was able to generate 10-terawatt pulses, it would be the second most powerful in the world outside the Lawrence Livermore Laboratory. Research at the ANU would benefit from a more 'interesting' laser performance, at a fraction of the normal cost.

He added: 'Much of the physics we do requires very short light pulses. The laser itself will produce pulses about one picosecond long (a million millionth of a second). After frequency doubling, we can expect to reduce that to 200 thousandths of a million millionths of a second - 200 femtoseconds - which is comparable to the shortest duration optical pulses produced by any laser, which are 50 femtoseconds long.

'At these levels, if you could see the light pulse, it would appear as a brilliant band of green light just ten times wider than a human hair, and travelling past you at 300,000 kilometres per second!'

In a series of experiments with the new laser, the ANU group will shine short pulses of intense light onto atoms ionising them into plasmas. Plasmas generated in this way are believed to be very efficient generators of high intensity x-rays, Dr Luther-Davies said. They will have wide application in materials analysis and in medical research. There is lively international competition to develop high intensity x-rays to image living tissue microscopically.

The new lasers will greatly extend the capabilities of the Laser Physics Centre's \$2 million installation, and enhance its standing as a national facility.

The Laser Physics Centre has a range of collaborative projects under way with researchers from other Australian universities. A group from the University of Melbourne is testing x-ray optics; scientists from the University of New South Wales are working on the generation of charged particles; and Professor Bruce Boreham from the University of Central Queensland is currently visiting the Centre to collaborate in studies on the ionisation of gases at extreme temperatures

- Marietta McGregor

Australia Day Honours

In the Australia Day Honours List, Emeritus Professor H M White, former Head of the Department of Clinical Science in the John Curtin School of Medical research, was named an Officer in the General Division of the Order of Australia for service to clinical science and humanity

Also, Dr A L Elek, senior research fellow in the Department of Economics, Research School of Pacific Studies, was made a Member in the General Division of the Order of Australia for service to international relations.

Twin sheep to boost research

ANU scientists have developed Australia's first custom-made genetically identical twin lambs from the division of a single sheep embryo.

Their work could improve stock bloodlines and lead to a better understanding of wool growth, ageing and geneticallycaused diseases.

Research in the Developmental Physiology Group of the John Curtin School of Medical Research (JCSMR) has focussed on two particular areas of interest: manipulating animal embryos, for example, by dividing them to obtain multiple progeny; and improving freezing methods to preserve the treated embryos.



Dr Shelton

Interest in the area of animal embryo freezing has developed rapidly. Embryos are far less likely to carry diseases than postnatal animals, and there is a burgeoning international trade in frozen embryos. A senior fellow in the JCSMR, Dr Jim Shelton, said his group had evolved a technique of preserving mouse embryos by plunging them directly into liquid nitrogen, using a special combination of cryoprotectants. This method also had been applied to sheep.

Dr Shelton said the JCSMR work was a departure from conventional embryo preservation techniques. For the latter, embryos generally needed to be frozen very slowly, and Dr Shelton said this required expensive and precisely controlled equipment.

In the related work on embryo manipulation, the group has produced twin lambs with exactly the same genetic makeup (monozygotic) by splitting sheep embryos into two halves five or six days after fertilisation. Half-embryos have a survival rate of 50 per cent after transfer to a surrogate mother.

Scientific interest in monozygotic twin lambs is related to their uniqueness as experimental animals. Because the animals are genetically identical, their cells, tissues and organs can be transplanted from twin to twin without causing an immune response. The recipient sees the tissue as self whereas tissue from another animal would be recognised as foreign, and thus would be rejected.

For this reason, these synthetic identical twins are being used to study cell development and the regulation of the immune system. According to Dr Shelton, of particular interest are the mechanisms by which the immune system in a developing foetus comes to recognise the animal's own tissue as self and to distinguish it from foreign and potentially harmful cells. When this self-recognition goes awry, he said, an individual mounts an immune response to its own cells. The outcome is autoimmune disease.

Identical twin sheep are also being used to study the development and ageing of wool follicles. The simplified cryopreservation techniques developed at the ANU have added an extra dimension to this research, because monozygotic twin sheep of different ages now can be developed. Despite the age disparity, the two animals remain genetically identical and will accept grafts of tissue and organs from each other; therefore, skin and wool follicles can be grafted from one animal to its twin.

Experiments of this nature will lead to an understanding of why wool follicles start to degenerate after four or five years. Scientists in the laboratory have found that when mature sheep skin is grafted onto a foetal lamb, follicle development, which normally ceases at about 100 days foetal age, starts again. This research may lead to means of pharmacologically controlling development and ageing.

AN INTRODUCTION TO RETIREMENT PLANNING



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Mr Russell Starr - F.P.I. Limited

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Time: 5.30pm for a 6pm start

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Balmain Crescent
ANU Campus

Light refreshments will be served afterwards

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ANU and the Western Pacific

Two new works on the Western Pacific recently published by the Research School of Pacific Studies (RSPacS) illustrate the diverse research on the region carried out in the School.

The publications are Lapita Design, Form and Composition*, edited by Dr Matthew Spriggs (pictured below), who is a fellow in the Department of Prehistory, and The Bougainville Crisis**, the proceedings of a one day seminar at the ANU, edited by Dr R J May, Head of the Department of Political and Social Change, RSPacS, together with Dr

Studies on Lapita design arose from the Research School of Pacific Studies' Comparative Austronesian Project, which seeks to establish the historical, cultural and social links between Austronesianspeaking societies throughout the Pacific and Southeast Asia.

Dr Spriggs said his own contribution to the workshop, a paper entitled The changing face of Lapita: transformation of a design, explores entire Lapita motifs. Certain motifs, for example, an anthro-pomorphic face design, recur throughout the region. Using this approach, Dr Spriggs has interpreted the Western Pacific Lapita differently from assessments based upon the simpler and more

Spriggs, because it included for the first time work by French archeologists on Lapita pottery from New Caledonia. In the past, the very specialised French research, carried out in isolation, was less accessible to other scholars of the culture. He said the French contributions to the ANU workshop had provided new perspectives on the region, as well as adding to the general body of knowledge on Lapita design.

The second publication from RSPacS on the Western Pacific region is a contemporary collection of papers on politics and change in Bougainville. The papers were given at a conference held at the ANU in 1990 to discuss the Bougainville crisis and its implications.

At that conference, Dr May presented a paper called Political implications of the Bougainville crisis, and Dr Spriggs gave a personal account of his impressions as an 'unwilling civilian' on the fringes of the Bougainville war, in Bougainville, December 1989 - January 1990: a personal history. The two papers appear in the

Among other papers included are a discussion by Professor James Griffin, formerly of RSPacS, and now in the Prime Minister's Department in Canberra, of the historical background to the present conflict, and the options currently facing the PNG Government and the Bougainvillean people.

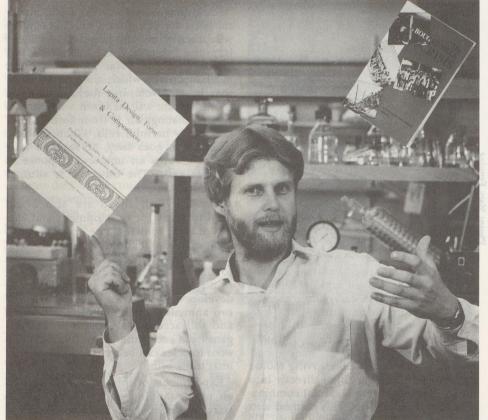
In another paper, Mr Henry Okole, a Papua New Guinean postgraduate student in The Faculties at the ANU, gives an account of the history and politics of the Panguna Landowners' Association, and the former Speaker of the North Solomons Assembly, Mr Moses Havini, addresses the issues of human rights and community disruption.

Dr Spriggs said he thought it was well worth noting that both volumes included contributions from members of The Faculties as well as the Institute of Advanced Studies at the ANU.

*Lapita Design, Form and Composition is produced and distributed by the Department of Prehistory, and printed by the ANU Printing Unit.

**The Bougainville Crisis is published and distributed by Crawford House

- Marietta McGregor



The work on Lapita design collects eight papers presented during a workshop held in 1988 in the Department of Prehistory, under the aegis of the Lapita Design Project. The papers provide detailed examinations of the Lapita design complex, a distinctive decorative system employed on prehistoric Lapita pottery. Lapita design elements are distributed widely throughout the Western Pacific region.

geometric Lapita style of Fiji and Polynesia.

In another workshop paper included in the book, Professor Anthony Forge, head of the Department of Prehistory and Anthropology in the Faculty of Arts, relates his own work on Sepik art in PNG to the Lapita theme.

The ANU Lapita workshop was particularly important, according to Dr

Lecture series on Overseas Chinese

The Inaugural Jennifer Cushman Memorial lecture will be given at the ANU on Thursday 18 April by a visiting scholar of the Southeast Asian Chinese, Dr Mary Somers-Heidhues.

The lecture is entitled Chinese Settlements in Rural Southeast Asia: The Unwritten Story.

The Overseas Chinese minorities in Southeast Asia have become an astonishingly dynamic and powerful force in the economic development of the entire region over the past twenty years.

ANU scholars have been in the forefront of international research on Overseas Chinese, particularly through a project in Research School of Pacific Studies (RSPacS) in the early 1980s. The project was headed by Professor Wang Gungwu, now Vice-Chancellor of the University of Hong Kong, and the late Dr Jennifer Cushman, a Cornell graduate who worked at the ANU for over 15 years. Their work culminated in a major international conference in 1985, followed by a book edited by them: Changing Ethnic Identities of the Southeast Asian Chinese since World War II.

After the sudden death of Jennifer Cushman in 1989, a Memorial Fund was established to maintain the influence of her work and ideas, in the form of a series of public lectures by some of the world's leading authorities on the Southeast Asian Chinese.

Because of Dr Cushman's unusually wide range of international experiences and interests - in Chinese, Thai and Malaysian studies - it was thought appropriate that the lectures be scheduled not only in Canberra, but also in countries where work on the Southeast Asian Chinese is being undertaken (Hong Kong, Singapore, Bangkok and the USA) with the aim of linking up the worldwide activities in this field.

Dr Mary Somers-Heidhues is the author of one of the best comparative studies in this field, Southeast Asia's Chinese Minorities (Longman, Melbourne, 1974). Like Jennifer Cushman, Dr Somers-Heidhues is a graduate of Cornell in Southeast Asian Studies and Chinese, and is now teaching at Göttingen University in Germany. She has recently completed another book on the Chinese in the islands of Bangka and Billiton in

The Inaugural Jennifer Cushman Memorial lecture will be delivered at 8pm on Thursday 18 April in the Asian Studies-Law Link Lecture Theatre. It is open to the public. There will be a reception afterwards in the Coombs tearoom. For information phone (06) 249 3106.

Action at Town vs Gown



The annual Town vs Gown cricket match proved popular with senior staff and their guests again this year. The only disappointment on the day was the defeat of the home side. The eight marquees on South Oval provided shelter for a variety of distinguished spectators, including the guests of the Vice-Chancellor and Justice Gallop, members of the Canberra Festival Committee, and the players and their families. The event was part of the Canberra Festival and was sponsored by Mallesons Stephen Jacques. The final score line in the limited over contest was Gown all out for 272, with Town reaching 3 for 273 in the 39th over.

Haiku

by Ken Gardiner*

Nothing quite so loud -the cymbal that sounds the end to meditation.

(ii) One autumn evening: walking uphill to shop and on into the moon.

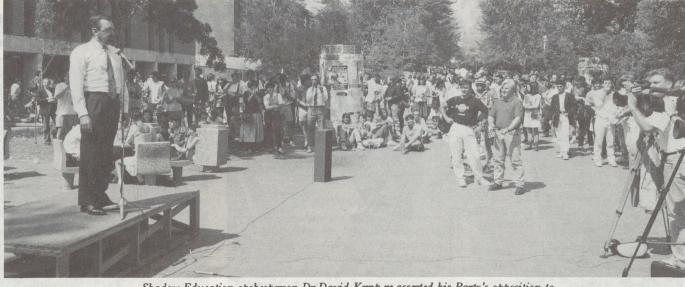
(iii) A round moon rises. Guess now, where is the other half of the cymbal?

* Dr Gardiner is a senior lecturer in the Asian History Centre in the Faculty of Asian Studies.

Staff and students rally to save ANU



The Dean of the Faculty of Arts, Dr Richard Campbell, addresses the lunchtime rally.



Shadow Education spokesperson Dr David Kemp re-asserted his Party's opposition to the Chubb proposals

About 2000 ANU staff and students attended a rally in the Union forecourt earlier this month to voice their opposition to proposals for change to tertiary education in the ACT. The Federal Government sponsored report was prepared by Professor Ian Chubb of Wollongong University. Speakers included Opposition spokesperson on education, Dr David Kemp, the Democrats education spokesperson Dr Robert Bell, the Chairman of the Board of the Faculties Professor Deane Terrell, and Student Association President Liz O'Leary. Dr Kemp re-affirmed his party's opposition to the Chubb report which proposes the separation of The Faculties and the Institute of Advanced Studies at the ANU and the amalgamation of The Faculties with the University of Canberra. Dr Bell said that the Democrats in the Senate would block any legislation based on the Chubb proposals. He said the Chubb document failed to provide evidence of significant educational benefits from its splitmerger proposals.



A petition to the Federal Parliament calling for a rejection of the Chubb proposals has so far collected about two thousand signatures.



A popular feature of the rally was free barbecued sausages provided by the Students' Association

Briefly . .

Japanese Conference

Teachers, students and researchers involved in Japanese studies and Japanese teaching in Australia will gather at the ANU from 11-13 July 1991, for the Seventh Biennial Conference to be held by the Japanese Studies Association of Australia.

The Conference centres on three themes: Japan and the World; Political, Social and Economic Changes in Japan; and Japanese Languages and Studies in Australia.

Distinguished guest speakers at the Conference will include Professor Takashi Inoguchi (Tokyo University), Professor Takao Suzuki (Keio University), Professor Iwao Nakatani (Osaka University) Professors Kent Calder and Sheldon Garon (Princeton University) and Professor Arthur Stockwin (University of Oxford).

All interested in contemporary Japan and its world significance are very welcome to attend.

The Australia-Japan Research Centre will offer, for students of Japanese studies from around Australia, fifty special fellowships to attend the Conference. illets are sought for these students.

For more information, please contact Eiichi Katahara or Marilyn Popp of the Australia-Japan Research Centre: phone 249 3780; fax 2490767.

Retirement

Elizabeth Richardson, Head of Technical Services in the Library since 1981, and a senior Library staff member since 1977, left the ANU in February.

She will travel with her husband, Emeritus Professor Jack Richardson, formerly a Commonwealth ombudsman and ANU Law Faculty member.

During Ms Richardson's period as Head of Technical Services, automation has been successfully implemented. This now allows speedier processing of material and detailed provision of management information.

AMIC student medal

The Australian Mining Industry Council (AMIC) is inviting students to submit research papers for consideration for the annual AMIC Student Medal to be awarded by the Council.

The award, which consists of a medal and \$500, aims at encouraging excellence in student research and communication in the field of environmental research related to mining.

The AMIC Student Medal is awarded on the basis of a written paper and pre-

sentation based on original student research (not literature surveys). The subject matter must have direct relevance to environmental management in the mining or mineral processing industries.

Selected student papers will be presented at the 1991 Workshop to be held in Perth from 7-11 October.

Abstracts not exceeding 250 words should be submitted by 31 May 1991 to Mr David Whitrow, Executive Officer, Environment and Services, Australian Mining Industry Council, PO Box 363 Dickson ACT 2602. Further information is available by telephoning (06) 279 3600.

Workstation theft

Staff at the ANU's Australian National Dictionary Centre (ANDC) have appealed to whoever broke into their cottage in Kingsley Street last Tuesday night (12 March) to return the SUN Workstation taken during the break in.

A spokesperson for the ANDC said the Workstation would be of no use to whoever had taken it but it was invaluable to the work of the Centre.

She said that if the person or persons responsible would return the machine, by whatever means, it would be greatly appreciated.

Missing artworks

Information is being sought from anyone who might know the whereabouts of two works which are missing from the University's art collection.

An oil painting by George Lawrence, entitled 'Picton Street', which disappeared from the Scarth Room at University House last November, unfortunately has not yet been recovered, according to the University Art Curator, Ms Johanna Owens.

The second missing work is a fine ink drawing of Professor A D Hope by his artist friend the late Noel Counihan. The University acquired the work in 1981. Return of the drawing is particularly sought because it is needed for research purposes.

Ms Owens says if anyone has any information about these works they should contact her on extension 2501.

Davis retires

Mr Barry Davis retires from the University on 31 March, after more than 21 years service in academic administration.

Mr Davis began his career at the ANU as Admissions Officer, then became Faculty Secretary in the Faculty of Economics and Commerce, later taking up a similar post in the Faculty of Science.

His ANU friends and colleagues wish him well for a long and happy retire-

Books and Arts . . .

Word Festival attracts big names





More than 700 people from all over Australia recently attended the biennial National Word Festival at the ANU to listen to and meet some of the big names in the Australian and international literary scene.

A highlight of the Festival was an after dinner address at the High Court by world famous English crime writer P D James. Also attending were Booker Prize winner Thomas Keneally, singer/song writer Eric Bogle, poet Les Murray, and noted Australian authors Jean Bedford, Judith Rodriguez and John Tranter.

As well as the numerous dinners and panel discussions, a feature of the Festival was the book launches, including three involving authors with strong links with the Australian National University.

Renowned Australian crime writer Peter Corris launched the new thriller Wildrag by Bob Brissenden (above left); and (above right) Sarah Dowse (left) launched the

Renowned Australian crime writer Peter Corris launched the new thriller Wildcat by Bob Brissenden (above left); and (above right) Sarah Dowse (left) launched the novel Crush by Brenda Walker (right), which recently won the T A G Hungerford prize for fiction in Western Australia.

Also, Suzanne Edgar's book Counting backwards and other stories was launched by Canadian author Audrey Thomas.

The threats to the Planet

Our biosphere under threat: ecological realities and Australia's opportunities.

Stephen Boyden, Stephen Dovers and Megan Shirlow

Melbourne, Oxford University Press, December 1990

by Alan Bellett*

Increasing human population, and unprecedented levels of energy consumption and waste production in developed countries, are beginning to threaten the stability of the 'biosphere', life and the global life support system.

This is shown not only by phenomena such as ozone depletion, acid rain and global warming, but by direct indicators such as decreasing biological productivity of rivers, oceans and several continents, and a rate of extinction of species approximately one million times the rate at which new species evolve (R M May, 1988; Science 241, 1448).

In Our biosphere under threat, Boyden, Dovers and Shirlow have produced a well researched and documented account of the biohistory of Australia, and of its present ecological situation. This shows that in spite of our small population, the modern, high-energy culture of Australia is unsustainable.

Our per capita rates of land degradation, carbon dioxide emission in transport and electricity generation, and of extinction of native mammals and vascular plants, are high by international standards.

The main message of this book is that if we and other high energy consumption countries ignore these ecological realities, the biosphere will eventually become unable to support human and other life. How long this will take, and which particular part of the biosphere will first lose its capacity to support life is uncertain; but if we delay remedial action for this reason, it may come too late.

The authors consider three possible responses to these problems: none at all, resulting in eventual extinction of humankind and many other species; an inadequate response, resulting in greatly increased human mortality, distress and social disruption but with some survivors; and a planned and orderly transition to ecological sustainability. It is rational to prefer the third scenario. But as adequate responses require reduction in the material standard of living in developed countries, it is also realistic to doubt that they will occur until the problems are so obvious and severe that transition to scenario two is irreversible.

Boyden et al correctly point out that historically, some isolated human societies have degraded the ecosystems that support them and perished, but others have adapted their culture and achieved sustainability. However, the dependence of the economies of these people on nature was obvious to them; it is so far from the everyday experience of people in developed urban societies that the myth that technology somehow overcomes the dependence of human society on nature is common.

Stephen Boyden and his colleagues canvass a number of options for Australia, suggest priorities, and attempt to calculate what responses might be adequate for particular problems we face. They perhaps pay too little attention to possible trade-offs between control of population and consumption.

The suggested requirements for sustainable energy use by 2005 include a 90 per cent reduction in the use of fossil fuels to generate electricity, a 70 per cent reduction in fuel used for transport, and a similar reduction in per capita energy use. Such reduced energy use is possible, for it corresponds roughly to that of Australia in 1939, or of Portugal today. But whether it is politically possible to get there from here is another matter, for it requires the health of people, future generations and the biosphere to take precedence over the dominant economic values of our society.

This book is not intended to prescribe answers, but to raise issues and stimulate debate. The ANU Centre for Resource and Environmental Studies is publishing a series of 'Fundamental Questions' papers in response to it, as part of this process. Our biosphere under threat deserves to be widely read and discussed.

Like Robert May (Ibid.) 'I believe future generations will find it blankly incomprehensible that we are devoting so little money and effort to the study of these questions'.

* Dr. Bellett is Senior Fellow at the John Curtin School of Medical Research, and convenor of the Societal values and ecological sustainability theme of the Fundamental Questions Program in the Centre for Resource and Environmental Studies.

Literary Lunch

The best-selling American author Evan Hunter, whose alter ego crime writer Ed McBain has a devoted readership as 'The King of Crime', is the guest speaker at the next ANU Convocation – The Canberra Times Literary Lunch.

Tickets at \$18.00 (which includes a two course lunch, wine, fruit juice and coffee) are available from University Public Relations, phone (06) 249 4144 or 249 5004. Booking is recommended.

PNG Art

A new exhibition at the Canberra School of Art, Canberra Institute of the Arts, highlights exciting developments in contemporary art in Papua New Guinea.

The art in the Luk Luk Gen! Look Again!, exhibition uses western techniques of painting, drawing, printmaking and metal sculpture. The exhibition is open until 13 April.

OPEN 7 DAYS 9am-5pm



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PLAN A WEEKEND BROWSE SOON

Council

The Vice-Chancellor, Professor Nichol, reported to a meeting of the University Council on 8 March that the ANU had made a submission to the Australian Science and Technology Education Council (ASTEC) as part of a preliminary process expected to lead to the production of a green discussion paper and eventually a white policy paper on setting directions for Australian research.

The proposal was initiated by ASTEC in a report to the Prime Minister in 1990 and agreed to by him.

The Vice Chancellor said the ANU paper, prepared with the assistance of the chairmen of the two academic boards, Deans and Directors, stressed the importance of plurality in decision making rather than attempting to specify priority areas. It discussed research management and training in the context of strategic planning within institutions.

Other matters on which the Vice-Chancellor reported included:

Academic labour market

Professor Nichol referred to the report Study of the Labour Market for Academics produced by the Department of Employment, Education and Training and the report's message that there would be a substantial shortfall in the number of academic staff over the next decade. He said that there seemed little doubt that the problems currently being encountered in staff recruitment and retention in law, commerce and computing science, would spread to other disciplines. He commented that with similar international trends emerging, the ANU would have to intensify its efforts to remain competitive by examining all avenues of increased flexibility in appointment procedures and reward structures after the current round of award restructuring was completed.

Student enrolment

All faculties at ANU, with the possible exception of Asian Studies, were likely to meet or exceed their undergraduate enrolment targets for 1991. Professor Nichol said although it was too early to report in detail on definite numbers, the global figure for undergraduate

enrolments had so far reached 6500, including full-fee students.

Professor Nichol provided Council with a list of minimum cut-off scores comparing ANU with NSW universities for students entering on the basis of their year 12 results. These showed that the Bachelor of Engineering degree at ANU at 91% had a very high entry level. The cut off for entry to the ANU Law School was 94.1% and Actuarial Studies 95.25%. In other disciplines, Commerce was 78.3%, Economics 69.9%, Arts and Science 54.9% and Asian Studies 50.05%.

The Vice-Chancellor commented that the entry cut-off for Science at ANU appeared average while that for Arts did not appear to compare favourably with several other universities. He added that such comparisons do not provide an infallible quide to relative standards and a much better measure was the median percentile of entrance since that reflected the distribution of student attainments. These figures would become available later in the year.

Other matters dealt with by Council include:

Review of administration

Council received the report of the committee which reviewed the administration of the University and resolved that the report be given wide distribution within the University and that interested parties be invited to respond on particular recommendations of concern to them in time for Council's May meeting. In particular, responses would be sought from both academic boards and the Finance Committee.

Submissions to the review, although not sought in confidence, will be held as confidential documents and have protection from disclosure under the Freedom of Information Act. Access to the submissions can be granted only with the permission of the Chancellor.

Research advisory board

A research Advisory Board is to be established for the John Curtin School of Research, headed by the Director and including the Vice-Chancellor, a representative of the NHMRC and four persons external to the school, at least three of them external to the ANU. Among the terms of reference for the advisory board is the provision of advice on the mechanisms used for resource allocation

within the School and the monitoring and reporting on the progress of changes undertaken, particularly in relation to recommendations made in external reviews of the scientific work and organisation of the school.

University Fellow

Professor T.H.R. Rigby who retired as Professor of Political Science in the Research School of Social Sciences in December 1990, has been appointed a University Fellow on the recommendation of the two academic boards. Professor Rigby, a specialist on the Soviet Union, will hold the appointment for two years with a possibility of renewal for a third year.

Job redesign

The Secretary reported to Council in a respose to a request at its December 1990 meeting on reports of problems associated with the job redesign R29 Program. The Secretary will provide for Council a report on the outcome of remaining appeals related to job redesign and transfer to new salary scales. He will also report at the end of this year on whether the objectives of the job redesign project in relation to productivity and job satisfaction are being met.

Obituary

Council expressed its deep regret at the death of Mrs Dorothy Green who died on 21 February after a long illness. Mrs Green was a lecturer, then senior lecturer in the Department of English, Faculty of Arts, from 1964 to 1973.

Council membership

The Senate has elected Senator Austin Lewis to be a member of the ANU Council to fill the vacancy caused by the resignation of (former) Senator Peter Baume. Senator Baume resigned from Parliament to take up a professorial appointment in community medicine at the University of NSW.

Academy Fellowship

Dr D G Marr, a senior fellow in the Division of Pacific and Asian History, Research School of Pacific Studies, has been elected a Fellow of the Australian Academy of the Humanities.

CRCs bring employment

Continued from Page 1

Delves of the ANU (Education and Communication); Dr Eric Huttner, of Bicem (Industry Relations); Dr Bill Taylor, CSIRO, and Dr Richard Williamson, ANU (Plant Development and Product Quality); Dr Murray Badger, ANU and Dr John Passioura, CSIRO (Plant Growth and Performance); and Dr Wayne Gerlach, CSIRO, and Dr Adrian Gibbs, ANU (Plant Disease Mechanisms and Prevention).

The new Centre for Robust and Adaptive Systems will conduct research into robust and adaptive signal processing and control systems, with applications to the improved operation of existing and new industrial plant in Australia. A major focus is on engineering research training to meet national needs for young highly trained research engineers.

The Centre's sponsoring partners are the Department of Systems Engineering, in the ANU's Research School of Physical Sciences and Engineering (RSPhysSE), the Signal Processing Groups from the Defence Science and Technology Organisation (DSTO), the Signal Processing and Image Technology Group of CSIRO's Division of Radiophysics, and the Process Control Group of BHP's Melbourne Research Laboratories.

Director of the Centre for Robust and Adaptive Systems is Dr Robert Bitmead, who is a senior fellow in the Department of Systems Engineering, RSPhysSE.

The research team leaders and student supervisors are Dr Ross Barrett (CSIRO), Dr Michael Green (ANU), Dr Rodney Kennedy (ANU), Dr Duncan McFarlane (BHP), Dr Iven Mareels (ANU), Professor John Moore (ANU), Dr John O'Sullivan (CSIRO), Dr Langford (DSTO), Professor Darrell Williamson (ANU), and Dr Robert Williamson (ANU).

Mr Muir said there were few examples of new industries being created in Canberra on the basis of local research, and the CRC program had offered a unique opportunity to redress the situation by capitalising on a major ACT asset, the vigorous research base already well-established in the Territory.

Classifieds 2

Continued from Page 8

bar, r/racks, exc cond, 3 new tyres, \$14,500 ono. Rob 2886587.

NISSAN, Vanette SGL, '83, 8-seater van, reg 10/91, exc cond, a/c, bull/tow bar, \$7600 ono. 2813998.

TOYOTA, Corolla, '71, 2 dr, reg 10 mths, exc cond, \$1300. 2813261 (h).

TOYOTA, Cressida GL, '82, all accessories, 2 careful owners, exc cond, \$11,000 ono. 2413056.

VOLVO, '81, white, auto, sdn, vry well maintained, a/c, tow bar, log books avail, \$10,000 ono. x5003/2821900 (ah).

VW, Kombi, '75, fully recond eng, new clutch, vgc, \$2300 ono. x3307/2919714.

Real Estate

MALUA BAY, must sell, b/ front, 2 level, easy dual occupancy. Lower floor also s/ contained, sleep 4-6, in ground heated pool, 2 min walk from shops, magnificent views. \$175,000 neg. (044) 711301.

RURAL PROPERTY, Heath-Victoria, ideal semiretirement, 47 1/2 acres grazing land, gd fences, ample shedding, contempory dwelling, in-ground filtered pool, gd views, \$220,000 ono. Marilyn x3208/2547471 or (054) 332388.

YARRALUMLA, 2br duplex dble brick, parquet flooring, dual occupancy block, open f/place, dble garage, mature trees and shrubs. \$182,000. 2823329.

Accommodation Wanted

FINNISH 27 y.o. male researcher trainee (Ag Econ at Aust Bureau of Ag and Resource Economics) looking for a place to stay for a couple of months (now till mid May). Preferably around Lyneham-Braddon area. Jukka 2469121 (bh).

FLAT or hse to rent or sublet. Nonsmoking, academic cple wish to have occupancy from July 1991 for years' sabbatical leave. Please send particulars to Professor James Wilson at 8A, Residence 12, Chinese University of Hong Kong, Shatin, N.T., Hong Kong. Fax (852) 6035229.

RESPONSIBLE ANU Masters, m, n-smoker, student req single rm. 2951113 (aft 6pm).

Accommodation Available

BELCONNEN, Furn b/ sitter, quiet hse, near all amenities, on bus route to Civic & ANU. Mrs Howarth 2543535.

BELCONNEN, 3 or 4 br home for non smoker or cple, furniture & terms neg. OK for single person to share. 2582531 (after Thurs).

COOK, 3 br f/f hse, 2 bathrooms, garage, about 7 June-5 September, \$180 pw. x4037/2514950.

COOK, bedsitter with own kitchen, bathroom & garden courtyard. Suit mature or postgraduate student. Rent neg. 2514607.

COOK, lovely furn 2br t/house, at Wybalena Grove, avail from April 27 approx for 6-8 weeks, \$190 pw. 2531248(w) /2515073(h). CURTIN, person to share flat, \$70 pw. Near shops, non smoker pref. Graham

O'CONNOR, person wanted to share house (pref male), close to shops, bus stops, bicycle paths. PhD student welcome (though not a must). 2485883.

O'CONNOR, n/smoker to share 3 br hse, April - July with 2 others, ff room, \$65 pw plus exp. Virginia 2472226(ah).

RIDGEWAY, 15 mins to Civic, f/f 24 sq home on 9 acres. Avail from 19/4 - 21/8, \$250 pw. 2977289(ah)/2935125 (bh).

SUSSEX INLET, Small waterfront holiday cottage avail w/ends & holidays, quiet bushland setting. x4049/2582016(ah).

TURNER/O'CONNOR, 1 br s/c gdn flat, almost f/f, opp. CSIRO/ANU, \$105 pw. 2485862(h)/2612902(w).

TURNER, 1 m/f wanted to share 3 br hse with 2fs. Please call 2574745(ah) aft Easter.

WATSON, room, semi/f, cosy house, garden, dog, near bike path, buses, pref post-grad, \$50 pw + exp. 2411217(ah).

Secretarial

ACCURATE, reliable w/p and typesetting, long or

short documents, reas rates. Jennifer 2381081 (am)/2490621 (pm).

EXPERIENCED TYPIST, for all manuscripts, standard audio tape transcriptions, proofreading. Laserprinter. Rates neg. 2486410.

TYPING, wp, private correspondence, thesis, essays etc. x0156/2825452(h).

WP/SECRETARIAL services
- Macintosh plus Laserprinter quality. Student rates
avail. 2805029(am)/
2865798(h).

Miscellaneous

INFORMANTS, adult native Chinese speakers, nonachromatopsia, 1.5-2.5 hrs, \$16. Xu, B12 Corin House, ANU. 249 3905.

MATURE AGE STUDENT, 42, male, Australian interested in making friends with another for coffee, talks etc. Age, nationality unimportant. Please write to PO Box 1165, Belconnen.

OPTOMETRIST, Anthony King (B.Optom) LittB (ANU) has now moved premises to Shop 6 Tasman House, 26 Marcus Clarke St. Acton. Bulk billing for ANU students and staff. 2474877.

Wanted

TRICYCLE, suit 4 y.o. child. 2415189.

WATERBED mattress overlay, lambskin/woollen, any size. 258 9354 (after 4).

Arts and Entertainment

ANU Convocation/Canberra
Times Literary Lunch. Best
selling author Ed McBain.
12.30pm. Wednesday 10
April. The Hall, University
House. Tickets \$18.
2494144.

School of Music, ABC Live Broadcast. Paul Thom, harpsicord, 'Works by Scarlatti and F Couperin.' 2pm (must be seated by 1.50pm). Sunday 31 Mar. Llewellyn Hall. FRFF

PhotoAccess, Community Photographic Centre Exhibition. Heike Hahner, 'The Death of Procris.' Wed-Sat 12-6pm. Until 4 May. Kingsley Street Acton.

School of Music, Graduation Recital. Peter Duggan, Oboe. Program to be announced. 8.15pm. Mon 8 April. Llewellyn Hall. FREE. Diary entries for the next issue close on Monday 1 April 1991 and will be for the period 11 April to 24 April 1991 inclusive. Please assist by submitting ALL diary entries on the forms available from University Public Relations, x2106.

WEDNESDAY 27 MARCH

Inorganic Chemistry, RSC Sem. Dr Peter Schwerdtfeger, 'Relativistic Effects in Chemistry; an Overview.' 11am. RSC, Rm 134.

Human Geography, RSPacS Sem. Mr I Ali, 'Rural development and land tenure change in Sabah: a case study of Kundasang.' 3.30pm. Sem Rm C, Coombs Bldg.

Dept of Linguistics, Faculty of Arts Sem. Dr Phil Rose, 'Tonal aerodynamics: intrinsic and extrinsic airflow data from Thai Phake.' 4pm. LG1, Dedman Bldg.

NCEPH Sem. Dr Dov Chernichovsky, 'A Crisis in a health care system and prescriptions for reform: the case of Israel.' 3pm. Florey Lect Theatre, John Curtin School of Medical Research.

THURSDAY 28 MARCH Dept of Economics, Centre for E&C Sem. Dr G Ma, 'Credit Markets in an overlapping generations model.' 2pm. Rm 104B, Copland Bldg

Division of Philosophy and Law, RSSS Sem. Dr David West, 'Spinoza, Positive Freedom and Justice.' 1.45pm. Sem Rm E, Coombs Bldg.

Dept of Sociology, RSSS Sem. Dr Jonathan Kelley. 'Mobility effects: Methods of estimation, with an application to Australian politics.' 4pm. Sem Rm E Coombs Bldg.

Organic Chemistry, RSC Sem. Professor Swee Hock Goh, University of Malaya, 'The Right Oil? Free Radicals and Cardiovascular Diseases.' 11am. Rm 134, RSC. CRES, Sem. Ms Judy Clark, 'Is there a future for native forest logging post 2000?' 12.30pm. CRES Sem Rm, 5th flr, Hancock Bldg.

Division of Historical Studies, RSSS Sem. Dr Paul Johnson, The Moral Economy of the Poor in Victorian England.' 11am. Ross Hohnen Rm, Chancelry.

SUNDAY 31 MARCH Special Easter Sunday Workshop, 'Buddhism in Everyday Life.' 10am - 5pm. 33 Bruxner Close, Gowrie. 2928150/2925622. **TUESDAY 2 APRIL**

Dept of Demography, RSSS Sem. Mr Bob Hogg, 'Indigenous Mortality: Placing Aboriginal mortality within a broader context.' 3.30pm. Sem Rm A, Coombs Bldg.

Dept of Demography, RSSS Sem. Mr K Gaminiratne, 'Child under-nutrition in Sri Lanka.' 3.30pm. Sem Rm A, Coombs Bldg.

Dept of Sociology, The Faculties Sem. Dr Stephen Mugford, 'The scenario method for researching sensitive topics.' 4pm. Haydon Allen Rm 2095.

WEDNESDAY 3 APRIL

Australian Institute of International Affairs & The Magellan Society, Talk. Señor Juan Salazar, Ambassador, Embassy of the Republic of Chile, 'Political Transition and Economic Modernisation in Chile.' 12.30pm. 30 Thesiger Court, Deakin. 249 2003.

Dept of Anthropology and Dept of Prehistory & Anthropology, RSPacS and Faculty of Arts Sem. Helen Kavapalu, 'Dealing with the dark side in the ethnography of childhood.' 9.30am. Sem Rm C (Nadel Rm), Coombs Bldg.

Dept of Linguistics, Faculty of Arts Sem. Ms Barbara

Knackstedt, 'The semantics of involvement in Telugu causation: some implications for a theory of transitivity.' 4pm. John Dedman Bldg, Lect Rm 1.

Dept of Human Geography, RSPacS Sem. Dr Francis Lian, 'The Penans of Sarawak - nomadic foragers, genuine or spurious? Situating the Penans in present day context.' 3.30pm. Sem Rm C, Coombs Bldg.

THURSDAY 4 APRIL

Centre for Women's Studies, Faculty of Arts Sem. Helen Prendergast (EEO Unit ANU), 'Gender Balance in the Institute of Advanced Studies: Consultation with Women Academics.' 12.30-2pm. Rm 101, Psychology.

Division of Historical Studies, RSSS Sem. Dr Bill Hudson, 'Evatt at San Francisco.' 11am. Ross Hohnen Rm, Chancelry.

AFUW-ACT Monthly Meeting. Mrs Helen Allnutt, 'Education in Russia, Japan & Korea.' 7.30pm. RSC.

Sociology Program, RSSS Sem. Deborah Rickwood, 'Help-Seeking for Minor Affective Disorder.' 4pm. Sem Rm E, Coombs Bldg.

Division of Philosophy and Law, RSSS Sem. Dr Robert Dunn (Uni of Wollongong), 'Akratic Attitudes and Rationality.' 1.45pm. Sem Rm E, Coombs Bldg.

FRIDAY 5 APRIL

Economic History, RSSS &c The Faculties Joint Sem Program. Professor Anthony Waterman, 'Modelling Malthus' Growth Theory.' 11am. Ross Hohnen Rm, Chancelry Bldg.

Dept of Political Science, The Faculties Sem. Mr John Nethercote, 'Program Evaluation and the Neutralisation of Accountability.' 11am. Copland Bldg rm 2069.

4 and 5 APRIL

Conferring of Degrees Ceremonies 2pm Thurs 4 April. 10am & 2pm Fri 5 April. Llewellyn Hall, Canb School of Music. Followed by refreshments at Melville Hall, Australian National University.

MONDAY 8 APRIL

Urban Research Program, RSSS Sem. Professor Peter Self, 'Defining and Defending the Public Estate.' 11am. Sem Rm D, Coombs Bldg.

Public Policy Program, Faculty of Arts Sem Series.
Professor FG Castles, 'Reforming Australian Federalism.' 5.30pm. 1st flr, Sem Rm, Crawford Bldg.

TUESDAY 9 APRIL

Political Science Program, RSSS Sem. Dr Don Rawson, 'Have Trade Unions a Future?' 4pm. Sem Rm D, Coombs Bldg.

Dept of Demography, RSSS Sem. Dr Kim Streatfield & Dr Lado Ruzicka, 'Trends and differentials in child mortality in Hunan and Shanghai provinces, China.' 3.30pm. Sem Rm A, Coombs Bldg.

WEDNESDAY 10 APRIL

Dept of Anthropology and Dept of Prehistory & Anthropology, RSPacS and Faculty of Arts Sem. Sally White, 'Myth and reality: a feminist view of Aboriginal mythology.' 9.30am. Sem Rm C (Nadel Rm), Coombs Bldg.

Dept of Linguistics, Faculty of Arts Sem. Professor Andrew Pawley, 'The vanishing languages of the Pacific: what price progress?' 4pm. Dedman Bldg. Lect Rm 1.

Visitors

LECHTE, Dr John. Macquarie University. Visiting fellow to Humanities Research Centre until 30 June. Interests: The work of Georges Bataille. x2223.

For Sale

ABORIGINAL paintings and coolamons from the territories. 2396420.

BABY

BOUNCINETTE,

\$12. Nappy buckets, 2, with lids, \$9 ea. MacLaren carrycot. with mattress, hardly used, \$25 ono. 4 dzn cloth nappies, \$10/doz. 2548618.

BABY EQUIPMENT. Steelcraft cot, \$20. Highchair, \$8. McLaren's stroller, \$40. Asstd cot linen & nappies new & used. Toni x0020/2588571.

BABY JACKETS, various designs, handknitted, wool & nylon, ages birth-12 mths, \$16-20. Jenny 2586558.

BALL DRESS, White silk, size 10-12, suit Debutante, immac cond, \$400. Lynne x2957/2413820.

BIKE, BMX maxi, recently serviced, vgc, \$90. x5195/2486083.

BIKE, womens, hardly used, 2yrs old, top cond, \$175 ono. Kylie 2549415.

BIKE, mens 10 spd, gd cond, \$65. Fuli x2321.

BIKE, men's, 10 spd, 19 inches, great cond, \$110. Inna Thurs, Fri, Sat 10-12. x3904.. BIKES, (1) 6spd, "Speedwell", 27", with lights, guards, stand, vgc, \$150. (1) Mountain bike, 26", 10 spd, vgc, \$150. 2961274.

BIKES, (1) ladies, 22", 3 spd, \$75. (1) ladies, 26", 5 spd, \$85. Both in fair cond. Microwave, large, vgc, \$200. 2961274.

BIKE, 10 spd, \$90 ono. 2475265.

BOAT, sailing, 5.05 metres, with boat trailer & 2 suits of sails, gd cond, \$1000. 2473669.

BUDGERIGARS, 2 plus cage, \$30. Chapati pan, \$5. Fan wall heater, \$10. Venetian blinds, 90cm & 150cm, \$5 ea. Bike mudguards, \$5. x4345(w)/2489374(h).

BULL-BAR, aluminium, suit early model Commodores, \$200 ono. 2381081(am)/x0621/2751350(pm).

CAMERA, Ricoh AF-500, fully auto, auto-focus & flash, exc cond, \$100 ono. Rao x0037/2516629.

CD, Cassette & radio player, 6mths old, exc cond, must sell, going o/s, \$200 ono. x3242/2822818(ah).

CRUISER, 18ft, steel, req painting & finishing touches, best offer. 2584478.

DOUBLE BED, mattress, \$100. Pram, Steelcraft, \$70. Stack hat, 54cm, \$20. 2413764.

FILING CABINET, 4 drawer, gd cond, \$120 ono. Meditation pyramid, aluminium, \$30 ono. 2310825 (ah).

FIREPLACE, freestanding, slow combustion, complete with flue, \$350 ono. Debbie x3498/2587867.

FRIDGE, old but reliable, \$80. Desk, \$10. S/s sink, \$20. Dble divan bed, \$150. Margaret 2515469(w).

GARDEN SWING SET, metal, plus slippery dip, \$50. x3105/2928454 (ah).

HAIR DRYER, Phillips, vry new, \$20. Squash racket, with case, as new, Donnay, \$30. B&G Hall C334.

IRONING PRESS, Singer, as new, \$250. AWA 3 in 1 stereo system, \$220. Pram, Jane Bribon, 3 in 1 complete with all accessories & stormweather cover, exc cond, \$400. x4184(w)/2919990(h).

KING-SIZE "Miracoil" mattress, exc cond, \$520.

Classifieds

Advertisements are restricted to staff and students of the University and members of Convocation and to 20 words each. ONLY one advertisement per person can be accepted for each issue. Typed advertisements should be sent or delivered to ANU Reporter, University Public Relations. The envelope should be marked 'Advertisement'. No advertisements will be taken over the telephone. All advertisements must be accompanied by the name and contact phone number of the lodger (not for publication). The closing date for advertisements for the next issue is Monday, 1 April 1991. Inquiries x2106.

LOUNGE, 3 pce, solid oak, American colonial style, \$800. Exercise bike, \$65. x3632/2816641.

MOTOR BIKE HELMET, Shoei, med-large size, as new, \$55. x4261/2812378 (ah).

NATURAL GAS hotplates, working, in pos, \$150. 2589354(h)/2525633(w).

PAIR of aluminium trundle beds. Can sep. to 2 single beds, inc. new mattresses, \$50. Evon 2897673(w)/ 2887698(h).

PARROTS, superb, princess, yellow & split turquoisines, bourke, K0754. x2278/2545030.

READING LAMP, \$15. Suitcases, \$15-\$18. Winter blanket, Queen size, \$25. Handy ladder, \$10. Teapot & mugs, golden beige, \$10. Decor sword, \$22. Katalin x0023.

ROLAND D50, as new, hard case & 2 extra cards, \$2300 ono. x3106/2413225(ah).
SAILBOARD, one design, 2

2881075(h).

SWIMMING POOL, 4.5m circular, pump, accessories, \$250. Unisex bike, 3 spd, \$50. Childs bike, \$50

sails, gd cond, \$350 ono.

x4572/2544043.

TV, Phillips, colour, exc cond, \$350. Simpson washing machine, \$150. Exercise machine, brand new, \$30. 2651553/2497649 (ah).

TV, colour, old, \$30. B&W, vgc, \$30. Video, Beta, remote control, gd cond, \$100 ono. 2574713.

TV, colour, \$250. Microwave, \$120. Food processor, \$55. Bike, mens, 10 spd, \$135 ono. Also computer desk, freezer, bookcase/wall unit, extension table (solid wood), old side board/dresser. 2582531.

TOASTER, kitchen master, exc cond, \$15. Ladies ice skates, size 39, extras, exc cond, \$55. Bicycle helmet, med, as new, \$35. 2861947 (h).

TYPEWRITER, elec, 12" carriage, Daisy Wheel, 7000 charactor memory, \$250. x0156/2825452(h).

WASHING MACHINE, GE, Sml auto, exc cond, \$130. Bike, 20", exc cond, \$35. Wall unit, lge, walnut, \$180. x4078/2575751.

WASHING MACHINE, heavy duty, \$65. Vacuum cleaner, Sanyo, \$35. Chair &

foot rest, \$60. Coffee table, \$15. Tools, asstd prices. x3307/2919714.

Computers

APPLE 2E, with Epson printer, Zardax wp prog, disks, ribbons, exc cond, \$900 ono. Barry x2006/2496068.

APPLE 2E, with monitor,d-d drive, terminal for printer & software, \$500 ono. x2623/2511859.

IBM compatible, Osbourne XT 10, 640 RAM, 20M hard disk, 360K floppy drive, Brother 9 pin printer, 1 yr old, half new price, \$1000. Kate x3381/2991867.

IBM XTs, colour, hard & floppy disk, \$700 & \$1000. Printers, \$150 & \$180. Modem, \$150. 2413764 (ah).

LAPTOP, NEC Multispeed, 640K RAM, 2 x 720K floppy drives, full sized keyboard, rechargeable battery, lots of software, exc cond, \$1100 ono. 2823348.

Motor Vehicles

ALFA QUATTRO, 4WD, huxury wagon, a/c, pwr windows, stereo, r/racks, 55 000km, reg 10/91, as new throughout, genuine reason for sale, \$13,500. 2532278 (h)/2468525(w).

DATSUN, Bluebird, '83, s/wgn, manual, new battery & clutch kit, reg 7/91, warranty 11/91, gd cond, \$6100. Goh x4032/2493641.

FORD TELSTAR, Ghia, '85, exc cond, low km, \$12,000 ono. Sam or Lisa x2461/2512814(ah).

HOLDEN, Commodore, '80, a/c, radio, exc cond & appearance, NRMA report, reg

1/92. Katalin x0023. KAWASAKI, GPX 750, long

reg, gd cond, \$5500. 2415351.

MAZDA 323, '83, hatch, reg12/91, yellow, mech gd, interior & body in exc cond. Must sell, \$5300 ono. x3107/2956603(ah).

MAZDA 626, '89, 2.2 ltre, immac 5 dr sdx hatch, white, auto, a/c, pwr str, towbar, rad/cass, elec mir/win, cent lock, reg 10/91, wrty 7/92, log bk, \$21,500. 2822684.

MAZDA 929, '78, 6 mths reg, recond engine, new battery & brakes, stereo rad/cass, mags, \$3600 ono. Andrew x3579.

MITSUBISHI, Lancer, '89, 1.5 ltre, fuel injection, tow bar, manual, exc cond, 6 mths reg, \$15,000 ono. Sue 9886587.

MITSUBISHI, Nimbus GLX, '87, a/c, red, manual, tow-

continued on Page 7

ANU Weekly Diary

For information about our wide range of interesting activities, ring our recorded message, up-dated each Thursday.

Phone: (06) 249 0742

Drill Hall Gallery

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