FROM MAITLAND HIGH TO M.I.T.

Dr Sue McNeil came back to the University recently from the United States ten years after having graduated. She was the first woman to complete a Civil Engineering degree with Honours Class I.

Sue McNeil has been lecturing since 1984 in the United States, where, she says, the proportion of women studying engineering at universities has now risen to about twenty-five per cent.

She says she has noticed that most women engineers have fathers or brothers who are engineers and who have given the women encouragement to look at the profession as a career alternative.

Dr McNeil’s father, Mr G. McGeachie, of Dora Creek, is a retired mining engineer. She says her father thought engineering was a quite reasonable career for a woman. She came to this University in 1973 and studied for a combined BE/BSc degree, graduating in 1977. Meanwhile, she married Mr John McNeil, who holds BE and BCom degrees in this University.

John McNeil was transferred to the US by the firm that employed him in 1979 and Sue McNeil enrolled at the Carnegie-Mellon University in Pittsburgh. She went on to complete a master’s degree and a doctorate in transportation systems. For a year she had a teaching appointment at Princeton University in New Jersey and in 1985 she began working at MIT.

In between taking out her PhD and beginning to teach at MIT, Dr McNeil gave birth to daughters, Sarah and Emily.

At MIT she is Assistant Professor in Transportation Systems and a member of the Centre for Construction Research and Education and the Centre for Transportation Studies. Her speciality is statistical methods applied to infrastructure and transportation management problems.

She is among 200 engineers and scientists selected by the National Science Foundation to receive 1987 Presidential Young Investigators Awards. With matching funds from industrial sponsors, the coveted grants provide up to $100,000 per year for five years. The awards are designed to identify the US’ best young faculty and to encourage their early research and teaching careers.

Dr McNeil says that in the future she hopes to see greater participation by Australian schoolgirls in science and mathematics so that they are able to make the transition to university and enrol in technological courses such as engineering.

To the question of the training she received at the University of Newcastle she has a straightforward answer: ‘My undergraduate education here was as good as any I have seen being provided elsewhere.’

INSIDE: Introducing new History Professor
LETTERS TO THE EDITOR

Dear Editor,

A $64,000 question

I read with interest in the Vice-Chancellor's column in the 28 July issue of University News that under CTEC proposals the University will attract about $6,250 for each extra full-time student it enrols.

In the Department of Mathematics we are currently operating on a student/staff ratio of around 18:1. Suppose this Department were to teach an extra eighteen students. Eighteen students will attract about $112,000. The extra lecturer who would be employed would earn $38,000 if he/she were at the top of the range. If the Department's part-time teaching grant, recurrent grant, secretarial support and library grant were all to increase on a pro-rata basis these would rise by $2,100, $4,400, $4,000 and $2,500 respectively. Nothing is being spent on new buildings. So all in all about $48,000 would be spent on the education of these eighteen extra students. On the other hand $112,000 extra government funds would come into the University. Where would the remaining $64,000 go?

To put this figure in perspective I note that our Department's entire library grant this year is only $40,000.

Bob Berghout, Department of Mathematics.

Dear Professor Morgan,

I have written to Mr Edmonds and asked him to pass on the thanks of the Committee for the help given to us by the members of the patrol and maintenance staffs.

As there were many other members of staff who assisted I would like to express on behalf of myself and the Committee our thanks to all those members of staff who helped during the running of the Book Fair.

Shirley Morris, Secretary, Friends of The University.

Dear Editor,

It is pleasant to return to our patch of bushland after a stay at a rather cramped European university, but who on earth is responsible for the construction of that hideous pile of cement which is passed off as the library extension? Why did the emergence of this blot on our fair garden not cause a general outcry? Do we really think it to be all right that one of our central buildings has been made to look like some urban carpark which has escaped the vigilance of the council aesthetics committee? Can anything be done to cover it up? Could we all contribute some money for a painting job? Does ivy grow on these grim bunkerwalls?

Arie Brand, Department of Sociology.

Dear Sir,

This letter concerns the non-delivery of the 1987 Telecom directories to University offices.

Telecom delivered the new directories during the school holidays, almost a month ago, and so far only the people at the Post Office have seen them. It seems that the directories are stacked in the Post Office waiting to be distributed and that they will not leave there until details of how many should go to each department are sent to the Post Office by someone in the Secretary's Division.

So until information is provided, 'phone users' at the University are forced to use old telephone books which is a great inconvenience to departments.

Talking about 'deliveries' will whoever stole my colleague's socks (handmade by his Mother-in-Law) from the men's showers in the Auchmuty Sports Centre please wash them and deliver them to the Information Office.

L. Aurelius.

$200,000 BOOST TO ASIAN LANGUAGE STUDIES

Qantas is providing $200,000 to sponsor sixty-five Australian tertiary students for training in Asian languages in 1987-88.

The Chief Executive of Qantas, John Menadue, said the sponsorship, was aimed at stimulating Asian language learning by Australian students considering a career with Qantas or with other Australian companies.

Mr Menadue said the Qantas language programme would provide undergraduate students with the opportunity to study Asian languages through short, intensive or part-time courses, and would operate on two levels:

- Fifty scholarships up to the value of $1,000 would be awarded to students with little or no language skills, to undertake study in Australia in a range of Asian languages. These would be aimed at first and second year students.
- Fifteen cadetships of an average value of $8,000 would be granted to students with a grounding in either Mandarin or Japanese. The cadets would be provided with a two month intensive language course in either Tokyo or Beijing, together with work experience in a Qantas office in Australia. These cadetships would be aimed at second and third year students.

The selection of students for sponsorship will be made in September and October, with training to commence towards the end of the year.

Applications close in August for the Qantas scholarship and in September for the other avenues,' Mr Menadue said.

Interested students should contact Ms Alison Morgan in the Student Administration Section of the McMullin Building.

Australian Plants: Conference Scholarship

The Newcastle Group of the Society for Growing Australian Plants is providing two scholarships to young people aged eighteen to twenty-five years to attend the Biennial Seminar of SGAP in Canberra from 17 to 22 January, 1988.

Further information is available from Mrs S. Hanchard, Room 174, McMullin Building, or Extension 240.
Dr Sterna-Karwat feels very comfortable living in Australia after having emigrated from Poland. A new staff member in Mathematics, where she has become well-known because of her exuberant personality, Dr Sterna-Karwat talks warmly about Australia and her time so far as a resident.

"My husband and I left Poland in 1981 not long before martial law was introduced and went to Austria, where we entered a refugee camp. We considered moving to America, Canada or Australia and, finally, chose Australia because it seemed to be a very friendly country."

She says their decision has given them what they wanted — a quiet, rewarding life far away from 'big politics'.

Born in Warsaw, Dr Sterna-Karwat gained her Master's degree in algebra and a PhD in mathematical analysis from the Polish Academy of Sciences. Professor Stefan Rolewicz, a distinguished mathematician, was supervisor for her doctorate.

After arriving in Australia the Sterna-Karwats lived in a migrant hostel in Melbourne for three months. 'We are very grateful to the government of this country for so many things, including lessons in English.'

She got a job as a postdoctoral fellow at Monash University and was a lecturer when she applied for the position at this University. Out of forty-four who applied Dr Sterna Karwat was the only woman.

She takes classes in measure theory for Mathematics II, in optimisation for Mathematics IV and tutorials for Mathematics I.

As a researcher she concentrates on optimisation theory and assists Associate Professor John Giles with work on the geometry of Banach spaces.

Her enthusiasm was particularly evident when she spoke to the News about the University, the Faculty of Mathematics and the possibility of her having interaction with other faculties.

'This is the first University I have seen with such a friendly relationship between students and teachers. Mathematics gives really good service to the other departments on campus. I am looking forward to having contact with Economics, Electrical Engineering and Statistics because of their interest in optimisation.'

SPECIAL RESEARCH CENTRES

The Vice-Chancellor says he is pleased that the University has advanced a good number of quality proposals for the establishment of special research centres.

Professor Morgan told Senate on 29 July that with assistance from Professor G. Kellerman, Chairperson of the Senate Research Committee, he had selected the following proposals for submission to the CTEC:

- Centre for Industrial Control Sciences (Professor G.C. Goodwin and Associate Professor R.J. Evans);
- Centre for the Analysis and Modification of Solid Surfaces (Professor R.J. MacDonald);
- Centre for Bulk Materials Handling (Professor A.W. Roberts, Associate Professor A.J. Chambers, in conjunction with Professor Arnold, University of Wollongong).

It was also likely that a proposal for a Centre for Coal Science and Engineering would be put forward in conjunction with research staff at the University of New South Wales and the University of Wollongong.

Science School selection opens

Year II students residing in Rotary District 967 who will enter Year 12 in 1988 are now able to apply to be selected for places in the Summer Science School to be held at this University next February.

About 200 students from the Rotary District will come to the University in the week beginning 7 February. The school will be residential, with the students taking over Edwards Hall for that week.

Students from the area roughly bounded by Swansea in the south, west to Dubbo and Cobar, then across to Merriwa and Nelson Bay will be selected from high schools in the area. The selection of attenders will be on the basis of interest in and aptitude for science and not simply on the basis of academic ability.

Students will attend lectures in Physics, Chemistry, Geology and Biological Sciences, plus a range of visits to industrial and technological institutions in Newcastle, and Supernova. Students may take advantage of the recreational facilities of the University and Edwards Hall.

There will be a school dinner, dances, a careers night and discussion forums in the evenings.

This scheme is part of the Youth Programme of Rotary District 967 and is supported by Rotary Clubs of that District, which will be responsible for the selection of students to attend the school.

Further information is available from Professor R. MacDonald in Physics at Extension 237.
RICHNESS OF PEOPLE'S OWN — AND OTHER — CULTURES

'Helping people appreciate the richness and complexity of their own cultural traditions, of other cultural traditions and the enormously exciting interactions that go on between them, not least in our own region.'

That's what the new Professor of History, Professor Alan Ward, is interested in — not History as sophisticated antiquarianism or simply as narrative.

A specialist on land tenure and administration in South Pacific nations, Professor Ward received the Chair following a career of teaching and research at the Australian National University, Canberra, and La Trobe University, advising authorities in New Zealand, Vanuatu and Papua New Guinea, and writing on his special interest.

He told the News he believes there is intrinsic value in apprehending the richness and complexity of cultural traditions — 'life becomes that much more meaningful and satisfying. And, if it helps people make more informed judgements, or valuations, about issues and events — as it inevitably will — so much the better'.

However, Professor Ward says, it's not good to be half-baked, or Mickey Mouse, about it. He would like to see students acquire a profound understanding of their mainly west European heritage, its lasting worth, as well as its folly, and its shame; to understand it in its own terms, including the industrial-capitalist form of it that took root in eastern Australia — in Newcastle.

He would like them also to understand at least some of the pre-existing cultural traditions of our region — Aboriginal, Pacific and Asian cultures — in their own terms and to understand the dynamics of the relationships between the two.

'It's a tall order,' he says, 'but the existing History staff are very professional and hard-working people, who have built library and archival resources over the years and developed lively courses.'

There are one or two more appointments pending as well, and he knows that cordial co-operation will be forthcoming from other sections of the University — from other disciplines with which History relates.

'Ve intend that Newcastle students shall receive a historical training equal to any in Australia, including supervision of research in Australian and Pacific History and aspects of European, American and Asian History also.

'Along the way, people will emerge knowing better how to regard complex issues, such as the rise of ethnic nationalism in the region and its challenge to European-derived systems, French imperialism or the British tradition of law.'

Or (for another example) the inter-action between capital, management, labour and the regulatory power of the state in the Hunter Valley.'

Professor Ward says it's 'relevant' and our paymasters in Canberra, and taxpayers generally, are, with justification, concerned about relevance to Australian conditions and what makes us more effective as a people and nation.

'But it's a relevance based on a broad and deep appreciation of culture and society — of how different cultures are understood and evaluated in different times and circumstances both by those who participate in them and those who observe and interpret them.'

Alan Ward was born in New Zealand and obtained his BA and Masters degrees in History from Victoria University of Wellington. His PhD in Pacific History was awarded by the ANU. Prior to taking up the History Chair he was Reader in History at La Trobe University.

Offer to scholars by ASC

Australian scholars who visit Great Britain are able to use the Australian Studies Centre in London as a research base.

According to the Head of the Centre, Professor Tom Millar, who visited this University on 3 August (he was guest speaker for the Newcastle Group of the Australian Institute of International Affairs), his institution provided the scholars with accommodation and facilities for research and seminars.

Located within the Institute of Commonwealth Studies at the University of London, the centre, 'virtually acting as Australia's academic presence in Britain', teaches Australian academic courses, fosters work in Australian Studies and endeavours to promote a deeper understanding of Australian history and culture.

Up until last month, a staff member of this University, Mr Robert Mackie, filled the post of Lecturer at the centre.

The centre's budget — approximately £250,000 a year — will, after 1 July next year, be the responsibility of the Sir Robert Menzies Memorial Trust, following the Federal Government's decision not to continue to provide support, Professor Millar says.
Book Fair 'most successful held so far'

The third Book Fair was concluded on 3 August with receipts approximating $40,000 — more than a third higher than in 1985.

Included were the proceeds from the rare book auction — around $5,000.

The Friends of The University, which organised the Book Fair, were delighted with the results. The group's Secretary, Mrs Shirley Morris, summed up the ten-day sale like this: 'It was the most successful Book Fair we have ever run.'

Mrs Morris said the Friends wished to thank all those who had contributed to the success of the fund-raising venture: the people from many parts, including Sydney, who donated the approximately 60,000 second-hand books and magazines; the people who went to the fair and bought the offerings; the helpers who worked 1985-1987 sorting the books and pricing them; the people from various departments of the University who gave their support; the helpers who ran the sale as people thronged the Great Hall, and many others who gave assistance.

Mrs Morris said the local newspapers, radio stations and television station had been most generous with coverage of the Book Fair and the Friends were most grateful also to the Hunter Branch of the Women Graduates' Association for producing most welcome refreshments.

All the profit (when finally settled) will be directed to the buying of the Hunter Tapestry, work on which should be completed by May next year. The huge tapestry will be hung in the Great Hall.

Planning is already under way for the 1989 Book Fair. People are requested to send their surplus books to The Friends of The University. Arrangements for collection may be made by telephoning 61 2059, 48 8629 or 68 5328.

Seminar on Advertising

A seminar at the University on 10 August, arranged by the Newcastle/Hunter Chapter of the Australian Marketing Institute looked at the many ways in which businesses can use advertising to improve their marketing performance, including planning campaigns and using the media, creative professionals and special types of advertising.

Part of the seminar was devoted to participation by a panel of guest speakers who have practical experience of advertising. The panel comprised Mr G. Ferris, Marketing Manager, G. Hawkins & Sons; Mr J. Lewis, Deputy Editor, Newcastle Morning Herald; Mr P. Scott, Marketing Manager, Newcastle Permanent Building Society; Mr F. Lee, Creative Director, Hunter Action Advertising and Mr P. Murphy, Chairman, Retravision, Hunter Region. Dr Hazel Suchard, Senior Lecturer in Management at the University who specialises in marketing, introduced the speakers.

The seminar, the first which the Newcastle/Hunter Chapter of the AMI helped to organise, aimed at strengthening the links between the local business community and the University.

Our photograph shows (from left) Messrs Lee, Ferris, Scott, Murphy and Lewis and Dr Suchard.

CU Manager

Mr Paul Cootes has taken up the position of Manager of the University and CAE Branch of the Universities Credit Union Ltd. Paul has come to the campus from the Credit Union's Office at the University of New South Wales where he was head of the EDP Section.
FEW REPORTS GIVE COMPANIES' ASSETS

'Creative (misleading) accounting' is more likely to occur from thoughtless compliance with conventional accounting standards than departure from them, Professor Frank Clarke argued in his Inaugural Lecture at the University on 5 August.

In a lecture spiced with allusions to some of the notorious, but very colourful, personalities and events in the history of creative accounting and analogies drawn with aspects of art, consumer protection law and religion, Professor Clarke, who has been Professor of Accounting since early this year, was particularly critical of failure by both the professional accountancy bodies and the Government's Accounting Standards Board to ensure 'serviceable' financial data.

Professor Clarke explained that virtually all the attention is focussed on procedural matters - the specification of 'how' accountants are to account - rather than specification of the qualities necessary for financial data to be serviceable in the uses ordinarily made of them.

There is indisputable evidence, he said, that companies' published financial data are the basis of numerous financial measurements, assessments and evaluations relating to their wealth and progress.

Invariably, the products of those uses invite inferences about a company's solvency, liquidity, debt to equity, asset backing, rate of return, capital safety, asset composition and amount, and the nature of amount of its equities - all features pertinent to investment and disinvestment decisions.

'It is critical', he argued, 'that the raw data in published financial reports are indicative of what reasonable people take them to show - various aggregates and sub-aggregates of actual money, or the actual money's worth of a company's assets and equities. But this can be claimed of few conventionally prepared accounting data.'

The current panic over creative accounting is misplaced, misdirected. With the best of intentions, dutiful compliance with the standards that exist is almost certain to produce misleading data. How data are prepared doesn't matter. In contrast, what they actually show, whether they are serviceable, does.

'Accounting seems to have escaped the consumer protection net. Yet, in a significant sense, those who use accounting data are 'consumers' and the data are 'goods'. The idea in consumer protection law that goods have to be of a merchantable quality - that they must be fit for the purposes ordinarily made of them - could be applied to accounting data through a significant change in regulatory direction.'

'Less, not more, standards, but, with the standards specifying end-product 'serviceability' not procedures, are desirable. Without that move, the prospect is that accounting data with their built-in deceptions will, like the baroque, continue to 'delight, but delude'.'

As an academic discipline/ accounting offers many opportunities, Professor Clarke told the News. 'Modern business has commercial complexities which have outstripped conventional thought. It's not so much recreating the wheel, as seeing it in a different light.

'There is enormous research potential. Quite apart from cleaning up extant practice and the applied research problems emerging from that, accounting has a rich, but largely undocumented, history in the development of its underlying ideas, a fascinating literature in which the development of accounting thought is gradually exposed, an inevitable link with the history of economic thought. And, of course, a vital role in so many of the corporate failures, crises and dilemmas, which I referred to in the lecture.

'They make Dynasty look like a fairytale. There's so much to be unravelled and understood, so much to be done, before accounting really serves in the way it should,' Professor Clarke added.

Honours work attracts support from Tamworth

MR SCOTT ELLIS, a final-year student in the Department of Electrical and Computer Engineering, recently attracted funding to support his honours project.

Mr Ellis is developing a real-time load controller in conjunction with Peel-Cunningham County Council, which is located in Tamworth. The controller, based on a PC, represents an extension and refinement of the existing controller, which was based on a VIC-20.

Peel-Cunningham County Council is the electricity supply authority in Tamworth. The Council buys electricity from the Electricity Commission and distributes it to customers throughout its area. The cost to Council of the electricity is based on two components: total energy consumed and maximum monthly demand. The former component is the same as that used for domestic tariffs and covers basic energy and running costs. The demand component, calculated on the peak demand for the month, is designed to encourage Councils to manipulate their loads as to to minimise the instantaneous demand on the Commission's generating capacity.

In 1983 Peel-Cunningham took a first tentative step toward automating its load management. The Council implemented a primitive form of load control on a VIC-20 home computer. For an initial outlay on the hardware of approximately $1,500, Peel-Cunningham were able to save approximately $25,000 a month on demand charges for nine or ten months of the year. The savings, achieved by switching off non-essential loads, such as storage hot water systems during periods of peak demand, are now in the region of $40,000 during the winter months.

Since 1983, Peel-Cunningham have recognised the potential for applying microcomputer technology to its load management systems. To this end, it has donated nearly $4,000 towards the cost of a PC to allow further research and development of load management systems.
Mr Ellis, working in association with Peel-Cunningham and under the supervision of Mr Ian Webster (Lecturer in the Department of Electrical and Computer Engineering, who designed and developed the original VIC-20 based controller), will investigate new control strategies using the new PC-AT.

A similar machine will eventually be installed in Tamworth to replace the ageing VIC-20. The new controller will allow more accurate and more flexible management of the Council’s load, ultimately providing a more reliable and economical electrical supply system.

Japanese Tea Ceremony classes are held in the new Tea Ceremony Room (C49) on Thursdays at 1 pm until 3 pm for $1 (come for one hour or for two). Everyone is most welcome to attend.

Mrs Knighton retires

- The cake and the champers tell the story. Mrs Robin Knighton received them from her friends when she retired early in August. Robin worked as Small Offset Operator in the Faculty of Engineering for the past eleven years. She was honoured by the Faculty at a farewell lunch in the Union and by about twenty-five of her friends, including former staff members at a less formal luncheon. Pictured before attending this function are (from left): Cherie Hook, Pam Falkiner, Anne Robotham, Greta Davies, Robin Knighton, Ron Goodhew, Isabel Sherwood, Roslyn Thrift, Idiko De Souza and Vilma Lucky.

Visit by top Chinese academics

- Newcastle University recently played host to a senior Chinese university delegation. The group of three visitors previously attended the International Conference of University Registrars and Secretaries in Sydney. While in Australia they also visited the Universities of Melbourne, Sydney and New South Wales. At this University they had a meeting with the Vice-Chancellor, Professor Keith Morgan, the Deputy Chairman of Senate, Professor Michael Carter and the Secretary, Mr Phillip Alexander and visited a number of departments.

Our photograph shows Professor Zhu Yaoting, Vice-President of Huazhong University of Science and Technology, Professor Morgan, Professor Wang Yigu, Provost of Peking University and Professor Sheng Zhenbang, Vice-President of Shanghai Jiao Tong University. They are displaying a picture of the Great Wall of China, one of several gifts made to the University by the visitors.
Schoolchildren understanding science

Renowned in Great Britain for his exciting demonstrations of science at work, in particular the science of music, Professor Charles Taylor gave lectures to schoolchildren and a public lecture at the University on 3 August. The Department of Physics was one of the sponsors of Professor Taylor's visit to Newcastle. He is seen leading Gateshead school students in a science lesson. He is on saw and the schoolchildren (from left) are playing hose, recorder and chanter. Photo by courtesy of The Newcastle Herald.

Mr Cleary backs Hunter Academy of Sport

The newly-established Hunter Academy of Sport has been given tangible support for its proposals.

As well as inspecting the Human Physiology laboratory in the Medical Sciences Building, the Minister for Sport and Recreation, Mr Michael Cleary, on 5 August announced that the State Government would provide the academy with assistance of $22,000 a year for this year and next year. Mr Cleary said the assistance was provided on the same basis as that given to the Illawarra Academy of Sport.

'I would hope that with the State Government's financial commitment to the development of the academy now a reality, the academy will soon be operating as a vital link in the process of developing sport within the Hunter Region,' he said.

'The academy represents a marvellous opportunity for sports people in the region and I am sure that with the assistance of those who have been involved with its development to date, the academy will prove to be a significant impetus to furthering the development of sport within the Hunter Region,' he said.

Professor Saxon White, Professor of Human Physiology, is Convenor of the Hunter Academy of Sport.
aims at, among other things, co-ordinating and implementing a regional structure for the development of sporting and recreational excellence.

In order to achieve its aims, it will endeavour to provide services for Hunter sportspeople of superior skill, develop services for adults and children of all ages and of both sexes, support research into an understanding of the mechanisms of enhanced human performance and link the activity of sport and recreation with sports medicine.

Professor White said the Steering Committee for the academy planned to use the government’s assistance to working out its priorities, looking closely at the various sports existing and identifying sporting talent.

Professor Keith Morgan, Vice-Chancellor of the University, and Dr Doug Huxley, Principal of Newcastle CAE, spoke of the individuals and groups with an interest in the academy, including their own institutions, and expressed confidence in the venture attracting wide support.

DEFORMATION STUDIES

A group of more than thirty surveyors and engineers heard Dr Wolfgang Niemeier give a lecture on 10 August entitled the deformation of large structures, such as dams, and how the appropriate surveying measurements, calculations and analyses may be made to detect those movements.

Dr Niemeier is a member of The Geodetic Institute of the University of Hanover, Germany, and has spent his academic career researching statistical techniques which enable the detection of errors in measurement and the subsequent degree of certainty which can be placed on the results of surveying measurements.

Surveyors from the Hunter District Water Board are interested in applying these techniques to similar measurements they have made at Chichester Dam, in conjunction with Associate Professor John Fryer, of the Department of Civil Engineering and Surveying.

Surveyors from other government authorities, local councils and private practice also attended the lecture, along with final-year Bachelor of Surveying students.

The detection of subsidence caused by mining was a topic Dr Niemeier addressed. He is spending three months in Australia and, apart from Newcastle, he will be spending time at universities in Sydney, Melbourne and Brisbane.

Our photograph shows: Dr Niemeier and Professor Fryer, Director of Surveying Studies, Department of Civil Engineering and Surveying.

Parliamentarians learn about Uni's regional role

The Executive of the Staff Association has told local Labor Federal MPs that it is concerned at the CTEC’s failure to consider the regional role of this University when it makes recommendations on funding.

The parliamentarians, Messrs E. Fitzgibbon (Member for Hunter), A. Morris (Member for Newcastle) and R. Brown (Member for Charlton) visited the University on 29 July for a luncheon and talks with members of the Executive and others.

Our photograph near the extensions to the Auchmuty Library shows (from left) Dr W. Wood, Mr Fitzgibbon, Mr P. Chopra, Mr Morris, Mr E. Flowers, Mr Brown and Dr J. Bern. Mr P. Morris (Member for Shortland) apologised for his absence due to his commitments as a Minister.

The Executive pointed out that the Auchmuty Library, whilst attracting an appropriate share of the University’s recurrent fund, is significantly under-funded, since it is also expected to have a regional role. Unlike city university libraries, the Executive said the library carried the extra burden of providing the intellectual and technological information base required by local industry and the community.
Another point discussed was the possibility of the University having its research role down-graded. The Executive said down-grading would be disastrous for the industrial base of the Hunter Region and effectively undermine the operations of the new technology centre being built on campus. Also the University needed more postgraduate students in order to transfer technological advances to the region.

The parliamentarians were sympathetic to the University’s policy of maintaining strong links with local industries. Moreover, they agreed that the University should nevertheless be a place of learning, scholarship and research.

The Executive documented the cuts made in the holding of serials and the downward trend in the number of monographs and, moreover, the decline in industrial and community access to the library.

The CETC should recognise the regional role and ensure special funding to maintain the purchasing capacity of the library without there being any further impact on the University’s recurrent funds.

Whilst not making any commitment the federal members agreed that the situation needs close scrutiny if the library is to continue its effective role in the Hunter Region.

**Need for electoral reform less urgent**

Australia did not experience the sort of political difficulties which make electoral reform a pressing concern in some other countries, the Electoral Commissioner, Dr Colin Hughes, said at the University on 31 July.

Delivering the Lecture in Australian Government, Dr Hughes said Australia increasingly used the two chambers of Parliament to have two bob each way with electoral systems.

One chamber (usually the upper house) was elected by proportional representation. It gave the smaller parties a better chance of winning seats.

The other chamber was elected from single-member districts and was likely to produce governments with a clear majority, although it was not 100 per cent certain.

Although there were some critics of compulsory voting and of requirements that a formal vote had to have as many preferences as there were candidates standing, the overwhelming majority of electors accepted these obligations.

Dr Hughes said he expected that the Commonwealth would be more concerned with matters of electoral administration, and with ensuring that the rising cost of elections was contained.

The immediate cost of an election was now about $50 million, of which $10 million was paid to political parties and candidates to make their campaigns more effective and $20 million on paying polling officials and temporary staff.

But, close to $100 million more would be spent between elections if they were held every three years in maintaining the rolls in readiness for a snap election or a by-election and in preparation for the elections when they came.

The Electoral Commission had introduced some cost-reducing innovations at the recent elections. Cardboard ballot boxes and voting compartments were the most obvious to electors, but there were other changes which will save money in previously labour-intensive operations.

Dr Hughes said that some of the delay in finalising Senate results was attributable to the need to wait two weeks until overseas postal votes were received. In 1987 there were over 35,000 such votes to be forwarded to Australia.

It might be possible to speed up the process substantially by keying in those ballot-papers, and then the numerous counts required by the single-transferable vote system could be done in hours rather than weeks.

However, he saw no likelihood of Australians using voting machines in the immediate future. The machines that were cheap could not cope with our complicated voting systems. Those that could cope would be prohibitively expensive.

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**Scholarship given by C.U.**

- At the Blues Dinner on 24 July, Mr Paul Cootes, (left) Manager of the University and CAE Branch of the Universities Credit Union, presented the Credit Union’s Annual Scholarship to Mr David Lightfoot, the 1986 Sportsperson of the Year. The scholarship is for travel/equipment worth $400.
Main Role for Pharmacology in World Congress

The Department of Pharmacology will make a significant contribution to proceedings of the 10th World Congress of the International Union of Pharmacological Sciences in Sydney from 23 to 28 August.

It promises to be one of the biggest congresses of biomedical sciences held in Australia, with about 2,500 delegates from around the world having registered.

The conference, to be held in the Sydney Opera House, Centrepoint and the Sheraton-Wentworth and Hilton Hotels, will be a forum for discussion of advances in pharmacology.

Most activities will focus on new developments in drugs for the management of cancer, heart disease and blood pressure and on drugs affecting brain function and mental disorders such as Parkinson's disease, epilepsy and Alzheimer's disease.

One result of the participation of a large number of Asian delegates, including delegates from the People's Republic of China, will be a workshop on the use of herbal medicines.

A large contingent of staff from the Department of Pharmacology, as well as clinicians from all Newcastle hospitals, will be assisting the Scientific Programme Committee and Local Organising Committee.

Professor Tony Smith, Professor of Pharmacology, says the contingent has organised the full scientific programme, dealing with about 2,000 abstracts, and written a computer programme to handle it.

He says that at various sessions in Centrepoint and the Hilton Hotel, the University will be represented by either the chairpersons or those presenting papers.

In addition to the international congress there will be a number of satellite meetings, including two in the Hunter Valley.

Professor Saxon White, Professor of Human Physiology, has organised a meeting on control of the coronary artery and Dr Loris Chahl will conduct a symposium on tachykinins (small peptide molecules which are becoming important in understanding brain-function and which may have a role in the mechanisms of drug dependence).

A 'spin-off' of the congress will be the distinguished international visitors who will be coming to Newcastle University.

Professor Smith says the business of the congress will be of great interest to members of his department. For instance, he cites mechanisms in relation to drug dependence, the way in which drugs used to control high blood pressure produce their effects, the monitoring and evaluation of drug use and the adverse effects of drug use in the community.

Visitors from West Germany

A group of senior students from West Germany included the University in the tour it is making of Australian mining and research operations.

Whilst in the Hunter Region on 6 August, the visitors saw some of the research in progress in the Chemical Engineering Laboratories, with Professor Graeme Jameson. The photograph commemorates the visit made to the campus.

The group of fifteen senior students are from the Technical University of Clausthal and is led by Professor Albert Bahr. On an intensive tour of Australian mineral operations they have visited various gold and nickel mines in Western Australia and the giant lead-zinc-copper mine at Mt Isa, in Queensland.

While in Newcastle, the group also saw the coal research facilities in the BHP Central Research Laboratories.

Clausthal is in the Harz Mountains of West Germany, a mining region since ancient times, and the University dates back to the fifteen hundreds.
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Staff Member's book for Engineers

DR PETER MOYLAN, of the Department of Electrical and Computer Engineering, is the author of Assembly Language for Engineers, a book on the assembly language of the iAPX 86 series of microprocessors.

Dr Moylan explains in the book that languages for computer programming fall into two broad classes. The majority of programmers use 'high-level' languages such as Pascal, which are useful for general-purpose programming. Assembly language is a more detailed notation, for use when it is necessary to communicate with the machine at a fundamental level. Although assembly languages are not much used for general-purpose computer programming, they are widely used when computers are used for special applications like industrial control systems.

He says the topic of assembly language programming is typically taught at second or third year level in Computer Science and Computer Engineering.

In this University, the book will be used as a text in conjunction with major syllabus revisions to take effect in 1988. In the past, we have used computers such as the VAX and PDF-11 for assembly language teaching. We are now changing our orientation to concentrate on microprocessors, in recognition of the fact that this where the main applications of assembly language programming now lie. The use of microprocessors also allows students to perform experiments which would not be safe — i.e. which would endanger the work of other users — on the central computers.

The author points out that a special feature of the book is the inclusion of material on multiprogramming and memory management. Most textbook authors omit these topics on the grounds that they are too difficult; but this leaves students poorly prepared for later work on computer operating systems and on control systems design. His philosophy is that this is precisely the material which is needed for engineers who will specialise in process automation, a specialty which will receive more and more emphasis in planned improvements to the Computer Engineering degree course.

The publication is issued by Ellis Horwood Ltd., of Chichester, England.

FULL-FEE PAYING OVERSEAS STUDENTS

THE DEANS, who had been asked to investigate the issue of accepting full-fee paying overseas students at Newcastle University, reported to Senate on 29 July.

Professor M. Carter, Deputy Chairman, said full-fee overseas students might be admitted to completely new courses, modified courses, or existing courses where spare capacity existed. There was a possibility that the BSc(Aviation) degree course could benefit from full-fee overseas student enrollments.

He pointed out that if an extensive intake of full-fee overseas students was planned it would be useful to have the market research capacity of the IDP and AUSTRADe utilised and that the possibility of full-fee paying overseas students be considered by the Planning Committee.

It was decided that the Bursar provide a provisional costing for full-fee overseas student enrollments in the Bachelor degrees of Aviation Science and Mathematics and in the lOP, BEdStud and MedStud degrees.

Retirement causes loss for Chemistry

The Chemistry Department has lost one of its star attractions at Open Days — the glass blower who produces model animals for children.

Mr Peter Fox retired recently having been a member of the University's staff for twenty-one years.

From a Sergeant in the Military Police with the British Army in Austria, Peter Fox went to a neon sign manufacturer in London, a migrant to Australia (with his wife and daughter, each on $10 tickets) and a laboratory glass blower in Newcastle.

He took up his appointment as Laboratory Technician at Tighes Hill in 1966. Peter's main job was to make laboratory apparatus not available on the shelf and vacuum systems.

Because he raced stock cars and took up parachuting (he admitted to having had one 'near miss') he says he must be 'a bit of an adventurer'.

During his retirement, Peter Fox will do such things as play bowls, go ballroom dancing and entertain his friends. His wife, Beatrice, who loves gardening, will have a labourer. After their daughter has visited them from New Zealand, they will go to England for a holiday.
Maths teachers visit UN campus

A half-day conference of high school teachers of mathematics and careers advisers on 25 July arranged by the Faculty of Mathematics drew well over fifty people from as far as Taree and Forster down to Wyong and Terrigal.

The meeting was held in conjunction with Hunter and Central Coast Regional Offices of the Department of Education and with the assistance of the Schools Liaison Committee. The first meeting of its kind, it was convened by the Dean of Mathematics, Professor Clive A. Croxton, and opened by the Vice-Chancellor, Professor Keith Morgan.

The object was to raise the profile and perception of the Faculty of Mathematics within the region and, in particular, to address a number of issues thought to be adversely affecting student enrolment within the Faculty.

The Departments of Statistics and Mathematics presented outlines of the wide variety and flexibility of the various degree structures available to prospective students within the Faculty — a state of affairs perhaps not always fully realised within the high schools.

The interrelation between preparation at high school and subsequent performance within the Faculty was discussed in terms of the two, three and four-unit options available to high school students. The data presented to the high school teachers revealed that preparation at the two-unit level was a severe disadvantage.

Career prospects for graduates of the Faculty were discussed by the Heads of the Departments of Mathematics and Statistics, as were measures designed to increase the number of female students enrolling in the Faculty.

Professor Croxton told the News that there was a lively exchange of views and ideas between the high school teachers and members of the Faculty. 'The intention is that members of the Departments of Mathematics and Statistics will go out into the schools and present the conclusions of the meeting to prospective students. Hopefully, this will both arrest the flow of enrolments to the metropolitan universities and result in an increase in the quality, quantity and awareness of students enrolling in the Faculty of Mathematics in 1988,' he said.

ATTEMPT TO RELIEVE HOUSING PROBLEMS FOR STUDENTS

A NEW COMPANY has been formed to help the University and Newcastle College of Advanced Education to alleviate the critical shortage of student housing.

The company, Newcastle International House Limited, has plans for the construction of a new block of student housing near Edwards Hall, the live-in accommodation complex at the University.

The International House project would be partly financed by a community fund-raising appeal and patterned on a traditional university hall of residence for students.

Newcastle International House Limited proposes that the first stage of the project provide forty one-bedroom units and the completed building about 150 units.

The University, whilst not able to contribute itself initially, has got behind the venture. The student accommodation crisis this year has been the worst in the University’s history, due to a tight rental market and a high enrolment.

The Commonwealth Tertiary Education Commission has supported the University’s request for additional funds for student residential accommodation in the 1988-1990 Triennium. The Commission has included a proposal for $500,000 on the capital works list in Volume I of the Commission’s report to the Federal Government.

However, the Government’s response will not be known for some time, as full details of funding for universities will not be given until Volume II of the CTEC’s report is released around the end of this year.

The CTEC has recommended that the funds for student accommodation be provided on a dollar-for-dollar basis, with the University of Newcastle, the College of Advanced Education and any other support organisations having to raise the balance.

Newcastle International House Limited is managed by a Board of eight people representing the community, the University and the CAE.

Mr Brian Relf, a Newcastle businessman, has been elected Chairman. He has close links with the University, having been Warden of Convocation, a member of the University Council and a member of the Board of Trustees of Edwards Hall.
REVIEW
by: DORRIT NESMITH

The current Green Room presentation poses an interesting question: What approach should actor and director take in interpreting a play? Should the author's instructions be followed as faithfully as possible, given differences in time and place since the play's creation, or is there value in a more flexible approach which will take into consideration changing mores?

As part of his Honours work, Drama student, Philip Bilton-Smith, has decided to explore both, with two sets, two casts, two interpretations of one script (with only minor changes) of The Human Voice by Jean Cocteau.

In the 'Then' version, there is an art deco set and an opening tableau in which we discover Dimity Raftos posed like a Modigliani odalisque. She is waiting for one last, promised phone call from a long-term lover who has left her to marry another woman. It is this phone call which comprises the entire verbal content of the play.

Bilton-Smith has attempted to follow Cocteau’s meticulous and somewhat stylised directions to create a performance as cool and restrained as the fashion of the late 1920s dictated. Like her protagonist’s hairdo, it is pulled back, simple, and firmly restrained. Ms Raftos gives the disciplined performance that is required of her, though it is spoiled somewhat by an erratic and unnecessary Gallo-Russian accent.

The second version is 'Now', and the woman — instead of being a Parisienne — is Australian: informal in dress, posture and speech, more open emotionally, more complicated and thus more enigmatic. It is the more moving version and — to a contemporary audience — more credible, although the 'Then' version is equally interesting as a period piece. Narelle Feeney is allowed greater range in the role and makes good use of the freedom, though one wonders why such a strong and personable woman cares so much for the insensitive dolt on the other end of the phone.

Although we hear only the woman’s side of the conversation, Ms Raftos is clearly victimised not only by a shallow and inconsiderate man, but by a society that imposes certain rules of behaviour on her: she must accept her cast-off state with dignity, even if she can maintain that dignity only long enough for an overdose of sleeping pills to end her anguish.

Ms Feeney, equally clearly, has chosen to victimise herself, unwilling to relinquish a relationship in which she was the stronger partner. We are far less certain of how she will eventually come to terms with her situation, but are inclined to believe her when she says 'no one attempts suicide twice'.

Basically an experiment in directorial techniques, the twin productions also have some interesting things to say about public and private roles, and how they have changed over the last half-century. The Human Voice 'Then' was presented at 1 pm 4-7 August; 'Now' from 11-15 August; a double-bill of both versions was available during evening performances in the first week.

PROGRESS WITH SEMINAL PLASMA POTENTIAL STUDY

MISS RUTH ALLEN, who was awarded a PhD by the University this year, is currently working as a postdoctoral fellow at the Jackson Laboratories in Bar Harbour, Maine. She is continuing her research into aspects of immunology and is also collaborating with Associate Professor Tim Roberts' laboratory in Newcastle to continue some of the work begun during her PhD.

Miss Allen's work for her doctorate related to the immunosuppressive potential of seminal plasma, the fluid surrounding the spermatozoa.

Professor Roberts explained: 'It has long been postulated that this fluid contains molecules which are able to suppress the activity of the immune system. The immunological theorists have postulated that such immunosuppressive potential is necessary for preventing the female making an immunoresponse to spermatozoa. In recent years the hypothesis has been examined with much vigour because of the advent of AIDS. AIDS (Acquired Immunodeficiency Syndrome) is due to a particular virus. However, because of the prevalence of this disease amongst the homosexual community, it was considered that susceptibility to the virus might relate to the immunosuppressive properties of seminal plasma.'

Professor Roberts went on: 'The scientific basis to such theories rested on work done in 1976 where it was shown that in experimental studies in vitro, that is in the test tube, it was shown that seminal plasma could affect certain immunological reactions.

The essence of Miss Ruth Allen's work was to reinvestigate the in vitro experiments and also to analyse any possible in vivo effects. For the latter she used mice as her experimental model. Her work has clearly delineated the nature of the molecules in seminal plasma that do affect lymphocytes and, indeed, she has shown that there is a component in seminal plasma which when activated by another enzyme becomes toxic for cells.

Not only toxic for lymphocytes, and thus immunosuppressive, but also toxic for any other cell. Miss Allen's thesis received excellent reviews from the three referees and to date five publications have resulted from her work,' he said.

Our photograph: Miss Ruth Allen with Associate Professor Tim Roberts. Dr Roberts recently returned from a ten-week visit as a Churchill Fellow to the United States, Canada, Great Britain, Singapore and Japan, where he inspected science and technology centres like Newcastle's Supernova, of which he is Director. He also travels extensively to pursue his research. The WHO will sponsor his forthcoming visit to Canton and Beijing in the People's Republic of China to work with an international team in the family planning field. It will be a followup assignment as a representative of the WHO; last year he visited Chile.
R&D STUDY

The New South Wales Science and Technology Council recently undertook a study of research and development (R&D) in New South Wales in business enterprise, New South Wales Government, Commonwealth Government, and tertiary education organisations. As part of this study, surveys were conducted on the R&D activities in all sectors.

The results of the R&D study, comprise the following publications:

- Overview Report on R&D in New South Wales.
- Directory of Business Enterprise R&D in New South Wales.
- Business Enterprise R&D in New South Wales.
- New South Wales Government R&D.
- Commonwealth Government R&D in New South Wales.
- Tertiary Education R&D in New South Wales.

Also included are brochures on telecommunications, aerospace and defence desk and the biotechnology desk recently established in the Department of Industrial Development and Decentralisation.

Copies of the documents were sent to the Minister for Industry and Business, Mr Cox, to the Information Office, Room G60 in the McMullin Building.

According to the committee, the game has established a nationwide reputation for itself and this year's adventure is virtually unrecognisable from its roots only two years ago.

Apparently it works like this: you form a party of six adventurers (minimum age ten years) and, after you've booked your group into one of the available sessions and paid your group fee, you will be provided with the information necessary to prepare yourselves for the adventure.

On the adventure (which lasts approximately two-and-a-half hours), each group attempts to unravel the secret of Dark Shadows and to meet the many challenges the game presents. Each individual player must adopt and improvise a character role created by a combination of choice and chance.

Prizes will be offered for the winning teams, the best individual role players, and the best costumes.

Booking forms and more detailed information are available from the Publicity Officer, Dark Shadows, C/- 83 Henry Street, Tighes Hill, 2296 or by telephoning 69 2668.

Dr Bayley leads Pritikin group

Dr Sandra Bayley, a graduate of this University, is President of the recently-formed Hunter Valley Branch of the Pritikin Health Association.

Attendances at the first three meetings of the association have averaged 230 people.

Professor Saxon White will speak at the next meeting on Exercise for Those Who Aren't Used to It. The meeting will be held at the Lecture Theatre in the David Maddison Building at Royal Newcastle Hospital on 29 August at 2 pm. Admission for non-members is $2.

For further information please telephone 59 2808.

Fort Scratchley Theatre event

The Scratchley/Mattamae Role Playing Committee has opened bookings for this year's improvisational role playing game, called Dark Shadows. The season is from 22 to 30 August and the venue again is the tunnels of Fort Scratchley.
Diary of Events

Wednesday, 19 - 21 August, 9 am to 5 pm
Workshop organised for hydrologists by the Department of Civil Engineering and Surveying entitled Hydrological Model Fitting and Prediction Using NLFIT. Instructors are Drs Brian Williams and George Kuczera.

Saturday, 15 August, 9 am to 4 pm
Seminar open to anyone interested in the planning and development of the Hunter Region entitled Hunter Regional Environmental Plan. Venue: R02.

Saturday, 22 August to 3 September
Wandering the Western Plains in the footsteps of the explorers, Sturt and Burke and Wills (environmental tour). Fee: $680. Enquiries: Extensions 522 or 600.

Thursday, 27 August, 9 am to 5 pm
Seminar/workshop to benefit people who wish to review the existing structure of their organisations entitled Management Skills — Structuring Your Organisation. Room 113, Social Sciences. Fee: $45. Enquiries: Extensions 600 or 522.

Friday, 28 August, 10 am to 5 pm
Seminar entitled Legal Aspects of Treatment Relating to Drug and Alcohol Problems (to help workers in this field to gain a clearer understanding in the treatment of these problems). Venue: Medical Sciences Lecture Theatre.

Friday, 28 August, 9 am to 4.30 pm
Workshop entitled Care of the Elderly (for those in the helping professions). Lecturer: Dr Mick Hunter. Venue: Purdue Room, Great Hall.

Wednesday, 2-3 September
Seminar and workshop entitled New Concrete Structures Code (mainly for structural designers, surveyors and city engineers). Organised by the Department of Civil Engineering and Surveying.

Advertisements

For Sale
Golf shoes — brown leather with spikes (size five-and-a-half) in good condition, $20. Please telephone Jan at Extension 262.

Hand-held Casio Computer FX702P, $98. Please telephone 55 8759.

Extension dining table, four chairs and a six foot buffet in Tasmanian blackwood and teak veneer, $200. One Slantboard (tighten those stomach muscles), $45. Telephone Extension 764.

Lost
Brown leather shoulder bag containing wallet and diary. If found please telephone Extensions 316 or 219.

Wanted to Buy
Pine or Ceda old furniture, also bric-a-brac. Cash buyer will call. Please telephone 59 2319.

Position Vacant
Part-time help wanted for data analysis using a statistical package on University VAX. Would suit mathematics or computer science student needing interesting part-time work in pleasant environment. Telephone Joan Welsh at 67 9593.

Mrs Roslyn Wood would like to type theses, reports, occasional papers etc. Please telephone 48 6948.

Position Wanted
Baby-sitting done in my home (Waratah area) at reasonable rates. Telephone 67 4053.

Lee Jensen-Muir (The Ink Blot — the original typing service) would like to type theses, reports, occasional papers etc. Please telephone 75 2078.

Arrivals & Departures

Appointments
Miss Alison Clark, Stenographer, Department of Mathematics.
Mr Dean W. Ferry, Laboratory Craftsman, Department of Mechanical Engineering.
Mr Robert S. Hoogwerf, Storeperson/Driver, Bursar's Division.
Mr Arthur J. Kingsland, Lecturer, Faculty of Architecture.
Mr Steven Scanos, Messenger/Driver, Bursar’s Division.

Resignations
Ms Margaret S. Finlayson, Stenographer, Faculty of Medicine.
Associate Professor John Kirby, Faculty of Education.

J.B. CHIFLEY PRIZES

The New South Wales Branch of the Australian Labor Party will award prizes of $1,500, $1,000 and $500 annually for the best essays on the ALP by undergraduate students.

The prizes are named in honour of Mr Ben Chifley, Prime Minister of Australia from 1945 until 1949, who died in 1951.

The ALP wishes to attract entries from as wide a range of disciplines as possible. The aim of the prizes is to encourage further study of the ALP, its history and philosophy.

It is assumed that more interest will be generated from students of History, Government, Political Sciences and Industrial Relations.

Undergraduate students are eligible and essays, on average, are expected to be around 5,000 words.

Entries must be lodged by 1 November with the New South Wales Branch of the ALP and should be addressed to: Mr Stephen Loosley, General Secretary, Australian Labor Party (NSW Branch), 9th Floor, 377 Sussex Street, Sydney, 2000.

For further information, contact the Education and Research Officer, Malcolm McGregor, at the NSW Branch Office, Australian Labor Party at (02) 26 42732.

Tax Guide 1987 for Staff Association Members

Members of the Staff Association are advised that they may obtain a copy of the Tax Guide 1987 from the Staff Office by contacting Lynne Turner at Extension 610 or by contacting the Secretary at Extension 608.