 SENATOR'S PLEDGE

The Commonwealth Minister for Education and Youth Affairs, Senator Susan Ryan, said at the University on June 29 that there was no hidden threat behind the Government's request that higher education institutions plan co-operatively.

Senator Ryan was speaking at a Press Conference before speaking in the Great Hall at the annual meeting of Convocation.

Concerning her visit that afternoon to Newcastle CAE, she said: "I think that they showed me just about everything they've got going. What the administration and the staff wanted me to understand was that it is a very specialised teacher training institution; it offers courses other than those for training teachers. It has a number of very specialised facilities, like the Special Education Unit, physical education training, the Art School, the computer programme, and so on. I think it's very good that they do have so many specialities, for which, I am sure, there will continue to be a demand.

"The Government has implemented a pre-election undertaking not to force amalgamation upon the University and the College. What I am now very interested in, and I believe the institutions are interested in, is co-operative planning for the development of tertiary education in the city and the region. And that planning process does not contain within it any hidden agenda", Senator Ryan said.

"I expect, and hope, that there will be a great deal more co-operation, where it's educationally appropriate, in the use of facilities, exchange of staff and joint development of specialist courses. To expect anything less would be quite irresponsible, I think.

"The problem with the whole amalgamation debate is the way the previous government handled it. It appeared as if it was designed just to save money and had no educational rationale.

"Of course, this Government is very interested in saving money too, if that's possible, but we don't really see education as an area where there is much to be saved. In fact, I am hoping to achieve some expansion in education spending in the budget and we are certainly hoping for an expansion in higher education.

"We are approaching the question of the future of the University and the College very differently. What's better for the students? What will be the future student demand? What does the local community require by way of higher education facilities?

"What will be done if the institutions fail to co-operate is a matter for decision further down the track, but I have no reason to believe that there will not be co-operation. Obviously, in both institutions you have dedicated staff, who want to do the best for the students, and I cannot see that they would resist co-operation which is based on educational objectives", Senator Ryan said.

"The benefits of co-operative planning are better resources and better facilities. If there were to be for example a major expansion of library facilities, it would be better to do the planning jointly.

"The Razor Gang precipitated the threat of amalgamation. Basically, they said that the demand for teacher training services had decreased and too many institutions throughout Australia were single purpose

INSIDE: JUMBO SILOS
(teacher training) institutions, although some of them had a few other things going.

"To ensure the viability of those institutions, they had to link up with larger institutions, this would provide the students with a wider range of courses and they would start with a larger career path, and so forth. I think that was quite sensible.

"What was not sensible was the decision of the previous government, following the Razor Gang's report, to say, this money can be saved, let's save it all straight away, and they have to do it by the end of the year."

Senator Ryan added that the previous government constantly tried to hide behind the Commonwealth Tertiary Education Commission and say that amalgamation was the Commission's advice. "Sure, it was the CTEC's advice, but not to do it then and not to do it in that way. The decision, not to proceed with the amalgamation was a political decision, it wasn't a CTEC decision. It was my decision -- the Government's decision".

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**Letters**

Dear Sir,

As a member of staff and Convocation, I recently received a brochure requesting a contribution towards the building of the proposed University Village. I sympathise with the student who has trouble finding accommodation or who is worried by insecurity of accommodation, but I am presently reluctant to make a financial contribution to the scheme referred to in the brochure.

My first concern is that it should be possible to assist more than 90 students with a capital fund of $2 million. When examining the cost of $35,300 per bed, one must consider points such as:

- the interest on the $2 million is about $100 per student over each of 40 academic weeks;
- a residential fee of $20 per student per week would add $70,000 to the Village's income over a 40 week academic year;
- there is (presumably) no land cost involved for the Village;
- the present market costs of low maintenance brick-and-tile 3-4 bedroom houses at under $75,000, of 2 bedroom home units at about $55,000 and of retirement village units at about $40,000, each of which includes land cost and each of which leaves the owner with a marketable asset. (The value to the community of $2 million worth of University residential blocks in some years time, if the University was to decline, is doubtful).

It is probable that the financial considerations have been investigated in detail already; possibly, I have failed to follow the debate. Nevertheless (and this raises my second and main concern), more detail on the venture should have been included in the invitation sent to graduates and other members of Convocation. (Not only is there no financial background, but there is no physical description of the proposed Village). Furthermore, I am concerned that a similar brochure could be sent to the 600 companies being canvassed for assistance. Contributors may gain the impression that the scheme suffers from poor planning.

**HARVEY MITCHELL**

Dear Sir,

Well any pretensions to being a high-brow university publication were well and truly shot to pieces with the publication in Volume 9, No. 8 of the infamous picture of a woman in a bikini. The dubious excuse for this expression of sexism was an article on heating. This graphic was real page 3 material, unsuprising really since it is part of the same capitalist, patriarchal construct of the world (never let it be said that students can't use academic jargon along with the best of them). Women are presented as commodities, in this case an instant, pocket-sized take away. Not only this but supposedly funny letters in the following issue (I am not of course referring to AMEN's letters) which show clearly the level of misogyny on this campus.

I will doubtless be accused of being a 'humourless feminist', if this means refusing to laugh at pictures, "just harmless fun" or jokes, which perpetuate damaging myths about women then I certainly do fit this description. The next time I hear a joke about a middle-aged, white, anglo-saxon male university lecturer I'll send it along to see how funny University NEWS readers find it.

The prevailing attitude of men on this campus, demonstrated perfectly in the publication of this photo and the subsequent responses, are a major part of the reason an Equal Opportunity Co-ordinator is so urgently needed. Opposition to this appointment has already been demonstrated from blatant private moaning to the comparatively subtle sabotage that most of the University Council has down to an art-form. The continuance of such opposition will inevitably lead to the scheduling of the University under the Act, as far as I am concerned this can happen none too soon.

**HAZEL FLYNN**

Women's Officer,
Student's Representative Council.

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**Seminars**

Proposed staff/research higher degree student seminars for the Faculty of Education:

**July 7, 1 pm, Staff Room**

Topic: On Doing the Right Thing, speaker: J. Biggs.

**July 11, 1 pm, Staff Room**

Topic: Comparing Open Universities, speaker: J.F. Hill.
HDWB supports our students

The Architecture students' concepts for the Scenic Lookout development on exhibition at the Water Board.

The main attraction of the Scenic Lookout, Newcastle (near Cliff Street and Memorial Drive) is implied by its name.

The lookout occupies one of the most elevated positions on the Newcastle coast and any structure built upon it automatically becomes a visual focus from parts of Newcastle and the surrounding suburbs.

When the Hunter District Water Board asked second-year Architecture students to produce designs for a water tower, tourist observation and information centre, highly aesthetic designs were therefore required.

The Board added interest by kindly offering a $100 prize for the best two submissions.

The outcome of the First Term Project is an exhibition in the Board's offices in Newcastle West of the 12 leading submissions.

Because the project captured the students' interest and most of the submissions were of a high standard, the assessors decided to depart from the original intention to award only two prizes. Instead, the designers of the eight leading proposals received awards.

At an early stage Dr. H.K. Banerjee, Senior Lecturer in Architecture delivered a lecture to the students on the principles of concrete water tower construction. Moreover, Mr. Geoff Gleeson, the HDWB's Design Engineer, spoke to the class about the nature and problems of water tanks.

The Water Board in 1961 demolished a 20,000-gallon tank at the Scenic Lookout and replaced it with the existing 50,000-gallon high level steel tank. The students' ideas were welcomed because the Board is presently considering the possibility of replacing the steel tank with a 50,000-gallon concrete tank.

The Board feels that the unique headland site also invites concepts for the provision of public facilities such as an information centre, a cafeteria and parking spaces. The Board wanted the submissions to include these facilities as well as landscaping and pathways.

Out of the 36 schemes prepared by second-year Architecture students, 12 were put on display in the Board's Head Office.

Dr. John Rockey, who has supervised the design project, said the awarding of the Board's $100 prize money was decided with some difficulty. Some of the schemes excelled in innovation while others, being less imaginative, were more resolved structurally. For a number of reasons it seemed more appropriate to nominate eight of the leading designs for awards. The authors of the leading designs are:

- K. Ng
- Brendan Smith
- Clara Pang
- Beatrice Hon
- I. Krautzer
- H.S. Leong
- F.S. Li and
- Francis Lim

Dr. Rockey said he wanted to thank the President of the Hunter District Water Board, Dr. John Peterson, through the University NEWS on behalf of the students for the interest he had taken and the enthusiasm the HDWB had created by giving the Architecture students his support.

Dinner

To farewell the Amenities Officer, Mr. Harry Bradford, on his retirement, a dinner will be held at the Police & Citizens Boys' Club, Young Road, Broadmeadow, on Friday, July 22, at 7 pm for 7.30 pm.

The cost of tickets is $15 per head, including drinks.

It is hoped that as many as possible of Harry's colleagues and friends will be able to attend to wish him well on the completion of his many years of service to the University.

Tickets may be obtained from the Vice-Principal's Secretary, Mrs. M. Means (Extension 343). Cheques, made payable to K.R. Dutton, may be sent to the Vice-Principal's Office.
**Distinguished Visitor**

There has been a sudden demand overseas for Jumbo silos for the bulk storage of materials. According to Professor Friedrich Rademacher, a Dutch academic, such silos with a capacity of 100,000 cubic metres are not unusual and a number of units of 120,000 cubic metres are being planned in California.

"We cannot escape from the need for environmentally critical solids like coal to be safely and cleanly stored," he said.

Professor Rademacher has arrived at the University to work with Professor Alan Roberts' group in the Department of Mechanical Engineering. He is here as the James Johnstone Visiting Fellow from the University of Twente, where he is a Professor in the Department of Mechanical Engineering.

Since 1977 he has become increasingly more involved in research into the handling and storage of bulk solids and handling coal and limestone for use in fluidised bed combustors. Part of the research activities of his group is being performed in conjunction with the Department of Mechanical Engineering at this University.

While in Newcastle, Professor Rademacher will work with Professor Roberts, who has worked with him at the University of Twente, on bulk solids storage and conveying, including the design of mammoth silos. Further he will work on a paper he will deliver at an international conference on bulk materials storage, handling and transportation to be held at the University of Sydney from August 22 to August 24.

As for mammoth silos, Professor Rademacher says the demand is greatest in densely populated countries such as The Netherlands and Japan where stockpiles are really hazardous.

Since power stations have switched from oil to coal, covered mammoth silos have been found to be the solution to the pollution problem.

As well as assisting to alleviate pollution where bulk materials such as coal are used, the mammoth silos protect primary products like potatoes, wheat and sugar, which have to be stored seasonally, from the natural elements.

Although Professor Rademacher does not see much application for mammoth coal silos in Newcastle, as open stockpiling takes place a distance from the main population and the coal can be kept wet, the method of storage will be feasible if some form of storage of "in situ" materials, for example, grain, is required on the foreshore of Newcastle Harbour in the future.

Professor Rademacher, who lives in Borne, near the border of West Germany, teaches at both Delft and Twente Universities, is a member of the Royal Dutch Engineers' Association and has presented papers in the United States, the United Kingdom and Australia. He was a Visiting Professor at Louisville, U.S., and first visited Australia to attend a seminar organised in 1979 by the Department of Engineering in this University.

In September one of the students from his laboratory will visit the University to collaborate further with Mr. Owen Scott, of the Department of Mechanical Engineering, on studies of the determination of wall pressures inside corrugated steel silos.

Mr. Scott recently returned from a stay in Holland where he worked with Mr. C. Masker on a project.

Professor Rademacher will shortly be joined by his wife, Frauwe, who is a former school teacher and former municipal alderperson.

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**Marketing to the Japanese**

The highly topical subject, Why Should Marketing to the Japanese Be Different, is to be discussed by Mr. A.C. Brown, of CSR Limited, at the University on July 12.

Mr. Brown, General Manager of Corporate Services for CSR, has had business contact with the Japanese since 1962.

He was closely associated with the initial marketing to the Japanese of the Mt. Newman Iron ore project and the Bauxite project and has participated in many other marketing exercises to the Japanese. His present position includes a continuing relationship with some aspects of CSR's business with Japan.

Mr. Brown has been an executive member of the Australia-China Business Co-operation Committee and is currently a corporate member of the Australia-Japan Society.

For several years he was a guest lecturer at the University of New South Wales for the Institute of Administration, and the Export Institute of Australia and for the evening course in the School of Marketing.

Mr. Brown's business activities have taken him to many countries of the world.

He will come to the University to give an address for the Department of Commerce in Room 502 at 7 pm.
IMMUNE SYSTEM RESEARCH

White blood cells normally kill bacteria which have caused infection. This is how the body's immune system works. However, in some instances, for example, kidney transplants, this immune response has to be suppressed if lives are to be saved. Drugs which suppress the immune reaction unfortunately produce unpleasant and adverse side-effects for the patient.

Recently, in the course of collaborative research in the Faculty of Medicine and the Department of Psychology, it has been demonstrated that the immune response can be psychologically conditioned in rats without recourse to harmful drugs. The finding is important if similar methods are to be used in the treatment of human beings.

Pavlov's pioneering experiments with dogs is a well-known example of conditioning. Ordinarily the sight of food will make a hungry dog salivate, while the sound of a bell elicits no such response. However, by pairing food with a bell ringing Pavlov was able to condition his dogs to salivate to the sound of the bell alone.

The researchers from the University, led by Professor Laurie King (Psychology) and Dr. Alan Husband (Medicine), wondered if conditioning could be used to control the immune response. To find out they gave rats saccharin, together with a drug called ALS (rabbit anti-rat lymphocyte serum), which kills white blood cells but which has no apparent effects on the body. After more weeks, saccharin only was offered to the conditioned animals. One week later, autopsies showed that the white blood cells from conditioned animals were suppressed by 35 per cent compared to cells from unconditioned rats, even though they received only saccharin.

That the rats' immune system is responsive to such Pavlovian conditioning is not new in itself, the researchers say. Since 1975 Immunologists have shown that conditioning takes place in experiments which pair saccharin with cyclophosphamide, a drug which suppresses the immune system but has unpleasant gastrointestinal side-effects.

The Newcastle studies have drawn the attention of Science Digest Magazine and the Los Angeles Daily News. These journals commented that the researchers had taken a significant step forward by using ALS, which had no side-effects.

Dr. Husband said that the result of the programme showed, at least in rats, that the course of disease and cancer could be affected not only by specific drug therapies, stress and emotional factors, but also by subliminal conditioning factors, which could affect subconsciously the way the immune system functioned. "The exciting implication to us is that humans adapt to a conditioning response even more than laboratory animals", he said.

The team of researchers now have further experiments under way to see if immune enhancement, as well as immune suppression, can be conditioned, using immune enhancing drugs. "We may be able to use similar conditioning to help stimulate their own immunity against disease".

Vicki Lloyd, a familiar figure around the campus, is likely to become even better known in the weeks to come.

Vicki has been appointed Assistant Station Manager of the University's radio station, 2NUR-FM. She is responsible for the development of station initiated programmes, special projects, publicity and promotion and other duties.

Vicki is the station's first full-time Assistant Station Manager since August, 1980. She is no stranger to Newcastle University. As well as working for the University Counselling Service she was employed in the Department of Architecture.

Since transferring to 2NUR-FM she had been employed as Station Secretary.

Kaye Dimmock has been appointed Station Secretary.

Vicki's and Kaye's appointments follow representations to the Council by the University's Radio Station Management Committee seeking support to overcome staffing difficulties. The Council asked the Vice-Chancellor to consider the matter sympathetically.

2NUR-FM new appointments -- above, Vicki Lloyd, Assistant Station Manager; below, Kaye Dimmock, Station Secretary. Photos: Peter Muller.
ACID RAIN EFFECTS

The long-term effects of acid rain falling from Northern American skies was a major worry, Visiting Jayes/Quanta Lecturer, Professor Bruce Forster, said.

"If we wait much longer the damage might be irreversible", Professor Forster said. "My feeling is we should proceed quickly with environmental protection and sulphur abatement measures."

In informing the University News about his major teaching interests, Professor Forster said that the importance of technologies to reduce acid rain came from the threat it posed to numerous small lakes in Northern Ontario which are widely used for fishing and other aquatic-based sports.

He is from the College of Social Science, Department of Economics, University of Guelph, Ontario. Although an undergraduate of a Canadian university, he worked on his Ph.D. degree in Australia. "It is one of those historical accidents, Dr. Douglas Auld, a staff member at Guelph, had studied at ANU. I decided to follow his example."

From 1977 to the present he has been an Assoc. Professor at the University of Guelph. During his stay at this University, the University of Newcastle), he expects to be promoted to a full Professor.

He has held teaching appointments at the University of Guelph and the University of British Columbia and research positions in the University of Wisconsin, USA. He has completed a number of governmental reports, including a report for the United States Environmental Protection Agency on acid rains.

As part of his visit Professor Forster is delivering seminars to staff and students of the Department of Economics and giving a talk to Newcastle Businessmen's Club and being interviewed by the ABC.

Further, he returned on June 28 and 29 to his alma mater, the ANU, to give a seminar in each of the Centre of Resource and Environmental Studies and the Department of Economics.

In some countries overseas, including Canada and Sweden, the chief source of acid rain is pollutants which come from distant power plants, smelters and motor vehicles. Sulphur dioxide and nitrogen oxide are carried on the prevailing winds, much of it falling in rain or snow after combining with water vapour to form sulphuric and nitric acid, or as dry particles that mix with water to form acids.

As a specialist on environmental and natural resource economics Professor Forster has been looking at this phenomenon and its impact in Northern America.

He says an economist can identify potential effects of acid rain on agriculture.

He turns to the natural science texts to find that the yield from the crops vary for different species and different cultivars. You can even have an increase in yield. So, it was unlikely that agriculture would have to face problems because of acid rain. There also seems to be no major problem for the timber industry.

However, Professor Forster says acid rain has been established as a great pollution threat in respect of numerous small lakes in Northern Ontario. About 150 of the lakes are fishless. Geology makes a lot of Northern Ontario more susceptible than Southern Ontario. The Canadian Shield is essentially granite and the lack of soil prevents the acid from neutralising.

"When acid rain falls the run-off ends up in the aquatic systems. Southern Ontario lakes do not suffer nearly as much because the soil is high in limestone and therefore the acid is neutralised before it enters the lakes."

Professor Forster arrived at the University on June 16 with his eight-year-old daughter, Kelly, and 14-month son Jeremy and his wife, Dela. He says he jumped at the chance to be a visitor at this University because he had been aware of Professor Clem Tisdell's reputation for his research and had met him at the ANU about 10 years ago.

Letters

Deer Sir,

At the Convocation General Meeting held in the Purdue Room of the University of Newcastle's Great Hall on Wednesday, June 29, a group of fewer than 80 people, listened to Senator Susan Ryan speak about the tertiary educational objectives of the new A.L.P. Government.

It is to be hoped that the Commonwealth Minister for Education does not take this meagre attendance as the measure of local interest in the Commonwealth's future dealings with the Tertiary Education Institutions in this area.

Zeny Giles

Letters

Professor Forster
COMPUTER ATLAS

It is anticipated that 300 copies of A Computer Atlas of the Hunter Region, 1981 will be published before the end of this year.

The atlas is an interesting new venture because a computer has been used to produce the maps, which depict population and housing data obtained in the last census.

Covering the whole Hunter Region, which includes the Lower Hunter and the Newcastle Urban Area, the atlas is being prepared by the Department of Geography and the Computing Centre. Datex Co-operative Director Dr. G. McCalden is also assisting.

The census data have been derived from tapes which the Department of Geography purchased from the Australian Bureau of Statistics.

Both the Bureau and the Division of National Mapping in Canberra assisted by providing digitised polygon data of the subareas which are being mapped.

Following a meeting between representatives of the Division of National Mapping and Professor D. Parkes, of the Department of Geography, representatives of the Division and the Bureau paid a visit to the University in May. They held discussions with Professor Parkes, Mr. Peter Young, of the Computing Centre, and Dr. Gerald McCalden, Director of the Datex Co-operative, who is a geographer, about technical aspects of the project.

Some of the mapping programmes used during the preparation of the atlas were bought from Harvard University’s Laboratory for Computer Graphics and adapted for use on the University’s VAX system. Mr. Young developed some other mapping programmes in the Department of Geography.

A Computer Atlas of the Hunter Region, 1981 will be printed on A3 size pages and released in loose leaf binders. It is hoped to sell them for $15 each.

It is also proposed that “special order” maps will be prepared for individuals or organisations in a compatible format. This operation has a great potential as the census included sufficient data to produce more than 1,000 maps.

The revenue from the sale of the atlas will be put into a University account which will bear interest. Accordingly, funds should be available for the publication of a more comprehensive atlas and information base in connection with the 1986 census.

A number of Departments contributed generously to the publication from their own limited funds. These include Medicine, Architecture, Sociology, Psychology and Geography.

Moreover, the Hunter Development Board, Convocation and four local government authorities made allocations.

The meetings will be held in the Auchmuty Room on Thursdays from 1 pm until 2 pm.

To commence the series, the following papers have been arranged:

July 14 -- Dr. John Lee on Hedonism.

July 21 -- Assoc. Professor Bill Daniele on Rationalism.

July 28 -- Mr. Bill Sparkes on Liberalism.

Other topics and speakers will be announced in the NEWS and elsewhere.
Howard Brenton's play *Ravage* shows over thirteen scenes the struggles of the ageing master-criminal Adam Hepple to make it big - to shock the general public, to bring into being a criminal England and to defeat his old enemy, Macleish of the Yard. The Drama Department's production is directed by Deborah Jones, and it matches the comic-strip, larger-than-life popular drama style of the play neatly with energetic performances, cardboard cut-out props and crisp lighting.

Hepple himself is robustly played by Adam Macaulay - so robustly, in fact, that it was always a surprise to hear the other characters call him an old man. The play makes no bones about the parallels between the arch-villain Hepple and the high-up copper Macleish, and Macaulay plays both. He revels in Macleish's apocalyptic Calvinism and stage Scottishisms. In the Hepple scenes, admirable support comes from Carl Wills as Not, a petty gangster who can't bear violence because it brings out his delicate skin in a rash -- Frank Spencer as thug, clinging in an outsize white dinnerjacket -- and from Bill Keir as Bung, hilariously gristle-headed 'knocker' and aspiring wrestler.

This unlikely trio sets out to terrorize England. They get as far as terrorizing P.C. George (Bruce Penfold) and running down his impressionable young offsider P.C. Albert (a nice performance by Paul Mekeman, rocking on his heels, copper-fashion, in imitation of his superior, and visibily swolling with pride at his first arrest).

To complete a very evenly entertaining set of performances, Dimitry Raffo and Karen Lantry played Hepple's two daughters, Cockney street-walkers who nevertheless love their Dad and marry P.C. George (respectively). This is pop-political theatre, borrowing its picture of crime from the Sunday tabloids and its picture of the police from one of the more cynical episodes of *The Sweeney*, but it could still work some surprises.

A pastoral scene, complete with loud tenor zips and deafening birdsong, broadened the play's scope nicely, especially as during it the thug Bung discovered that tripping over a railway line in his escape had not only made him able to read but had also enlarged his vocabulary alarmingly. Presumably the credit for another fine scene, a mimed snooker game made out of two cues and an oblong light on the conveniently green floor of the Green Room, goes mainly to the director.

It was P.C. George and Assistant Commissioner Macleish who made the most significant political comment in the play: the actors managed to convey in their assurance their characters' unshakeable complacency about their own roles, demonstrating in Brechtian fashion how tightly they are in the grip of an ideology: Macleish seeing himself as Divine Scourge (Lord, look down this night on "the Division"), George unctuously deferential to his superiors, and complacently preaching to the general public about good old-fashioned criminals and the whining modern variety. It was a good test of the style of this production that the scene where P.C. George runs from Hepple's machine-gun, returns to find P.C. Albert shot dead, and stands with Macleish by the body -- a mixture of garish violence and solemn sermonising -- was both shocking and absurdly funny. Perhaps this sort of theatre can make a job at mixing propaganda and entertainment, after all.

Val Wiggins, Secretary in the Department of Geography, retires on July 19. Val came to the University 13 years ago, working for Geology one day a week. She was then employed in the Department of Civil Engineering for another day a week.

In December, 1972, Val went to the Department of Geography as a full-time member of staff. She had worked for the Department briefly when she became very ill and the Department kept her position open for three months so that she could recuperate.

Val thinks female employees of the University fortunate to have the Association of Women Employees of the University of Newcastle (APEUN). As some departments are isolated, the luncheons and talks arranged by the group give the girls a much appreciated opportunity to meet with one another.

By way of interest -- Val Wiggins just happens to have worked with three people who have won the lottery. We might add that one person won $200,000 and the others $60,000 each. Val herself has never won the lottery or even come close to winning.

Val will now be able to concentrate on her recreational interests. She and her husband, Jack, have joined a bowling club. In about two months the Wiggins' and five other couples from the Newcastle Caravan Club will make a trek through the Flinders Ranges lasting eight weeks. This will be the beginning of their "rediscovery of Australia."

Val also intends to become a full-time grandmother. She has five grandchildren, including Alexander (only eight weeks old).

Val's friends will bid her farewell on July 13 from Noon until 2 pm in the Godfrey Tanner Room in the University Union.
As the cross-country season gets into full swing, University Athletics Club is enjoying some success, with a number of runners recording personal best performances.

On the international scene, Albert Nyemeyer ran 12th in 1:32.06 out of a field of 203 in the well-known Brieslemarsloop, a 25km road race around an island in the middle of Holland.

On June 19 the 8km cross-country handicap was held around Bar Beach and Merewether. Terry Wall recorded second fastest time of the day with an outstanding 15.02. Tony Guttmann was the highest placed University runner on handicap, finishing 12th in a personal best of 30.07, whilst Dick Parberry showed a welcome return to form with his run of 19.25.

On June 26 the Newcastle and Central Coast Road Relay championships were hosted by the University. This is a team event, with each one of four runners running one lap of a hilly 4.5km loop around the University's ring road. The unavailability of some of our faster runners meant that the University team would be struggling for a place, and an exciting race ensued.

Terry Wall ran first (and recorded the fastest time of the day, an exceptional 14.00) to put us two seconds ahead of Maitland and 18 seconds ahead of Myers Park Novos. Paul Buckley ran next and his very strong 15.24 widened our lead to eight seconds. Tony Guttmann ran third in a valiant 16.35, which dropped us back to a close third spot, but Craig Hansford demolished the opposition in the final leg with his time of 14.33, to bring the Road Relay Championship back to the University after a long absence.

The University No.2 team, comprising John Lambert, David Finlay, Bob Kimberley and "Terry Wall clone" also ran well, to finish in 73.20, among the top 12 teams.

The University Mountaineering Club holds weekly meetings in the Michael Nelson Room in the Union on Wednesdays at 12.30 pm. Join in if you are interested. Some of the Club's forthcoming activities are:

**July 9 and 10**

Cross country skiing (may include July 8, depending on examination timetable).

**July 9**

Rock-climbing (probably Monkey Face, in The Wattagans). Interested persons are requested to contact Steve Campbell at 68 2181.

**July 14**

Aliyn Ridge (Barrington) day walk. Interested persons are requested to contact Martin Hand at 59 2741.

**July 16 and 17**

Barrington Tops walk. Interested persons are requested to contact Steve Campbell at 68 2181.

**July 31**

Day walk (mystery location). Interested persons are requested to contact David Cater at 51 2759.

**August 6 and 7**

Wollami Wilderness Bushwalk. Interested persons are requested to contact Geoff Mitchell, 119 Kemp Street, Hamilton South.

**August Holidays**

Cross-country skiing, Jagungal Wilderness (limited numbers). Interested persons are requested to contact Michael Roach at 51 3725.

Cross-country skiing, Victorian Alps (limited numbers). Interested persons are requested to contact Steve Campbell at 68 2181.
hospital changes

A combined effort by researchers from the University, the Commonwealth Institute of Health at Sydney University and Westmead Hospital is expected to result in more accurate predictions of the effects of changes in the provision of hospital facilities.

Recently a team lead by Professor Robert Gibbard, Assoc. Professor of Mathematics, produced a mathematical planning model of patient flows to hospitals in the Lower Hunter as part of investigations into whether a new hospital at Rankin Park or one on the western-side of Lake Macquarie would make beds more accessible.

Now Professor Gibbard has received a grant of $23,900 from the Commonwealth Department of Health in connection with a similar study entitled Changes in the Use of Acute Hospital Inpatient Facilities in Sydney 1978-1981.

Professor Gibbard is a statistician. His research team will also include a health services and administration specialist, Dr. Cedric Gibbs, of the Commonwealth Institute of Health, and a health economist, Ms Jane Hall, of Westmead Hospital. A Research Officer, Ms Nallie Hall, from SIROMAT, a firm of statistical and mathematical consultants, will be employed on the project until the end of this year.

The need for the investigation followed the opening of the new Westmead Hospital Centre and the commencement of the New South Wales Government's 'rationalisation programme', which included the elimination of some beds in hospitals within the Inner Sydney area.

As the pattern of use of hospital beds has changed because of the change in supply, Professor Gibbard's team will be undertaking to develop a mathematical planning model which helps predictions to be made of the effects of any future changes in the provision of hospital facilities.

Factors to be considered include the changes in the time involved in getting to the hospitals, demographic changes, trends in inpatient treatment and changes in the number and location of hospital beds in various specialties.

The Department of Health's grant includes an allowance of $4,000 for doctor supply to be obtained by the researchers.

The pilot study, the mathematical planning model for Lower Hunter patient flows to hospitals, used 10 hospitals and 31 postcodes as sources of data. Differences in utilisation rates were identified and linked with the number and location of hospital beds. Professor Gibbard and Ms Hall expect to finish writing this report by December.

Heard Island Adventure

Michael Golding, a Newcastle Medical student, and Dr. Ross Vining, of Sydney, are offering a Discover Heard Island lecture to members of the University and Newcastle communities.

If it weren't for the heating system, the Medical Sciences Lecture Theatre would probably take on a cold and forbidding atmosphere as Golding and Vining carry on a dialogue about the Heard Island adventure-scientific expedition and show colour slides.

They and others who formed the expedition party recently returned after six weeks spent on the island, which is Australia's most isolated territory, being over 4,000 kilometres south west of Perth and only 1,500 kilometres from the Antarctic mainland. Dominated by the 3,000 metre ice-sheathed heights of Big Ben, a still smouldering volcano, Heard Island has remained virtually untouched for over two decades.

The feature that sets the Heard and nearby MacDonell group of islands apart from all other sub-Antarctic islands is that they are not plagued by plants or animals introduced by man.

The area is home to vast wildlife populations: giant elephant seals weighing many tonnes, penguin rookeries providing a haven for millions of birds and skies alive with the graceful aerobatics of albatross, petrels and gulls.

Together with a simple flora, highly adapted to the rigorous climate, the living environment is of great interest to biologists. Other scientists are intrigued by the advance and retreat of some of the fastest moving glaciers in the world, and an active volcano.

Michael Golding went on the trip as the Expedition Medical Officer and so completed an official elective within the Faculty of Medicine, endeavoured to develop a mathematical planning model which helps predictions to be made of the effects of any future changes in the provision of hospital facilities.

The Department of Health's grant includes an allowance of $4,000 for doctor supply to be obtained by the researchers.

The pilot study, the mathematical planning model for Lower Hunter patient flows to hospitals, used 10 hospitals and 31 postcodes as sources of data. Differences in utilisation rates were identified and linked with the number and location of hospital beds. Professor Gibbard and Ms Hall expect to finish writing this report by December.
Paediatrics, the delivery of child health care, is at a critical point in its professional development. It is faced with dilemmas which need to be fully recognised if an imaginative and creative way forward is to be found.

Professor Robert Boulton said this in the Medical Lecture Theatre when he gave his inaugural Lecture to a good crowd of Convocation members and staff on June 24.

"In Australia public concern about child health reached a crescendo in the late Victorian era as people became aware, and then alarmed about the extent of childhood death. In Adelaide in the 1860's and the 1870's 15 per cent of all children under one year of age died between November and February each year. This annual summer scourge was caused by croup, diphtheria, whooping cough, dysentery, typhoid, measles, erysipelas, and scarlet fever.

"How and why did the social climate change so quickly that children's hospitals were established within a decade in each of the capital cities in this country? A modern chronicler of the history of Adelaide Children's Hospital selects two separate developments in the late 18th century as reasons why the total indifference of the mid 18th century gave way to the concern over the plight of sick and destitute children.

"One force was the Evangelical religious movement which fostered the notion of liberty, equality, and fraternity, which had originally emanated from the French Revolution. From this sprang benevolence and its practical expression in helping fellow men.

"The second force stemmed from the English writer Frances Cobb who in 1846 advanced the idea that there cannot be a child pauper since every child is naturally dependent, the king's son no less than the beggar's. This notion allowed children to bypass the typical Victorian idea of self-help before charity, and to be eligible for compassion and care.

"The children's hospitals were started in Adelaide, Melbourne and Brisbane around that time and in New South Wales several years later. It is of local interest that the wife of the member for Singleton in the State Parliament, Mrs. W. Brown, was the driving force in pressurising influential and wealthy people to subscribe and found the Sydney Children's Hospital. The number of children in New South Wales had risen from 100,000 in 1850 to nearly 300,000 in 1881.

"Slowly modern medicine became a clinical science. In the pre-antibiotic era, morbidity and mortality remained high. Diseases led to months of hospitalisation, disfiguring operations, and life long disability.

"Technological advances were rapid in the immediate post-war period. For example piped oxygen became available for children with respiratory disease.

"Advances in paediatric care came from people concentrating their expertise solely on the physical, psychological, and emotional needs of children. Obviously the family doctor has a key role here as the doctor of first contact for the vast majority of all children, but, with the overall improvement in organic health of our childhood population, individual primary care doctors rarely have the experience to manage children with serious illness.

"The technological advances occurred in parallel with major advances in other areas as the use of intravenous fluids, the development of antibiotics and the understanding of inherited and metabolic disease.

"Research in paediatrics has to some extent naturally paralleled this historically rapid change, with the emphasis switching from rescuing otherwise well children from acute life-threatening ills to reducing the effects of the complications of chronic cardiac, respiratory or renal disorders affecting a tiny minority of children.

"However, a marked lag effect is present with most research money still being spent on extremely rare conditions or on conditions which have their aetiology in socio political inequalities and for which the medical solution is questionable useful. The most common example here is prematurity and fetal growth retardation, for world wide there are problems of maternal poverty, malnutrition, enforced early child-bearing and the unavailability of safe methods of family planning. In this country they are the results of maternal ignorance about health issues, deleterious effects of social class mediated factors such as smoking, and alcohol consumption during pregnancy.

"What are the common causes of morbidity? The term the 'new morbidity' in paediatrics was coined by Dr. Haggerty, of Rochester, who found that most parental concern about children's health centred on conditions such as behavioural problems, development, nutrition, and school learning problems. The death delivering diseases of earlier decades are now recognised to be passed and people are much more concerned about conditions which don't easily fit the medical model in a traditional way.

"Hence, we have reached a crossroad. Paediatrics is a specialty founded on the humanitarian concern for children, oriented towards understanding the children's illness in the context of his emotional and intellectual development, and working hand in hand with research in the clinical sciences in providing expert technical care for sick children. But now it is recognised that his is not enough, and that the traditional strength of the specialty needs to be broadened, Professor Boulton concluded.
Advertisements

HOUSE FOR RENT

A United Kingdom scientist taking a year's study leave in Sydney from August, 1983, has a house to let for 12 months in North London (Stoke Newington). The property is a three-bedroom terraced family house with the usual facilities, including full gas central heating, a well-equipped large kitchen and a secluded rear garden, close to Central London and is on a direct bus route to the main University of London campus. Rent, including rates: 380 pounds per month. Interested persons are asked to contact Dr. J. Cohen, Zoology Department, University College London, Gower Street, London WC1E 6BT.

TO LET

Person wanted to share fully furnished renovated terrace near the inner city. Full use of all conveniences. Rental: $37 per week. Interested persons are requested to contact Vicki Deakin at Extension 537 or at home at 69 3436.

Unfurnished three bedroom modern house available for a few months in Colombo. This house is ideal for a family on a short visit to Sri Lanka. Rental: $60 per week. Interested persons are requested to telephone 52 8804.

FOR SALE

V8 HOLDEN COMMODORE STATION WAGON. Features include: air conditioning, power steering, automatic, alloy wheels, four wheel discs, superb sound system (almost every available factory extra fitted). Current model replacement cost over $20,000. Going price: $10,500 or near offer. Interested persons are requested to telephone Extensions 453 or 657.

THREE PIECE LOUNGE SUITE (two-seater couch and two easy chairs) in very good condition; needs recovering. $150 or near offer. Interested persons are requested to telephone Amor Futter (Chemical Engineering) at Extension 489.

FIAT X1-9 in excellent condition. Features include: Targa Top, Clarion Cassette Radio, New Radials, 12 months registration. Interested persons are requested to telephone 28 1865.

METAL DETECTOR NEEDED

I need to borrow, rent or steal a metal detector. My wife lost her platinum wedding ring and ordinary searching has failed to locate it. If you have, or know someone who has, a metal detector I would be very pleased to hear from you. Please telephone 43 5306 and ask for Chris or Theo MacDonald.

DRESSMAKING

Dressmaking, alterations and curtain making done at reasonable rates. Interested persons are requested to telephone 52 8804. No job too small.

TAE CHI CLASSES

New classes in Term II -- Advanced (Level II) begins Wednesday, July 13. Beginners (Level I) commences Friday, July 15. All classes held in the Second Year Laboratory, Ground Floor, Psychology Department. For further information please telephone Ken Lee at Extension 794.

ATTENTION ALL WINE BUFFS

For sale by tender 1964 PENFOLD'S GRANGE HERITAGE. Only genuine purchasers should telephone Extension 737.

Funding

The Institute of Industrial Economics has decided to fund two new research projects in its area of interest.

The Continuity of Small Firms -- Fact or Fiction? a survey commenced in December, 1982, is currently being dispatched. It is anticipated that analysis will commence in early 1984. More than 1,000 firms are being asked to complete a comprehensive questionnaire and up to 2,000 other firms are being circulated for information on their current status only. The principal researcher is Mrs. K.M. Rainfrow of the Department of Economics.

Financial Distress Prediction: A Study of Small Companies is being carried out by Mr. G.E.P. Shailer, of the Department of Commerce. Preliminary work was commenced in April, 1983, and primary data collection is currently being undertaken. It is anticipated that analysis will be commenced in September, 1983, with a final report being available before December, 1983. Approximately 20,000 data items for 400 companies will be collected and studied, and the predictive abilities of auditors will be surveyed and analysed for about 100 firms.

Saturday Opera

Winter Series commencing at 8 pm in the Basden Theatre of the University. Saturday Night at the Opera is two public opera film series (presented by the Department of Community Programs).

Saturday, July 9

Orpheus in the Underworld by Jacques Offenbach (105 minutes).

Saturday, July 16

The Abduction from the Seraglio by Wolfgang Mozart (110 minutes).