BUILDING OPENED

The Social Sciences Building, which provides accommodation for the Department of Geography, Economics, Commerce, and part of the Department of Psychology, was officially opened at a ceremony held in the University's Drama Theatre on 31st May.

The opening ceremony was performed by Sir John Crawford, who retired earlier this year as Vice-Chancellor of the Australian National University and who has had links with the University of Newcastle extending over many years.

The occasion was also marked by the conferring of an honorary degree on Mr. Marcel Aurousseau, who has made scholarly contributions to Geography, a discipline which has been rehoused in the new building.

The Vice-Chancellor, who presided, said:

"It gives me very great pleasure indeed, on behalf of the university, to welcome you all here this afternoon. But, first, I must apologize for the absence of our Chancellor, The Honourable Sir Alister McMullin, who in fact shared in the choice of date, but you will realize that, since he ceased to be President of the Senate, he no longer has that final control over his duties in connection with the commonwealth government which was once allowed to him by both parties in the Senate, and at the last minute he had very regretfully to give priority to a Canberra engagement, whose importance I had to acknowledge. Naturally he sends his good wishes for the success of this occasion.

Sadly out Deputy Chancellor, Dr. George Edwards, is gravely ill, so for the second time in my career, in accordance with the by-laws, I preside at a congregation of the university.

Originally, we proposed to hold the ceremony in the Great Hall despite the distance from the building to be opened — and I recommend those of you who have not been inside the Great Hall to seize the opportunity today — but the Great Hall, though acoustically very successful when crowded, has proved very difficult for speakers when audiences of 800 or less are
concerned. No doubt this will change in due course, but currently we have no hall at this disposal between this one, holding a maximum of over 300, and the Great Hall, accommodating 1,500. Fortunately, our occupants made the best use of the Drama Theatre and the adjacent lecture theatres. The opening ceremony could be carried out in a single area, although the drama theatre was perhaps less suitable for research assistants. The opening of the Sciences Building, which Sir John Crawford is about to open, provides lecturing and other work facilities. The Research and Development Laboratories, Department of Geography, Economics, Commerce and Legal Studies, and also includes some specialized facilities for the Department of Psychology. The main Psychology Laboratory is in the north wing of the Sciences Building, which will double as an office for the psychology staff. We shall make another occasion for the opening of these laboratories.

The procedure this afternoon is, after the speeches in this drama theatre are concluded, that we shall proceed to the Research and Development Laboratories, Department of Geography, Economics, Commerce and Legal Studies, where refreshments will be provided. At a subsequent occasion a plaque commemorating the occasion. Guests are free to move about the building at will and by for the 90 or so staff here and students in the various disciplines, the three theatres, respectively seating 40, 100 and 150 persons, are open and available for their use. If all were in use at the theatres at any one time, the adjacent lecture theatres, halls and seminar rooms in this building, I do propose to argue the need for a function of the market place under conditions but also a function of decisions by governments and permanent finish. How and what of the market place under conditions of competition but also a function of decisions by governments and permanent finish. But this is not the place to go into this.

Economics is fundamentally a science of choice in the allocation of resources which are scarce in any sense. Economics is often forgotten is that choice is not only a function of what society wants, but also some of the problems which confront us all. Indeed, it is in the recent decades has come from the attempt to convert it into a kind of geometry, or advanced algebra, divorced in its premises from advanced algebra, divorced in its premises from the real world.

"A building suggests a basis of unity for its occupants - the more so when dignified with the name of professor. What Leonardo da Vinci suggested, that not all the social science departments of the University are in fact housed in this building, but that the need for a greater sense of unity in purpose and in action on the part of the social sciences. I think this view is especially pertinent today for geography and economics.

"Let me begin with a reminder of what economics is about (or ought to be about) and why Edmund Burke could refer to economists in a context of 'suborners', and why Marx could speak of 'calculators' and again why Carlyle gave them an assurance to the respectable professors of the Dime. Science.

"In 1910, Mr. Arousseau joined the staff of the Royal Geological Society and it was here, and subsequently as Secretary to the British Permanent Committee on Geographical Names, that he was to demonstrate that capacity for meticulous research and scholarship which had led him to be internationally known geographer, happily with Sir John Crawford, to perform the opening ceremony and associated the function with the award of the university medal in Geography to Mr. Marcel Aurousseau, its 80th anniversary.

"Sir John Crawford, to perform the opening ceremony could be carried out in a single area, although the drama theatre was perhaps less suitable for this purpose. I refer to the Social Sciences Building, where refreshments will be provided. At a subsequent occasion a plaque commemorating the occasion. Guests are free to move about the building at will and by for the 90 or so staff here and students in the various disciplines, the three theatres, respectively seating 40, 100 and 150 persons, are open and available for their use. If all were in use at the theatres at any one time, the adjacent lecture theatres, halls and seminar rooms in this building, I do propose to argue the need for a function of the market place under conditions of competition but also a function of decisions by governments and permanent finish. How and what of the market place under conditions of competition but also a function of decisions by governments and permanent finish. But this is not the place to go into this.

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"A return to his native Sydney in 1956, at the age of sixty-five, might well, for most men have taken retirement. His Australian colleagues, however, were quick to take advantage of his experience, and the continuing vigour of his mind. Both in 1959 to 1961 he has appeared in the pages of the Royal Geographical Society of New South Wales making an essay on the revision to the constitution of its membership in a period of its rapid growth. From 1964 to 1968 he served as President of the National Geographic Society for Geography for the Australian Academy of Science.

"Marcel Aurousseau celebrated his seventy-fifth birthday by submitting the manuscript of his book on the University of Sydney, Fellow of the Royal Geographical Society, Fellow of the Australian Academy of Science.

"Mr. Michel Chardonnier, I present to you, Mr. Marcel Aurousseau, to receive the Honorary Degree of Doctor of Letters."
The achievements of a full and active life were to be seen in George Edwards, earthy life has kept back nothing that was needed for a full life, and today we think not of unfailingly prompt— we are able to thank God for performance.

It is my pleasure to have been asked to say a few words of appreciation on behalf of the University of Newcastle and the particularly close association with the Faculty of Economics and Commerce, that Sir John Crawford has in such a short and effective manner expressed. It is my pleasure to present Sir John Crawford with a commemorative plaque.

The Faculty of Architecture typifies the attractive natural surroundings which have been retained throughout the university’s life.

TREES ON CAMPUS

Newcastle University is very fortunate in having a site which is generally forested and considerable effort has been spent to retain as many of these trees as possible during the development of the site. Naturally, the construction of buildings, roads and underground services, makes the removal of some tree inevitable. However, the location of existing trees is taken into consideration in the siting of these facilities, in as much as situations of high traffic density can be modified to avoid removing healthy trees. Even so, the value of trees not directly in the way of the building operations is often adversely affected by a variety of factors such as changes in drainage pattern, soil aeration and wind exposure or by physical damage from accidental impact from vehicles or equipment or from fire.

The ability of trees to adjust to these new conditions varies considerably and some species appear to be more sensitive to these changes than others. In an effort to maintain or recover the vigour of our trees, the Planners’ Division on occasions is forced to vary their trimming in order to recover the vigour of particular trees. However, the location of existing trees is taken into consideration in the siting of these facilities, in as much as situations of high traffic density can be modified to avoid removing healthy trees. Even so, the value of trees not directly in the way of the building operations is often adversely affected by a variety of factors such as changes in drainage pattern, soil aeration and wind exposure or by physical damage from accidental impact from vehicles or equipment or from fire.

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An election for the position was held at the annual general meeting on 4th May. Mr. Dernkamp was elected unopposed.

The constitution of Convocation provides that of 12 members of the Standing Committee, four shall retire annually. Professor E.O. Hall, Dr. J. C. Callaghan, Mr. J. H. Bull, and Miss J. L. Lyall resigned at the annual general meeting and the vacancies thus created were filled by the election of Mr. M. W. John, Miss J. M. A. Stimson, Mr. B. J. Beckett, and Mr. J. H. Bull, respectively.

Mr. C. W. Harman and Mr. J. H. Bull also resigned from the Standing Committee.

The date of the next annual meeting was fixed for 1st May, 1974.

Mr. B. J. Beckett, B.C.E. (above), who was elected Deputy Chairman of the University, has had a long association with Newcastle.

He was born in Newcastle and educated at Newcastle High School. Since leaving school, Mr. Beckett has also had the closest of ties with the development of the University, having been a member of its Council since the formation of the first full Council of the University in 1966. As a Council member, and as Director of The Newcastle Research Associates Limited (the University's specialist research and education company), Mr. Beckett has given the University the benefit of his wide experience. Since 1969, Mr. Beckett has also served as Chairman of the Newcastle Administrative Staff College and as a Member of the Council of the Institute for the Study of Man and Society.

Mr. Beckett was referred to consider the possible establishment of a Creative Fellowship tenable at the University.

On 3rd May, Mr. Beckett was elected Secretary, and Mr. R. Gibbons was re-elected Treasurer, of the Standing Committee. Mr. Beckett was also re-elected Miss Fran Burns, who held the position of Secretary for two years and declined nomination for re-election.

Mr. Y. H. Yeung, of the Department of Computer Studies, was re-elected Radio Officer.

Mr. K. J. Lamb, of the Department of Community Affairs, was re-elected Auditor.

Mr. T. King, Community Arts Consultant with the Australian Council for the Arts, accepted Convocation's invitation to speak at the annual meeting. Mr. King expressed his support. Mr. King spoke in the Drama Theatre on 9th August and indicated the sorts of community arts projects the Australian Council for the Arts would probably support with financial and other assistance.

NEW DEPUTY CHANCELLOR

Mr. B. J. Beckett, B.C.E. (above), who was elected Deputy Chairman of the University, has had a long association with Newcastle.

For the University's first sessional seminar, held on 24th May, the Warden thanked members for their contributions to a panel discussion on "The contribution being made to creative work generally by scientists; these sessions were taken by Professor Keay and an infra-red picture of Jupiter..."

Professor Keay and an infra-red picture of Jupiter...
system, driven by a special electric motor which rotated in tiny steps, was chosen to generate the scan motion. The control, timing and data recording problems were resolved electronically, and the system yielded its first crude maps of Jupiter and Saturn in February, 1972. Modifications and improvements to the system led to publishable results from an observing run in April.

Large telescopes are always shared. Regular observers are usually granted a few days use of the telescope once each lunar month and on the first and last days of the run their equipment has to be assembled on, or dismantled from, the telescope. In our case a further complication arose because my colleague, Dr. George Riske, used the telescope for making infra-red observations of distant galaxies during the time from nightfall until Jupiter rose and climbed high enough in the sky for scanning to commence. This called for slewing the telescope to its parking position to install the scanning mechanism on the secondary mirror at the front end of the telescope.

At 3 or 4 a.m., conditions are not at their best at 8,000 feet altitude in the Catalina Mountains, and while I laboured at one end of the telescope George was busy switching bolometers at the other. If nothing went wrong we could complete a change-over in forty minutes and then acquire Jupiter to commence scanning. The scan-motor causes the image of Jupiter to appear to bounce up and down like a huge orange beach-ball and is fascinating to watch. We set the telescope to drift across Jupiter from one side to the other in a total time of about 12 minutes and thus the scans covered the planet completely to provide data for each infra-red map. Work continued after daylight because infra-red observations of bright objects like Jupiter are scarcely affected by light from a clear blue sky, but the slightest trace of cloud is ruinous. Also there is a somewhat restricted observing season because the cold, dry, polar airmass at high altitudes over North America disperses in summer. Infra-red observations demand perfectly dry air.

Following the successful April observations we modified the system to improve the mapping detail as far as possible and hoped that the May observing run would yield a bonanza. Fortunately it did. The air remained cold and moisture-free. By the end of the observing run we had gained data for more than twenty infra-red pictures of Jupiter — enough to construct a complete map of the heat-emitting regions of the planet with some pictures to spare for comparison purposes.

The scan data was stored on magnetic tape and required lengthy processing by computer to produce a useful picture, followed by manual rectification and calibration to produce the final map projections. Like digging diamonds out of mud, the results were most rewarding. We found that the principal cloud layer in the Jovian atmosphere has a topside temperature close to 209 degrees Kelvin (minus 64 degrees Celsius) and that there are gaps, mainly in three distinct latitude bands which reveal the hotter cloud layers underneath. The gaps are probably wind vortices on a scale one hundred times greater than the largest terrestrial hurricane eye.

A few other regions appear colder and in the case of the famous Red Spot its depressed temperature indicated that it protrudes about 12 kilometers above the main cloud layer.

The greatest bonanza from the work came when the infra-red Jovian maps were closely compared with colour photographs of Jupiter taken through the same telescope a day or two later. For the first time a clear correlation was found between the infra-red temperatures and visual colours of the various Jovian features. The blue and brown areas proved to be hotter and the orange and salmon-coloured areas colder than the main cloud deck, which is principally a yellowish-grey tone.

Comparison between the results obtained in April and May (or Saturn) that the Jovian hot spots persist for a month or more, corresponding to perhaps a hundred revolutions of the planet. But photographs of Jupiter and other evidence suggest that large-scale changes occur from year to year, particularly when violent tropical disturbances cause the appearance of new features, including fresh blue spots.

Next December, Pioneer 10 will become the first spacecraft to take a close look at Jupiter. From a distance of 130,000 kilometers it will be able to check much of what we have learned at lesser expense, but greater discomfort, from a distance of 600 million kilometers, give or take a few meters! Then, after its scrutiny of Jupiter, Pioneer will venture outwards to leave our Solar system and become lost forever in the hostile depths of interstellar space, while our Earth-bound explorer of Jupiter has already returned from the Saturn system to become lost in the hostile depths of income-taxation.

UNIVERSITY NEWS

Departments of the university and student dramatic societies, as well as outside theatrical companies, have availed themselves of the Arts/Drama Theatre of the university since it was completed last March. The Student Players presented "Roots" (Arnold Wesker) and "Blithe Spirit" (Noel Coward), the Elizabethan Committee, an evening of songs and music of the Renaissance, the German Club, two plays, the residents of Edwards Hall, "Lear" (Edward Bond), the Department of Classics, "Helen" (Euripides) and the Old Tote Theatre Company, "King Lear" (Shakespeare). In addition the theatre has been used at night for film screenings and public lectures.

At the Sixth South regional Conference of the N.S.W. Association of University Women Graduates was held at Edwards Hall on the weekend of 25th to 27th May. The conference brought together delegates from Armidale, Central Western, Goulburn, Illawarra, Richmond Valley, and Riverina Branches of the Association, as well as representatives from eight Sydney Groups, with the Hunter Valley Branch as hosts.

The Chancellor (Sir Alister McMillin), the Vice-Chancellor (Professor J.J. Auchenmuty), Professor L.N. Short, Professor of Education, and Miss M.R. Hall, Senior Lecturer in Geography, represented the university at the 11th Association of Commonwealth Universities Congress in Edinburgh from 11th to 18th August. The Vice-Chancellor subsequently attended a conference of heads of Commonwealth Universities at the University of Exeter.

On 30th July, Mr. B. Newman, representing NBN Channel 3, handed over to the Vice-Chancellor a cheque for $9,000 to pay for the provision of additional equipment in the Mobile Environment Measurement Unit. NBN previously donated $14,000 to pay for the motor vehicle and equipment to measure the atmospheric levels of certain pollutants.

As at 30th April, 3,950 students had enrolled for courses offered by the University. The enrolments in 1972 (at the corresponding point) were 3,758.

Mr. J.K. Ellis, M.A. (Oxford); Manager, Production, Paving and Control at the B.H.P. Steelworks Newcastle, was appointed to the Council of the University of Newcastle in succession to Mr. Brian Loton, who was transferred by the B.H.P. Co. Ltd. from Newcastle to Melbourne.

Dr. Alexander Marshall Clarke, a former student of Newcastle University College, has taken up his appointment as Professor of Psychology at Wollongong University College. Professor Clarke was born in Sydney and holds the degrees of Bachelor of Arts, with first-class honours, in the University of N.S.W. (1963) and Doctor of Philosophy in the Australian National University. Immediately prior to his appointment he was Associate Professor in Psychology in the School of Behavioural Sciences, Macquarie University.

The University of Newcastle was represented by Robert Wilkinson in the two Rugby Tests played between Combined Universities of New Zealand and Australia in Canberra and Brisbane in May. He also played for Newcastle-Macquarie-New South Wales Universities against the Kiwis.

The University Council decided to name the proposed Field House (the indoor sporting complex to the constructed close to No. 2 Oval) the Auchenmuty Sports Centre in honour of the Vice-Chancellor, who is due to retire at the end of 1974.

Lyndall Kay Davis, a 1965 Bachelor of Arts graduate, is working in Iran giving tuition in English. She is presently lecturing to Army officers who are installing telephonic equipment for the Iranian Army. Before taking up this appointment, she was attached to, first, the University of Tehran and, then, the University of Karadj. Miss Davis taught English at Bulahdelah Central School and Warner's Bay High School before going overseas in 1971.

Brian J. Proctor, who holds a Bachelor of Arts degree and a Diploma in Education in this university, has been awarded a Bachelor of Laws degree by the University of London.

Please advise

The Secretary, University of Newcastle, 2308, of -

* Your change of address
* Names and addresses of other graduates who are not on the mailing list for "THE GAZETTE"
* Change in marital status

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