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A. U. C. UNDER FIRE

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The President of the Association is Professor Ivan Barko, of the Monash Department of French.

In a speech at the opening ceremony of August 12 Professor Barko said:

For the first time in its history our Association is holding its congress in one of the newer Universities of Australia. I should like to think that in accepting the Monash invitation, A.U.L.L.A. meant to pay a tribute to the new Universities' contribution to language and literature; studies in this country and it is in this sense that the venue of this congress is significant. The coming of age of Monash and its sister universities in Australia is thus symbolically recognized by our Association. The Monash Organizing Committee is grateful to the 400 delegates from New Zealand, Australia and overseas who have accepted to spend this Congress week on a campus situated such a long way from the main urban centre, and it hopes that the papers and other functions arranged for the Congress will in some measure compensate for the remoteness of Monash.

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And since you have come today to what is still regarded as a developing University, you will, I hope, forgive me if I briefly turn my
attention to problems of development, and I trust that our New Zealand colleagues will not hold it against me if some of the problems I will discuss are specifically Australian. May I add immediately that the views I will express are not necessarily those of the governing bodies of this Association.

Although Australian Universities retain a large measure of autonomy, it is well known that as far as new developments are concerned this autonomy is more theoretical than real.

The Australian Universities' Commission holds in its hands the future of new disciplines in our Universities. No doubt, individual Universities still retain a negative form of autonomy, since they are not made to introduce new subjects against their wishes. However, their freedom to initiate the introduction of new subjects against the recommendations of the Commission is, to say the least, dubious. Although on page 35 of its Fourth Report published in 1969 the A.U.C. deems it undesirable to recommend "ear-marked grants", this liberal policy is not strengthened by a further statement on the same page on new developments in existing departments, schools or faculties, according to which "the University will be notified which of such developments are approved or disapproved". References to new developments in languages on pp 36 and 37 of the same Report make the mandatory nature of the Commission's recommendations evident. For instance, the Commission decrees on p. 37 of its Report that "Asian languages less in demand", such as Thai and Hindi, should not be introduced by universities other than the A.N.U. It is not entirely clear what action the Commission would take if a university ignored its recommendations, but it is evident that in spite of its opposition to ear-marked grants, the A.U.C. has severely restricted the autonomy of universities as far as the introduction of new disciplines is concerned.

I am prepared to believe that the Commission has carefully thought out long-term policy for the development of language and literature studies in this country. It is, however, a pity that such a policy is not clearly defined in the A.U.C.'s report and that the philosophy behind the recommendations of the Commission is not made explicit.

The section of the Commission's Report on new developments contains less than three pages (pp. 35-37) and submissions by universities are often dismissed without comment or at best in a sentence. One is surprised, for instance, to find the following statement on p. 37 of the Report:

"Certain universities have proposed the establishment of independent Departments of Linguistics and of Fine Arts. In the case of Linguistics the Commission considers that it would be appropriate for universities, if they so desire, to make appointments of suitable staff within an existing language department. The study of Fine Arts might also be encouraged in the first instance by making appointments of suitable staff within a school or department of language and literature."

At a time when linguistics is emerging on the world scene as one of the most dynamic disciplines in the human sciences, one would like to know what assumptions underlie the Commission's decision to reject the introduction of independent departments of linguistics. Similarly, universities should be informed of the reasons why, in the A.U.C.'s opinion, Fine Arts or Visual Arts should be taught in departments of languages and literature. The Commission's assumptions cannot
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be challenged because its thinking is not made public, and no provision has been made for an effective system of appeal against its recommendations. Although a fresh submission may be made for a later triennium, in some cases a three-year delay can have disastrous effects on the development of a centre of learning.

Since the Universities' Commission now holds such unprecedented powers, the time has come for it to revise its procedures. A first step in the right direction would be a re-definition of its terms of reference. There is some doubt whether the A.U.C. is merely an advisory body or whether its recommendations are intended to have the mandatory character they have gradually taken on.

In the second place, the Commission must make its assumptions and policies in different areas of academic activities more explicit and make it possible for scholars to query and challenge them. The extreme brevity of some statements in the A.U.C.'s Fourth Report and the binding nature of the Commission's recommendations can only create discontent and frustration.

Thirdly, and more significantly, the Commission should set up specialist ad-hoc sub-committees in different broad areas of scholarship and should not hesitate to consult overseas experts on developments under consideration. The academic importance of the issues at stake and the financial investments themselves are such that the right decisions cannot be made by a general committee comprising one or at the most two experts in the field considered. In the particular case of linguistics, for instance, top level linguists in the United States, Europe and Australia could have been consulted on the desirability of introducing autonomous departments in that discipline. Since the Commission disposes of considerable funds and has ample time to study submissions, surely it is not unreasonable to expect that it should seek the views of local and overseas academics and make their advice available to individual universities.

If this were done, the A.U.C. would fulfill a positive advisory function not only in relation to the Federal Government but also towards the universities themselves. To consult overseas experts does not mean that Australian universities must copy what is done elsewhere: but they should be in a position to draw freely on the best advice available and ensure that their new developments are not tainted with provincialism.

I am sure that most of us realize that the future of language and literature studies in Australia depends not only on grant-giving bodies but above all on ourselves and on the worth of the work we do in established disciplines and existing departments.

The programme of this Congress provides ample evidence of the variety and depth of scholarship in the field of language and literature in our universities. Some of the material which will be presented in the course of our proceedings is of an international standard. Whilst the Association wishes to continue to encourage pure research, increasingly one of the prime purposes of Congresses such as this one is to discuss the aims and methods of our teaching in our main fields of study. The Convenors and the Organizing Committee of the XIIIth Congress have made a special effort to set aside sufficient time for such discussions both in sectional meetings and at plenary session. I feel that the success of this Congress depends largely on the effectiveness of our symposia and informal discussions on the best ways of adapting our teaching to the new needs and aspirations of the students who will come to us in the seventies.
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ENVIRONMENTAL POLLUTION

The following extracts come from a talk given by Dr. M. C. R. Edgell, of the Department of Geography, during a Monash Symposium on Pollution held during Second Term:

An ideal environment - one which is socially, aesthetically or economically most acceptable - means very different things to very different people. Similarly, any deviation from that ideal, any environmental change, or any environmental pollution, is viewed in many ways. Environmental pollution is many things to many people, perhaps all things to all people.

The following responses to a questionnaire given to high school students illustrate that pollution is regarded in many ways:

- Garbage where it shouldn’t be.
- The invasion of foreign matter harmful to life in water, air, T.V., books.
- Contamination of the natural environment as a result of carelessness.
- When the air starts smelling and the water stinks.
- Something that is not 100% pure.
- Bad air, halitosis, buses, cops.

It is difficult to find a generally accepted definition of environmental pollution, partly because we are not clear about what the environment is that we are so concerned about. However, the following definition, modified from one given at a resource ministers conference on pollution in Montreal 1966, provides some useful guidelines.

"Pollution is alteration of the natural environments, air, water and land, so that they are rendered offensive or deleterious to man's aesthetic sense or uses, or to resources which man wishes to conserve. It is recognised that some degree of alteration of the environment is a necessary consequence of man's activities. Such alterations are not considered pollution until they reach the limit of tolerance."

What are the implications of this definition? First, pollution is a change in the environment. What to one person is a correct and necessary change in land use, ecology or whatever, may to another person be pollution, of the worst possible kind. How do we set the limits of tolerance beyond which environmental change becomes environmental pollution? Second, change and/or pollution is with us to stay in one form or another. This implies that we have to decide the levels of change that are to be tolerated, and to plan for our future environment so that it is not overwhelmed locally or generally by pollution.

The root processes of pollution are ecological processes - ecological imbalances caused by the increasingly one-sided relationship between society and our environmental resources (atmospheric, hydrologic, pedologic and biotic). Environmental pollution is due to man-imposed ecosystem change, whether these are intentional or unintentional does not matter, the results are the same.
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Major types of change are -

(i) Overloading of ecosystems with substances that they would normally deal with and process, but which in excess quantities cause a breakdown in ecosystem dynamics and result in accumulations of these substances, e.g. organic refuse, sewage, dust, smoke. Often, other effects such as the accumulation of algae or the depletion of water oxygen are very severe.

(ii) Overloading of ecosystems with alien chemicals that they have no capacity to process (synthetic pesticides, herbicides, lead compounds in petrol - tetra-ethyl and tetra-methyl, etc.). This aspect of environmental pollution is both the most frightening and the one which probably is most noticed by the community.

(iii) Removal or simplification of ecosystem components, which often places an intolerable drain on ecosystems processes and mineral storages.

These types of change, and other types not mentioned, can be thought of in two senses.

1. Positive pollution in which something is added to the environment (sewage, oil, heavy metals, biocides, fertilizers, flyash, nitrogen oxides). These additives accumulate in ecosystem "gathering grounds" such as water bodies, the atmosphere, soil and living organisms. Some of them are obvious, such as oil, industrial wastes, sewage. Others, such as the vast range of biocides, whilst being potentially or actually extremely virulent and toxic, do not always make their presence felt immediately, but gradually build up concentration until their effects are often suddenly and irrevocably manifested in ecological and socio-economic catastrophes.

2. Negative pollution in which something is removed from the ecosystem (trees, animal carcases, sheep, cattle or kangaroos, soil, minerals). This pollution can be particularly dangerous if it results in a breakdown of circulatory relationships between ecosystem and environment components - e.g. mineral cycle between soil and vegetation. Although negative pollution usually causes less concern amongst the community than positive pollution, it can have very striking visual as well as more deep-seated ecological, social and economic results.

Our environmental ecosystems are characterised by complex systems of energy flow and mineral circulation, in which living organisms and the physical environment each play their part. It is into these mineral cycles, food chains and physical processes (such as the gradual breakdown of organic matter and release of mineral compounds, the food flow from marine micro-organisms to predatory fish, and the processes of river and lake sedimentation) that we thoughtlessly dump our chemical, biological and physical wastes. In some instances, these wastes are processed efficiently by ecosystem processes, in many other instances, they are not. The great increase in materials completely alien to nature, that are included in our wastes, have no use in an ecosystem and can be extremely toxic. They also have the propensity, because of the cycling processes in ecosystems, to become highly concentrated in the bodies of organisms at higher levels in the food chain, and also to turn up in most unexpected places. DDT residues with concentrations of 1600 ppm have been found in Grebes in the U.S.A., and lower concentrations have been found in penguins in Antarctica.
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far removed from any direct applications of DDT. We also must remember that human beings are part of the ecosystem cycle, and that we are not immune from such concentrations. DDT and dielorin residues are probably present in the fatty tissues of everyone in this theatre. What are their long term effects? Recent bans of DDT and dielorin in some countries is to be welcomed, but other chemicals are actually and potentially just as dangerous.

Some parts of our environment can act as sensors or waste disposal channels, and this must be fully realised both by polluters and anti-polluters. Polluters often seem to regard the sewer capacity of the environment as endless, using water bodies as bottomless, and the atmosphere as topless cesspits. Anti-pollution feeling is often completely opposed to any utilisation of the environment as a natural sewer. In fact, the atmosphere and certain water bodies, for a variety of ecological, economic and physical reasons, are the best medium for a certain amount of waste disposal.

One of our priorities is to assess the sewer capacity of the atmosphere and certain water bodies (i.e. Western Port Bay) so that they can be utilized as waste receptacles without undue degradation. It is imperative that this assessment be done before any pollution commences, once that happens, it is difficult to reverse due to a multitude of political, social and economic factors. Pollution represents a needless depletion of a resource supply - a polluted environment has fewer resources than an unpolluted environment.

It is difficult to measure the economic effect of environmental pollution. Some can be measured - the cost of damage caused by air born pollutants alone in the U.S.A. has been estimated at $10 billion a year. Economic considerations, however, although of great importance in considerations of the costs of pollution (both social and economic) must not be overstressed. Economics is a theory of social choice - but is it the only theory of social choice? With economics viewed in a proper perspective however, we certainly have to attune our thinking towards paying for a clean environment. The community must realise from politicians and industrialists on down, that it has to buy a clean environment just as logically as it pays for everyday consumer goods. After all, we daily consume 35 lbs. of air and daily use 100 - 200 gallons of water per person.

At first glance, the cost of buying a clean environment appears staggering - to maintain pollution at its present level in the U.S.A., not to reduce it, would cost $20 billion per year. Such figures are often unfairly and immorally quoted by industry and government as being causes for not introducing more effective pollution control. But, in this country, and in this state, we have the wealth and the techniques to tackle pollution, if only we can re-orient our thinking to the fact that the economy must include pollution control in its budgeting and philosophy.

It has been said that ecology is the possible future saviour of mankind, and thus it is too important to be left to the ecologists. I would add that it is certainly too important to be left entirely to the engineers, economists, administrators and politicians. I mentioned earlier that the root processes of pollution are ecological processes. However, even if we accept this, the inescapable conclusion remains that environmental pollution is fundamentally a social problem. The causes and remedies of pollution are contained within society. The ecological and technological processes and knowledge are there to combat pollution - society has to use them.

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VICE-CHANCELLOR HONOURED

The Faculty of Engineering at the University of Melbourne recently honoured Dr. Matheson.

The Vice-Chancellor was one of four people to receive a Kerfoot Memorial Medal from Sir Robert Menzies, the Chancellor of Melbourne, for distinguished contribution to engineering achievement in Australia.

The others were: Sir Philip Baxter, Sir Lindesay Clark and Sir Maurice Mawby.

The Medals provide a Memorial to William Charles Kerfoot, first Professor of Engineering at Melbourne.

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12
TEACHING RESPONSIBILITIES

In the June issue of The Reporter, Mr. Gordon Troup, Reader in Physics, wrote an article entitled "Lousy Teachers...and all that". Mr. A. Holgate, Lecturer in Civil Engineering, has provided the following comments:

Mr. Gordon Troup infers in his article that since the N.U.A.U.S. made its proposal that incompetent lecturers be dismissed he has heard no voice raised in their defence. It seems to me that the original proposal has been drowned out by a thunderous roar of anguish from guilt-ridden academics on all sides. What amazes me is that so far no-one has publicly shown the slightest sympathy for the unfortunate students. (I must hasten to add that I do not agree with their proposed solution).

The type of research which involves original discovery of facts, formulation of principles and invention of new techniques is naturally of great importance in university life. So is the broad study of a subject, its development and practice, the observation of latest trends and the duty to keep abreast of developments over a wide field. So also is the handing on of this knowledge to others.

The stress of being pulled simultaneously in three directions by such conflicting requirements is one of the occupational hazards of academic life.

But let us try to look at it from the students' point of view. Can nobody remember his own student days?

I remember a maths lecturer who used to race in with head down and immediately start scribbling on the blackboard at a frantic rate, muttering inaudibly. After an hour he would race out again. When we had time to stretch our cramped fingers and read what we had copied we could make no sense of it and see no relevance to the rest of our course. Obviously he was as much in need of psychiatric, as educational help.

Then there was a much-published lecturer who always spoke in jargon we could not understand, and assumed we were familiar with things of which we had never heard. Despite the letters after his name he must have been too stupid to see the need to discover our current level of knowledge and so deliver a lecture we could understand.

The other representative type was a gentlema who had published a definitive text on his subject and yet was unable to marshal his thoughts during a lecture and present his topic with clarity. Again, the uncharitable view is that his Ph.D. was no measure of his intelligence. We students reached the conclusion that his subject was too abstruse for even an expert to understand, and therefore did not bother to try ourselves.

The effect on us students was to foster the impression that we were victims of some macabre game. The rules were that staff must stand before us at certain times of the day and talk or write for one hour. The object was to do this without actually divulging information in a manner which might help the weaker ones amongst us to pass the examination.

Looking back from my present vantage point I see that this state of mind borders on the psychotic, but there is evidence of it here at Monash. Many students seem to think they are
TEACHING RESPONSIBILITIES

In the June issue of The Reporter, Mr. Gordon Troup, Reader in Physics, wrote an article entitled "Lousy Teachers... and all that". Mr. A. Holgate, Lecturer in Civil Engineering, has provided the following comments:

Mr. Gordon Troup infers in his article that since the N.U.A.U.S. made its proposal that incompetent lecturers be dismissed he has heard no voice raised in their defence. It seems to me that the original proposal has been drowned out by a thunderous roar of anguish from guilt-ridden academics on all sides. What amazes me is that so far no-one has publicly shown the slightest sympathy for the unfortunate students. (I must hasten to add that I do not agree with their proposed solution).

The type of research which involves original discovery of facts, formulation of principles and invention of new techniques is naturally of great importance in university life. So is the broad study of a subject, its development and practice, the observation of latest trends and the duty to keep abreast of developments over a wide field. So also is the handing on of this knowledge to others.

The stress of being pulled simultaneously in three directions by such conflicting requirements is one of the occupational hazards of academic life.

But let us try to look at it from the students' point of view. Can nobody remember his own student days?

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cheating if they actually ask a lecturer to explain something.

My regimented postwar generation never dreamt of suggesting that the rules be changed. Thank goodness the present one has a little more initiative and sense.

Assuming now that students do have a genuine grievance, let us examine two common arguments against doing anything about it.

The first is that the word “teaching” is not applicable to university life and staff-student interaction. This is true, especially in the postgraduate and later undergraduate years. However, it is completely irrelevant, because there still exists a set of definable techniques which is appropriate to our particular circumstances, and which should be learnt by anyone wishing to draw his salary with a clear conscience.

The second argument runs ...
"unaccustomed as I am to public speaking, it doesn’t really matter anyway, because the lazy bastards ought to find it all out for themselves." This brings into question the value of lectures. That is a separate and involved argument. Suffice it to say that participating in an audience listening to a flesh-and-blood lecturer should bring a topic to life in a way that is impossible with the printed page in the loneliness of a library cubicle.

Finally, I should like to advance two moral arguments in favour of paying more attention to "handing on".

To begin at a crude level, the students (or on their behalf, the taxpayers) give handsome fees for the privilege of their attendance. If we treat them as an infernal nuisance they are presumably entitled to charge us with obtaining money under false pretences.

On a higher level, many staff members feel that since the students came to us in good faith not expecting to be cast like jetsam upon the sea of knowledge, they are entitled to at least the courtesy of properly delivered lectures. Some even feel a sense of responsibility to strive continually to improve the standards and efficiency of their "handing on".

The crux of the matter is that those who accept their responsibility (and often that of research-oriented staff as well) run the risk of placing their careers in jeopardy owing to the present system of promotion. In my opinion this, and not the tenure system, is the cause of the students’ present predicament.

* * * * *

UNIVERSITY TYPEWRITERS FOR SALE


All machines have been regularly serviced under the Monash typewriter maintenance service contract, and from reports of typewriter service people, these machines are represented as being in reasonable condition. Inspection may be made by appointment with Mrs. L. Raymant, ext. 2060 or Furnishings Section, Administration Building.

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* * * * *
STEERING COMMITTEE
ON EDUCATION RESEARCH AND EXPERIMENT

The Australian Vice-Chancellors' Committee has decided that it will take steps to encourage and support research and experiment dealing with aspects of education within universities. It has appointed a Steering Committee on Research and Experiment in Education Matters.

The Committee's function will be to advise the AVCC about research or experimental projects it may help to promote or support, and about other measures that might be taken to stimulate the study of educational problems and the improvement of educational practices in the universities. The present membership of the Steering Committee is as follows: Professor P.H. Partridge, Australian National University (chairman); Professor A.G. Mitchell, Macquarie University; Professor G.A. Barclay, Macquarie University; Professor P.J. Fensham, Monash University; Professor E.G. Saint, University of Queensland; Mr. H. Stretton, University of Adelaide; Professor J.B. Thornton, University of New South Wales; Professor M.H. Brennan, Flinders University; Dr. F.M. Katz, University of New South Wales; Professor P. Scott, University of Tasmania.

The AVCC has accepted a recommendation from the Steering Committee that it should for the time being particularly encourage research or experiment concerned with undergraduate education. It has accepted the recommendation that it should promote work in the following broad areas:

1. The possibilities and problems of teaching in groups of different sizes (including teaching in small groups);

2. Studies of attitudes, objectives, perceptions and skills of university teachers;

3. Evaluations of the effectiveness of teaching by TV and by the use of other audio-visual aids within Australian universities;

4. Evaluations of the effectiveness of different forms of examinations and of different examining practices;

5. Studies of work-loads placed upon undergraduates, including the manner in which they are affected by the requirements of separate departments, or by the introduction of different types of examining practice.

The AVCC hopes that it will be able to encourage educational research staff and other members of staff to develop projects falling within these broad areas. The funds available to the AVCC for financial assistance for projects are not large, but the Committee hopes that it will be able to offer some financial support for some selected projects. It may take the form of providing research or secretarial assistance, meeting expenses for travel or preparation of research instruments, and so on. In the case of expensive projects the AVCC, on the advice of the Steering Committee, will explore the possibility of adding its support to applications submitted to the ARGc, the Australian Advisory Committee on Research and Development in Education and other grant-giving agencies.

The AVCC now invites members of university staffs to submit to it projects which fall within the areas specified above. Applications should set out in all necessary detail the objectives of the proposed project, the manner in which it will
The Australian Vice-Chancellors' Committee has decided that it will take steps to encourage support and experiment in education and research. It has appointed a Steering Committee on Research and Experiment in Education, and the Committee's function will be to advise the AVCC about research or experimental projects it may help to promote or support, and about other measures that might be taken to stimulate the growth of educational problems and the improvement of educational practices within universities. The present membership of the Steering Committee is as follows: Professor P.H. Partridge, National University (chairman); Australian National University, Dr. M. Katzen, University of Queensland; Mr. H. Stretton, University of Adelaide; Dr. J. M. Thornton, University of New South Wales; Dr. M. R. Brennan, Flinders University; Dr. F. M. Katz, University of New South Wales; Professor P. Scott, University of Tasmania.

The AVCC has accepted a recommendation from the Committee that it should encourage research or experimental projects in the following broad areas:

1. The possibilities and problems of teaching in groups of different sizes (including teaching in small groups);
2. Studies of the effects of different teaching methods on student achievement;
3. Evaluations of the effectiveness of different forms of examination, including the use of multiple-choice and essay-type examinations;
4. Evaluations of the effectiveness of different forms of examination procedures;
5. Studies of work-loads placed upon teaching staff, including the manner in which they are affected by the requirements of separate departments, or by the introduction of different types of examining practice.

The AVCC hopes that it will be able to encourage research staff and other members of staff to develop projects within these broad areas. Applications for projects are now being accepted, and the Committee encourages applications from all universities. It may be possible to offer some financial assistance for projects, and so on. In the case of expensive projects, the AVCC, on the advice of the Steering Committee, will explore the possibility of adding its support to applications submitted to the ARC, the Australian Advisory Committee on Research and Development in Education and other granting agencies. The AVCC now invites members of university staffs to submit projects within the areas specified above. Applications should be submitted to the Steering Committee, Australian Vice-Chancellors' Committee, 307/11 Broadway, South Yarra, Vic. 3141.
be carried out, the personnel who will be involved, the estimated length of time required for completion, the estimated costs of the project and the amount of financial assistance required. Applications should also include a statement of the manner in which it is proposed that the results of any experiment will be evaluated. There is no specified closing date for applications, but the Steering Committee on Research and Experiment on Education Matters will consider applications at least twice a year, in March and November.

Applications should be addressed to Mr. F. Hambly, Secretary, Australian Vice-Chancellors' Committee, Box 1142, P.O., Canberra City, A.C.T. 2601.

The Steering Committee is interested in exploring the possibility of coordinating similar or related projects that may be carried out in different universities, or of actively encouraging projects to be conducted within more than one university. For this reason, it would be interested to receive outlines of all research projects or experiments concerned with university education which may be contemplated or actually in progress, even though no financial assistance is requested for them. It will also be glad to receive from members of universities suggestions about projects that might be initiated if funds and research workers were available. The Steering Committee hopes that it may assist research by becoming a centre for the reception and dissemination of ideas about educational problems and possible research and experiment, and that it may be able to help crystallize and initiate projects that members of staff believe to be promising and important.

THE COMPUTER CENTRE

By Dr C.J. Bellamy

Computing facilities have been available at Monash University since 1962 when the Computer Centre was established. The first machine installed was a Ferranti "Sirius" which is still operating, and in 1964 the Centre took delivery of a Control Data Corporation 3200 which has been expanded over the years in an attempt to keep pace with the rapid growth of computer use in teaching and research. In February 1969 a Burroughs D5500 computer was installed on a rental basis in order to keep the computing service at a reasonable level while awaiting a Commonwealth Government decision on funds for additional facilities.

The Computer Centre is a service department as opposed to an academic department, although some of its staff who teach and consult on computing techniques in relation to research projects have academic appointments in other departments. It is administered by a Director who reports on matters of policy to the Computer Centre Committee, a standing committee of the Professorial Board.

It was recognised several years ago that the University could supplement Government funds for computing by using spare computing capacity to earn revenue. This is to the University's advantage because:

(a) there is generally idle computer time on a new computer for 1 to 2 years while the workload develops; and

(b) there is an economy of scale in that computing becomes cheaper for both the University and other organisations using the computer if
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(a) there is generally idle computer time on a new computer for 1 to 2 years while the work-load develops; and

(b) there is an economy of scale in that computing becomes cheaper for both the University and other organisations using the computer if
they collaborate to obtain a more expensive but faster computer than the University might otherwise be able to afford.

From the outset the criteria applied to proposals for undertaking outside work were:

1. it should not be in direct competition with commercial service bureaux;
2. it should require the special skills available in the university;
3. the University should obtain some material benefit from the work;
4. that the work should be regarded as having intrinsic value.

Additional criteria were agreed to in 1969 when it was decided that at least 6 members of the Computer Centre Committee (13 members in total) must approve new contracts for non-university work. Furthermore, its nature and the methods used must be unclassified. However it has been accepted that almost all the work undertaken includes some results of a confidential nature, such as individual marks in tests or examinations.

In practice, therefore, except where it is clear that the Computer Centre has some particular skills or facilities necessary to do the work, and in addition the work is considered to be worthwhile for industrial or scientific purposes, enquires about obtaining computing services from the university are referred to commercial computer service bureaux. This policy has meant that only a very small percentage (less than 5%) of non-university work carried out is for commercial and industrial organisations, and falling outside our main areas of specialization in computer applications of educational or medical significance. A detailed list of the non-university work being done is maintained and is readily available to anyone interested.

The staff of the Centre have been encouraged by the University over the years to develop their interest in computer applications of social significance, that is, applications from which people as individuals can derive some direct benefit. Partly by design and partly by circumstance it became clear that the Centre could make a contribution in the educational and medical fields.

The long-term objective in the educational field is to build up a bank of data and develop means of finding out how to make better use of examination and testing systems in improving education. It is thought that computer-based techniques can contribute to the problem of educational guidance at the secondary and tertiary transition points, the objective being to provide each student with the type of education most likely to be beneficial for him and at the same time to provide each tertiary institution with the most appropriate set of students. In the short term the Centre has developed techniques for scoring ability tests used for the Commonwealth Scholarship Examination, the university place allocation system used in Victoria, faster ways of getting public examination results to candidates and the MINITRAN programming system which has been used by about 20,000 school children in introductory computing courses.

In 1965 the Victorian Hospitals and Charities Commission and the Computer Centre formed a Computer Study Group to investigate the possible use for computers in the medical field and advise the Commission on their development. The work involved many aspects of the medical system including the computer control of auto-analysers in Biochemistry.
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Non-university work, while vital to the Computer Centre from a financial point of view, accounts for only about 10% of the computer time used. The value to the University in terms of facilities gained is quite clear. It paid for about 20% of the Control Data Corporation 3200 computer and has met to date over 90% of the rental for the B5500, as well as a significant part of its running costs. The B5500 is now used for more than 12 hours per day for University work and this represents free computer time for three to four hundred university jobs per day.

The Computer Centre staff place at least as much value on the contribution they believe they make to the development of Educational and Medical computing applications as they place on the material gain in computing facilities. Their relationship with 'customers' in these areas is more one of collaboration with colleagues in affiliated organisations than a normal commercial customer and client relationship. This is the case with the Hospitals and Charities Commission, the Victorian Universities and Schools Examination Board, the Victorian Universities Admissions Committee, the Department of Education and Science, and the Australian Council for Educational Research. These organisations represent about 95 per cent of the Centre's non-university work.

Listed below are all of the major groups for whom processing was being carried out on June 30, 1970. The magnitude of the contracts varies from as much as $50,000 to as little as $50.

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10. Miscellaneous

(Less than $1000 p.a. ea.)

The Centre also does small amounts of work for the following organizations:

- Education Department
- Pye Pty. Ltd.
- Peter McCallum Clinic
- Monash Teachers College
- Relays Pty. Ltd.
- Melbourne & Metropolitan Transport Study
- Department of Mines
- Austral Standard Cables
- Commonwealth Bureau of Roads
- Eric Kolle & Associates
- Wilson Electric Transformers
- Latrobe University
- Dept. of Fisheries and Wildlife

**MONASH WOMEN’S SOCIETY**

The Monash Women’s Society is organizing local groups for Monash wives wishing to meet others in their neighbourhood. Will anyone interested please contact the co-ordinator, Delia Johnson (Tel. 232 8692), or their nearest suburban group leader:

- Mt. Waverley: Mary Brown, 277 2962
- Mulgrave/Ringwood: Ann Richon, 546 2142
- Camberwell/Balwyn: Alison Morton, 89 4622
- Mitcham/Ringwood: Jeannie Legg, 874 5465
- Malvern: Margaret Bellamy, 20 1532
- Oakleigh/Frankston: Claire Pullin, 90 5097
- Glen Waverley: Carol Kenwood, 560 0020

**AUSTRALIAN RESEARCH GRANTS**

The Australian Research Grants Committee has approved a total of $389,841 for the following 63 Monash projects in 1971. This compares with a total of $316,601 for 62 projects this year.

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project Title</th>
<th>Grant</th>
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<tbody>
<tr>
<td>(a) Humanities and Social Sciences</td>
<td></td>
<td></td>
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<tr>
<td>Dr D. S. Bartholomeusz</td>
<td>Shakespeare and the Players: A Historical Reconstruction and Evaluation of Shakespeare’s Last Plays on the Stage from the Seventeenth Century to the Present</td>
<td>$1,247</td>
</tr>
<tr>
<td>Dr D. E. Edgar</td>
<td>Socialization for Conformity: the Relation of Social Class, Academic Competence and Adolescent Sense of Power</td>
<td>6,000</td>
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<tr>
<td>Professor M. G. Swift</td>
<td>Social Change in Jelebu</td>
<td>8,508</td>
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<tr>
<td>Dr J. L. Bradshaw</td>
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<tr>
<td>Dr C. S. Chen</td>
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<tr>
<td>Dr M. G. Clyne</td>
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<td>Professor R. H. Day</td>
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<td>Dr K. I. Forster</td>
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<td>Dr H. G. Gelber</td>
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<td>Dr T. Hore and</td>
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<tr>
<td>Professor R. Taft</td>
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<tr>
<td>Dr L. D. Mackay</td>
</tr>
</tbody>
</table>
10. Miscellaneous

The Centre also does small amounts of work for the following organizations:

- Education Department
- Pye Pty. Ltd.
- Peter McCallum Clinic
- Monash Teachers College
- Relays Pty. Ltd.
- Melbourne & Metropolitan Transport Study
- Department of Mines
- Austral Standard Cables
- Commonwealth Bureau of Roads
- Eric Kolle & Associates
- Wilson Electric Transformers
- Latrobe University
- Dept. of Fisheries and Wildlife

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MONASH WOMEN’S SOCIETY

The Monash Women's Society is organizing local groups for Monash wives wishing to meet others in their neighbourhood. Will anyone interested please contact the co-ordinator, Delia Johnson (Tel. 232 8692), or their nearest suburban group leader -

Mt. Waverley: Mary Brown, 277 2962
Mulgrave/Roseville: Ann Richens, 546 2142
Camberwell/Balwyn: Alison Morton, 89 4622
Mitcham/Ringwood: Jeannie Legg, 874 5465
Malvern: Margaret Bellamy, 20 1532
Oakleigh/Frankston: Claire Pullin, 90 5097
Glen Waverley: Carol Kenwood, 560 0020

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AUSTRALIAN RESEARCH GRANTS

The Australian Research Grants Committee has approved a total of $389,841 for the following 65 Monash projects in 1971. This compares with a total of $316,601 for 62 projects this year.

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Project Title</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Humanities and Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr D. S. Bartholomeusz</td>
<td>Shakespeare and the Players: A Historical Reconstruction and Evaluation of Shakespeare's Last Plays on the Stage from the Seventeenth Century to the Present</td>
<td>$1,247</td>
</tr>
<tr>
<td>Dr D. E. Edgar</td>
<td>Socialization for Conformity: the Relation of Social Class, Academic Competence and Adolescent Sense of Power</td>
<td>6,000</td>
</tr>
<tr>
<td>Professor M. G. Swift</td>
<td>Social Change in Jelebu</td>
<td>8,508</td>
</tr>
<tr>
<td>Continuing Projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr J. L. Bradshaw</td>
<td>Human Information Processing: Determinants and Correlates of Performance</td>
<td>5,187</td>
</tr>
<tr>
<td>Dr C. S. Chen</td>
<td>A Comparative Study of the Learning Ability and Memory of Different Strains of Rats in a Temporal Maze</td>
<td>2,300</td>
</tr>
<tr>
<td>Dr M. G. Clyne</td>
<td>A Study of Migrant German in Australia</td>
<td>2,230</td>
</tr>
<tr>
<td>Professor R. H. Day</td>
<td>Visual Acuity and Visual Processes with Stimulus Orientation</td>
<td>2,158</td>
</tr>
<tr>
<td>Dr K. I. Forster</td>
<td>The Perception of Sentence Structure under Conditions of Rapid Visual Presentation</td>
<td>2,238</td>
</tr>
<tr>
<td>Dr H. G. Gelber</td>
<td>Australia, the United States Alliance and power relationships in the Pacific</td>
<td>4,437</td>
</tr>
<tr>
<td>Dr T. Hor and Professor R. Taft</td>
<td>Teacher/Pupil Interaction with Australian and Non-British Immigrant Children</td>
<td>4,814</td>
</tr>
<tr>
<td>Dr L. D. Mackay</td>
<td>The Development and Testing of Procedures for Evaluation of Physics curricula in Secondary Schools</td>
<td>736</td>
</tr>
</tbody>
</table>

27
(b) Physical Sciences

New Projects

Professor P. D. Finch
A Comprehensive Structural Grammar of Modern Standard Japanese

Dr R. Weber
The Mathematical and empirical foundations of non-classical logics with particular reference to quantum mechanics

Continuing Projects

Professor R. Street and Dr G. V. H. Wilson
Study of Magnetic Materials at Low Temperatures in High Magnetic Fields

Mr G. J. F. Troup and Dr J. R. Pilbrow
Variable Temperature Electron Spin Resonance and Nuclear Magnetic Resonance in Solids and Complexes

(c) Chemical Sciences

New Projects

Professor R. D. Brown
Molecular orbital studies of electronic structures of molecules

Dr I. R. McKinnon
The Determination of the Thermodynamic properties of simple fluids

Continuing Projects

Dr D. St.C. Black
Metal template rearrangements

Professor R. D. Brown
The study of short lived molecular species by microwave spectroscopy

Dr R. F. C. Brown
Synthesis of Mycelianamidine and related compounds (cyclic hydroxamic acids)

Dr G. B. Deacon
Structures of halide complexes of organo-metallic compounds

Dr G. B. Deacon
Main group element organometallic synthesis

Dr R. S. Dickson
Substituent effects in organometallic chemistry

Dr F. W. Eastwood and Dr J. D. Rae
Synthesis of Sporidesmin

Dr R. J. Fleming
The effects of ionizing radiation on some common organic polymer materials, studied at the electronic level

Dr B. M. K. Gatehouse
Crystal Chemistry of the Solid State

Dr J. E. Kent
A spectroscopic study of small conjugated hydrocarbons in the near and vacuum ultraviolet

Professor J. M. Swan
Design and Synthesis of Organic Compounds having Potential Therapeutic Value

Professor B. O. West
Some Chloro and Fluoro Substituted Organometallic Compounds

Dr I. R. Wilson
Quantitative studies of oxidation reactions

(d) Biological Sciences

New Projects

Dr L. M. Aitkin
Central nervous mechanisms in sound localization

Dr L. B. Geffen and Dr B. Jarrott
Molecular basis of synaptic plasticity

Dr J. M. Haslam and Professor A. W. Linnane
The effects of altered biochemical composition on the structure and function of mitochondrial membranes

Dr B. J. Macauley
The effect of soil type on the role of the mycoflora in the decomposition of Eucalyptus litter

Continuing Projects

Dr L. Austin
The Origin of Axonal Protein

Dr I. A. E. Bayly
Studies on osmotic and ionic regulation in animals in highly saline inland waters

Dr R. C. Bayly
Regulation of the enzymes of the “Meta-fission” Pathway in Pseudomonas spp
Professor J. V. Neustupny
A Comprehensive Structural Grammar of Modern Standard Japanese $3,600

Professor A. A. L. Powell and Professor F. H. G. Gruen
Econometric Analysis of Protection 30,764

Dr A. G. Seile
History of Victoria, 1851-1900 $1,700

75,919

(b) Physical Sciences

New Projects

Professor P. D. Finch
The Mathematical and empirical foundations of non-classical logics with particular reference to quantum mechanics 7,000

Dr R. Weber
Measurement of thermal properties of magnetically ordered materials in the temperature range 0.3 to 300K and in magnetic fields up to 60kg 8,964

Continuing Projects

Professor R. Street and Dr G. V. H. Wilson
Study of Magnetic Materials at Low Temperatures in High Magnetic Fields 35,605

Mr G. J. F. Troup and Dr J. R. Pilbrow
Variable Temperature Electron Spin Resonance and Nuclear Magnetic Resonance in Solids and Complexes 3,895

55,464

(c) Chemical Sciences

New Projects

Professor R. D. Brown
Molecular orbital studies of electronic structures of molecules 24,210

Dr I. R. McKinnon
The Determination of the Thermodynamic properties of simple fluids 2,400

Continuing Projects

Dr D. St.C. Black
Metal template rearrangements 4,333

Professor R. D. Brown
The study of short lived molecular species by microwave spectroscopy 18,288

Dr R. F. C. Brown
Synthesis of Myceliandomide and related compounds (cyclic hydroxamic acids) 2,700

Dr G. B. Deacon
Structures of halide complexes of organometallic compounds 4,186

28

Dr G. B. Deacon
Main group element organometallic synthesis $2,500

Dr R. S. Dickson
Substituent effects in organometallic chemistry 2,000

Dr F. W. Eastwood and Dr I. D. Rae
Synthesis of Sporidesmin 5,299

Dr R. J. Fleming
The effects of ionizing radiation on some common organic polymer materials, studied at the electronic level 3,840

Dr B. M. K. Gatehouse
Crystal Chemistry of the Solid State 4,176

Dr J. E. Kent
A spectroscopic study of small conjugated hydrocarbons in the near and vacuum ultra- violet 2,584

Professor J. M. Swan
Design and Synthesis of Organic Compounds having Potential Therapeutic Value 2,512

Professor B. O. West
Some Chloro and Fluoro Substituted Organometallic Compounds 8,182

Dr I. R. Wilson
Quantitative studies of oxidation reactions 950

89,160

(d) Biological Sciences

New Projects

Dr L. M. Aitkin
Central nervous mechanisms in sound localization 9,728

Dr L. B. Geffen and Dr B. Jarrott
Molecular basis of synaptic plasticity 9,957

Dr J. M. Haslam and Professor A. W. Linnane
The effects of altered biochemical composition on the structure and function of mitochondrial membranes 3,665

Professor R. D. Brown
The effect of soil type on the role of the mycflora in the decomposition of Eucalyptus litter 3,031

Continuing Projects

Dr L. Austin
The Origin of Axonal Protein 4,864

Dr I. A. E. Bayly
Studies on osmotic and ionic regulation in animals in highly saline inland waters 865

Dr R. C. Bayly
Regulation of the enzymes of the "Meta-fission" Pathway in Pseudomonas spp 3,300

29
Professor M. J. Canny  
Physiological and Structural Studies of Phloem  
$3,331

Mr G. F. Cross  
Mycoplasma - Cell Interaction  
3,693

Professor B. W. Holloway and Dr V. Krishnapillai  
Genetic Control of Enzyme Regulation in *Pseudomonas Aeruginosa*  
12,473

Professor D. G. Lampard  
Information processing in the Nervous System using Stochastic Techniques  
6,574

Professor A. W. Linnane and Dr H. B. Lukins  
Biogenesis of Mitochondria  
11,167

Professor A. W. Linnane  
Effect of antibiotics on mammalian tissues and on human cells in tissue culture  
5,230

Professor D. A. Lowther and Dr H. C. Robinson  
Structural studies of connective tissues including factors involved in the maintenance of cartilage  
6,654

Dr R. F. Mark  
Anatomy and Physiology of vision and memory in lower vertebrates  
4,312

Dr I. R. McDonald  
Adrenal function in Australian monotremes and marsupials  
6,071

Professor R. C. Nairn  
Immunological Studies of Biological Specificity  
4,900

Dr T. P. O'Brien  
Cell Cytology of Grasses with Special Emphasis on Cereals  
9,361

Dr B. N. Preston  
Physico-Chemical and Mechanical Studies on Model Connective Tissue Systems  
6,395

Dr J. C. Saunders and Dr W. R. Webster  
Single-unit activity in sensory systems of unanesthetized animals  
7,173

Professor J. M. Swan and Dr J. B. Youatt  
Organic Chemical aspects of Cell Differentiation  
4,050

Dr R. A. Westerman  
Communication between cells in the nervous system of teleost fish  
3,600

130,394

(e) Earth Sciences  
New Projects  
Dr D. M. Churchill  
A study of Organic Sediments in the Volcanic Crater-Lakes of the Western Basalt Plains  
3,145

Continuing Sciences  
Dr A. C. McLaren  
Direct Observation and Identification of Crystal Defects and their Role in the Mechanisms of Crystalization and Deformation of Minerals and Rocks  
$3,654

(f) Engineering and Applied Sciences  
New Projects  
Dr J. B. Agnew  
Dynamics of packed tubular reactors for exothermic reactions  
3,980

Dr D. V. Boger and Dr C. Tiu  
Accelerating and deaccelerating flows of viscoelastic fluids  
4,100

Continuing Projects  
Dr W. A. Brown  
Identification, Stored Program Control, and Adaptation for Multivariable Continuous Systems  
1,530

Dr G. A. Holder  
Mechanism of Crystal Growth Poisoning by Polymers  
1,000

Dr W. H. Melbourne  
Model Scaling of Wind Effect on Structures  
4,739

Mr R. McPherson  
Ultra fine dispersed phase ceramics produced by precipitation from metastable solutions prepared by plasma methods  
4,039

Associate Professor K. Morstyn  
The theoretical and experimental investigation of the influence of linear and non-linear phenomena on transient voltages in H.V. Transmission lines and transformers  
1,000

Professor I. J. Polmear and Dr B. A. Parker  
Studies of Age Hardening Phenomena in Alloys with Special Reference to the Role of Trace Element Additions  
11,717

32,105

389,841

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**Earth Sciences**

<table>
<thead>
<tr>
<th>New Projects</th>
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<tbody>
<tr>
<td>Dr D. M. Churchill</td>
<td>A study of Organic Sediments in the Volcanic Crater-Lakes of the Western Basalt Plains $3,145</td>
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**Continuing Sciences**

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<th>Dr A. C. McLaren</th>
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<td>Dr B. A. Parker</td>
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<td><strong>389,841</strong></td>
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* * * ** * * *
The first international Chemical Engineering Conference to be held in Australia, CHEMICA '70, took place in Melbourne and Sydney during August. The conference was sponsored jointly by the Australian Academy of Science and the Australian National Committee of the Institution of Chemical Engineers, London. Over 80 papers were presented in eight technical sessions in the two conference centres. Of the 426 delegates who attended the Conference, many were from the U.K., the United States, Canada, South Africa, New Zealand, Japan, India and Czechoslovakia.

Members of the staff of the Department of Chemical Engineering were involved to a considerable extent in the organisation of the conference. Professor Potter, Dr. Agnew and Dr. Boger were all active on the organising committee, while Professor Potter and Dr. Boger also chaired technical sessions. Members of the department contributed six papers. Many distinguished visitors inspected the department during one of the conference technical tours.

Prior to the Conference, a number of overseas delegates visited the department and read papers at departmental seminars. Visitors included Dr. J.F. Davidson from Cambridge University, who is President of the Institution of Chemical Engineers; Dr. D.H. Sharp, General Secretary of the Institution; Dr. D. Harrison also from Cambridge; Professor A.M. Kennedy and Dr. R.B. Keey from the University of Canterbury; Dr. P. Eisenklem from Imperial College; Professor J.A. Tallmadge from Drexel University, Philadelphia; Dr. J. Beranek from the Czechoslovak Academy of Science at Prague. The subjects of these seminars covered a wide range of topics, including fluidization, pollution control, reaction modelling, and the future development of the Institution of Chemical Engineers.

Civil Engineering

Associate Professor I.B. Donald has been awarded a Post-Doctorate Fellowship by the Royal Norwegian Council for Scientific and Industrial Research. He will spend a year in Oslo at the Norwegian Geotechnical Institute working on the small strain strength properties of clay.

English

- In September Mr. Doug Muecke's volume "Irony", in the critical Idiom Series, was published by Methuen.
- Dr. Dennis Davison's critical study "W.H. Auden", in Literature In Perspective Series, was published by Evans Brothers in September.
- Recent visiting lecturers have included Professor Louis Landa, Dr. C.J. Rawson (of Warwick University) and Professor Roger Sharrock (of Kings College, London).
- Miss Judith Wardle has joined the staff of the department: she previously lectured at Queen's University, Belfast, and she is preparing a doctoral thesis on W.B. Yeats.
DEPARTMENTAL NEWS

Chemical Engineering

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PERFORMANCE OF THE MONASH UNIVERSITY RUSSIAN CHOIR.

On Monday, August 10, in the Mordi­alloc High School Hall an international concert was organised under the auspices of UNESCO as part of the International Education Week. Many national groups from Melbourne took part. The well-known Russian choir and string orchestra of Monash University under the direction of Mr. Pobie represented the Russian Depart­ment.

This group took up a major part of the programme and had a deep national character. The audience gave a very warm welcome to the performance of Russian folk songs and melodies.

The Monash Russian Choir has been in existence for a long time. But naturally, its membership is continually changing, because it consists of students who attend the university and then leave at the end of their studies.

But the conductor of the choir

Mr. Pobie constantly replenishes the choir with freshers and devotes much effort to the choir. And it is a pleasure to say that he manages to arouse the interest of students in Russian culture, songs and music.

We congratulate both the conductor and the members of the choir on their success and wish them good luck in their effort to make Russian culture known in other lands.

** ** **

MR. J. C. FLETCHER

The death occurred in August of Mr. James C. Fletcher, aged 51, who occupied the position of Central Services Manager for almost six years. Mr. Fletcher came to the University from the RAAF where he had completed 23 years' service. A memorial service in the Religious Centre preceded the funeral. In his tribute to Mr. Fletcher delivered at the service, the Vice­Chancellor, Dr. Matheson, said:

"We shall go out from this beautiful place to resume our daily tasks saddened that one of our friends is no longer sharing those tasks with us but enriched by the memories of a man who, without pretensions in a place that he may sometimes have found a little pretentious, did his job well."

* * * * *
We present below, without comment, extracts of an article which appeared in the only Australia wide Russian Newspaper, "Unification", (28.8.70).

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* * * * *
COMMONWEALTH UNIVERSITY INTERCHANGE SCHEME  
TRAVEL GRANTS  
CONDITIONS OF AWARD  

1. General Description  
A number of grants towards the cost of travel will be made to facilitate visits between universities in different parts of the Commonwealth. They are available for award to persons in the following categories:—  

Category A — University Teachers or Officers on recognised study leave  
The majority of grants will be made to persons in this category, and preference will be given to university teachers or officers of at least five years’ standing.  

Category C — Postgraduate University Research Workers holding research grants  
Grants in this category will be strictly limited in number. The grants are intended for research workers (including younger university teachers not eligible under Category A) who have obtained financial support which would enable them to undertake research at a university institution in another Commonwealth country, but who require additional assistance to meet the cost of travel.  

2. Eligibility  
(a) Any suitably qualified member of a recognised university institution in the United Kingdom or in any Commonwealth country who fulfils the conditions set out below is eligible for consideration.  
(b) The funds of the Interchange Scheme are derived from contributions made on behalf of the United Kingdom, Australia and Hong Kong. A grant may be made if the visitor’s own university or the university at which he proposes to work is in one of these countries but not otherwise.  
(c) Retrospective applications (i.e. applications from persons who have already succeeded in reaching the country which they wish to visit) will not be accepted.  

3. Value of Awards  
Categories A and C  
(i) Assistance is given towards the cost of travel only, and no grant will be made unless the applicant has adequate resources to maintain himself in the country which it is intended to visit. In no case will supplementary grants be made.  
(ii) A fixed sum related to the cost of a return passage, in the tourist class by sea or economy class by air, will be paid to the person receiving assistance, who will be responsible for arranging his own travel. For return passages between the United Kingdom and Australia the following rate of grant has been established: £575. ($A 1,237).  
The forward and return journeys will be paid for separately in equal instalments at the time they are made. Grants may sometimes be limited to the cost of a single forward journey.  
(iii) A grant which is not taken up for a forward journey in the financial year (April 1st to March 31st) for which it is awarded cannot be postponed. In such circumstances the grant will lapse and a fresh application must be made.  

4. Conditions of Award  
Categories A and C  
(i) Applications must be made in triplicate on special forms obtainable from University Registrars.  
(ii) All applications must be sponsored by and submitted through the applicant’s own university.  
(iii) Applicants must normally undertake to spend at least six months at the Commonwealth university or universities which they propose to visit. A limited number of awards may be made to candidates wishing to be away from their universities for not less than one term.  
(iv) The university or universities named by the applicant as his proposed place or places of study must be willing to receive him. Applicants should state whether they have been accepted or whether they have yet to arrange this. The Committee cannot undertake to assist in the placing of applicants, who should also make their own arrangements for accommodation.  
(v) Awards are intended primarily to assist those persons who have secured financial support, by salaried leave or research grants for the period of study proposed but who would be unable to spend it overseas without help towards the cost of fares. Applicants are therefore required to give particulars of any other grant held or applied for in connection with the visit proposed. Any alteration in these particulars occurring after submission of the application must be notified immediately. The Committee reserves the right to review an award made under this scheme if a grant holder subsequently obtains substantial assistance from other sources.
COMMONWEALTH UNIVERSITY INTERCHANGE SCHEME
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5. Method of Award

(a) The awards will be made on the recommendation of the Committee for Commonwealth University Interchange, composed of representatives of the Association of Commonwealth Universities, the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, and the Inter-University Council for Higher Education Overseas.

(b) Category A awards will be announced in March each year, and Category C awards in June.

6. Instructions for Submitting Applications

Categories A and C

(i) Persons in these categories should send three copies of their application to the Vice-Chancellor, Principal or President of their own university, who is requested to forward two copies to the Secretary, Committee for Commonwealth University Interchange, c/o The British Council State House, High Holborn, London, W.C.1, retaining one copy for reference. [MONASH APPLICATIONS SHOULD REACH THE VICE-CHANCELLOR'S OFFICE AT LEAST TWO WEEKS BEFORE THE DUE DATE IN LONDON. APPLICATION FORMS FOR CATEGORY A ARE AVAILABLE FROM STAFF BRANCH (MRS OTTREY, TEL. 2040), AND FOR CATEGORY C FROM THE GRADUATE SCHOLARSHIPS OFFICE (TEL. 2009). STAFF MEMBERS MUST HAVE RECEIVED FORMAL APPROVAL FOR STUDY LEAVE BEFORE SUBMITTING A CATEGORY A APPLICATION TO THE VICE-CHANCELLOR'S OFFICE.]

(ii) Applications must be received in London by the following dates:

   Category A – December 15th
   Category C – March 31st

   for visits to commence during the ensuing financial year (April 1st to March 31st).

(iii) Save in exceptional circumstances, late applications cannot be accepted.

November 1970.

SCHOLARSHIPS AND FELLOWSHIPS

University of Melbourne – Sir John and Lady Higgins Research Scholarship – 1971 Award

Conditions for the Sir John and Lady Higgins Research Scholarship are as follows:

The Scholarship shall be open to competition among graduates in Science, Agricultural Science and Veterinary Science who have had at least one year's experience in research work or one year's advanced training after qualifying for a first degree. Preference shall be given to graduates in Agricultural Science or Veterinary Science, providing that their work after graduation has been in Chemistry or Biochemistry.

It shall be awarded by the Professorial Board, after report from the heads of the departments of Agriculture, Chemistry and Biochemistry, to the candidate who in the opinion of the Board is best fitted to discharge the duties thereof.

The value of the Scholarship shall be within the range of $1600 to $2000 per year, but at the discretion of the Professorial Board additional money may be made available to defray the Scholar's travelling or other expenses.

The successful applicant will be expected to take up his duties as soon after March 1, 1971 as can be arranged.

Applications should be lodged at the Office of the Dean of Graduate Studies, University of
5. Method of Award

(a) The awards will be made on the recommendation of the Committee for Commonwealth University Interchange, composed of representatives of the Association of Commonwealth Universities, the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, and the Inter-University Council for Higher Education Overseas.

(b) Category A awards will be announced in March each year, and Category C awards in June.

6. Instructions for Submitting Applications

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November 1970.

* * * * * * *
Melbourne, by November 30, 1970.

French Government - Professional and Technical Scholarships

The French Government is offering a limited number of scholarships to enable Australians working in professional and technical fields to visit France to further their experience through observation and, where appropriate, participation.

In the past these scholarships have been awarded in such diverse fields as scientific research, education, mass media, medicine, public health, town planning, architecture, agriculture, rural development and public administration.

All applications should be supported by reports from two professional or academic referees and evidence of professional or academic qualifications.

Application forms may be obtained from and should be returned to:

The Secretary,
(French Government Professional and Technical Scholarships)
Department of Education and Science,
P.O. Box 826,
CANBERRA CITY. A.C.T. 2601.

Applications may be lodged at anytime but must be at least nine months prior to the intended date of departure. It would be preferred, however, if applicants would, where possible, apply in the period immediately before December 16 of the preceding year to allow most of the applications to be examined at the one time in the following February.

University of Melbourne – A. O. Capell Postgraduate Scholarship

Applications should be lodged at the Office of the Dean of Graduate Studies, University of Melbourne, by December 19, 1970.

Conditions:

The scholarship shall have the value of $2000 per annum plus fees and may be held for three years provided that the work of the holder of the scholarship is satisfactory.

The scholarship is available to a graduate of the University of Melbourne or of any other university and shall be held at the University of Melbourne.

It may be awarded in any Faculty.

An applicant must be qualified by March 1, 1971 to undertake the course for a higher degree involving research and must have previously undertaken successfully at least four years' study at a university.

The Myer Foundation – Asian and Pacific Fellowships and Grants-in-aid

The Myer Foundation wishes to announce the 1971 series of Fellowships and Grants-in-Aid for graduates in the Humanities and Social Sciences who are undertaking postgraduate work in the following areas –

South Asia
East Asia
Southeast Asia
Papua-New Guinea
Southwest Pacific (excluding Australasia)
Melbourne, by November 30, 1970.

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East Asia
Southeast Asia
Papua-New Guinea
Southwest Pacific (excluding Australia)
Applicants may be graduates of Australian or overseas universities. In the latter case they should be research students or members of staff of Australian universities or resident in Australia or Papua-New Guinea.

Fellows and grantees may undertake formal postgraduate study at a university or other institution of higher learning, or may conduct independent research.

Details of the information required from applicants should be obtained from -

The Fellowships Secretary,  
The Myer Foundation,  
224 Queen Street,  
MELBOURNE. VICTORIA. 3000.

Applications, typewritten in quadruplicate, should be sent to the same address before January 18, 1971.

Awards will be announced during March 1971.

South Australian University Women Graduates' Association  
Jean Gilmore Bursary

The Bursary is open to a woman graduate in Australia and Australian Territories provided she is a member of the International Federation of University Women,  
(a) to assist her to proceed to a higher degree  
(b) to complete a research project, including purchase or hire of equipment;  
(c) for other projects put forward from time to time

Bursary value is $500.

Applications must be in the hands of the Honorary Secretary of the S.A.U.W.G.A., Mrs. B.E. Crase, 8 College Street, College Park, South Australia, 5069 by February 28, 1971. Applications received after this date will not be considered. The successful applicant will be notified not later than April 30, 1971.

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BOOKS FOR SALE

The Monash representative on the Women of the University Fund has the following books for sale in aid of the Fund's charities. Anyone interested should telephone Netta McLaren on 253424.

King, W.F.H.  
Classical & Foreign Quotations, etc. in French, German, Greek, Latin, & Spanish, with translations, refs. and notes. Pub. Whitaker, 1889. $3.00

Outram, Geo.  

Cross, Launcelot  

Longfellow, H. W.  
Trans. of Dante's Inferno. Pub. Routledge 1867. 1.00

Moliere  

Poe, Edgar A.  
The Poetical Works. Pub. Hislop, Edin. n.d. 1.00

Poe, Edgar A.  
Tales of the Grotesque. with other stories. Pub. Newnes 1903. 1.00

Pepys, Saml.  
Diary. Edited by Lord Braybrooke. Pub. Simpkin & Co. n.d. 80c

Smythe, F.S.  

Tonybee, Philip  

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Applicants may be graduates of Australian or overseas universities. In the latter case they should be research students or members of staff of Australian universities or resident in Australia or Papua-New Guinea.

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MONASH UNIVERSITY ANNUAL STAFF XMAS LUNCHEON

To be held on Tuesday, December 22, 1970, all Faculties and Departments are welcome to participate, the luncheon will commence at 12.30 p.m. until 2.30 p.m. approx. and will cost $1.25 per person.

MENU

MANDARIN COCKTAIL

ROAST CHICKEN (with Stuffing)
Peas, Tomatoes and Roast Potato

PLUM PUDDING & BRANDY SAUCE

COFFEE

B.Y.O.

Relax for 2 hours, enjoy a three-course meal with a group of friends at this year's Xmas Luncheon. There will also be prizes to win for lucky seats, so come along and have some fun.

Will Departments please note that all the numbers of people who will be attending must be in the Caterer's hands no later than Thursday, December 17, no late bookings or refunds will be given after this date. The dinner will be on the first floor of the Union building.

Open to the Staff

- 30 courses in 22 subjects
- Non-residential day & night courses ranging in length from 1-5 weeks.
- Enrolment cards & brochures from Activities Officer. Ext. 3180 or 3144.
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N.U.A.U.S. PHARMACY IN UNION

The N.U.A.U.S. Pharmacy in the Union, which is conducted on the lines of a Friendly Society, and is run under the auspices of the N.U.A.U.S. Friendly Society Pharmacy Scheme, has been set up to offer pharmaceutical services, especially dispensary services, to students and staff at the University.

The Union, after long negotiation, has gained agreement for a discount of 15% on purchases, with the exception of government scripts and a limited number of franchise lines, to be available to staff members who pay an annual subscription of $1.25, deducted from salary payment in the month of January of each year. The membership form, spare copies of which may be obtained from the Union Reception Desk, will thus combine the Application to become a Special Pharmacy Member of the Union with the Authority to the University to withdraw from the January monthly salary of each year from 1971 onwards such an annual subscription.

The first pro-rata annual subscription of 50c. will cover the period from September 1 - December 31, 1970 and must be paid directly to the Union Cashier, Union Reception Desk, Ground Floor, Union Building, who will issue a Special Pharmacy Membership Card, production of which will entitle the subscribing member to 15% discount.

Those who are, by membership of an existing Victorian Friendly Society, entitled to purchase goods at the Elizabeth Street Pharmacy run by the Victorian Friendly Society Pharmacy Association, may also, on presentation of their credentials, purchase goods from this Pharmacy at a discount, without taking out the Union special membership.

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