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BEAUTIFUL MONASH

from a new series of Monash views by
Hervé Alloume — see page 7.

H. Alloume

CREDIT CO-OPERATIVE TO OPEN OFFICE IN MONASH UNION

The Monash Campus Credit Co-Operative will open its own office in the Union on Monday, November 13, just over a year after its formation.

The co-operative chairman, Dr. Frank Burden, a senior lecturer in chemistry, said the current membership was 370; he expected the new office would result in increased membership.

"We are planning to appoint a manager next April but until then a casual appointee, the directors of the co-operative and volunteers will staff the centre," he said.

Membership of the co-operative is restricted to people who are, at the time of joining, working for the university and its associated institutions. Their spouses may also be members. A director and secretary, Mike Ballagh, a systems analyst in administration data processing, explained that unfortunately this regulation effectively prevents under-graduates from joining the co-operative.

However the policy of the board is "that the inclusion of students in the common bond meets with the approval of the board," and the matter is being investigated.

"Three other university co-operatives, at ANU, La Trobe and Queensland, all admit students," he said.

JAPANESE TO TEACH CHINESE IN 1973

The Department of Japanese will offer the first under-graduate teaching of Chinese at Monash next year.

It will be introduced as a minor sequence in the arts degree and will be available to students who have no previous knowledge of either Chinese or Japanese.

The first year of the sequence will be the spoken language and the second year will involve Chinese characters.

A quota of 24 students will be placed on next year's initial intake. For more information contact the secretary, Department of Japanese.

The first degree course in Chinese was offered at Monash this year by the Department of Japanese. The enrolment was restricted to third year post-graduate students who had previously taken Japanese. The course was planned and taught by Mrs. L. Li, who has a PhD in Chinese phonetics from the Australian National University.

The staff of one of Monash's larger faculties recently received the following memo:

MEMORANDUM TO: Members of the Faculty.
FROM: Dean's Office.
SUBJECT: EARLY RETIREMENT PROGRAMME

As a result of fiscal problems, as well as declining student numbers, the University has decided to take steps to reduce the faculty. A plan for reduction of faculty staff has been developed which appears to be the most equitable under the circumstances.

Under the plan, older faculty members will be placed on early retirement, thus permitting the retention of those who represent the future of the University.

Therefore, a programme to phase out older academic personnel by the end of the current fiscal year via early retirement will be placed into effect immediately. The programme will be known as RAPE (Retire Aged Personnel Early).

Faculty members who are RAPE'd will be given the opportunity to seek other jobs within the University system, provided that while they are being RAPE'd they request a review of their employment records before actual retirement takes place. This phase of the operation is called SCREW (Survey of Capabilities of Retired Early Worker).

All faculty members who have been RAPE'd and SCREW'd may also apply for a final review. This will be called SHAFT (Study of Higher Authority Following Termination).

Programme policy dictates that faculty members may be RAPE'd once and SCREW'd twice, but may get the SHAFT as many times as the University deems appropriate.

"The largest of these, at ANU, has been running about ten years and has over \$3 million in assets."

The co-operative will lend up to \$3000 to a single member and has paid out a total of \$92,138 in loans.

Dr. Frank Burden explained that loans were determined on the character, need and ability to repay of the applicants.

"Women too can borrow as freely as their fellow male members," he said. "We believe that a woman has as much right and capacity as a man to deal with financial matters."

Mr. Ballagh said that the co-operative has made loans to women who had previously been turned down by certain banks and finance houses.

Unjust discrimination

"The discrimination against women in obtaining credit is often quite unjust and unnecessary," he said.

The directors are not happy with the number of academics in the co-operative compared with other university credit unions.

"They are conspicuous by their absence," Dr. Burden said. We have only about 30 academics, the rest are administrative, technical and trades staff."

However both the chairman and the secretary hope that the opening of their new office and a rigorous publicity campaign will make the existence of the co-operative more widely known on campus.

Temporary location

The office will be temporarily located in the Union Theatre ticket office and will be open on weekdays between noon and 3 p.m.

● A pamphlet designed by the Victorian Credit Co-operative Association Ltd. defines a credit union as "a group of people with a common bond, who agree to save regularly together and then lend these savings to one another at the lowest possible rate of interest . . . they assist each other to improve their financial position."

MODERN JAPAN, THROUGH STUDENT EYES



Technology and nature, constantly side by side in a modern, industrialised country like Japan. Above the 155 mph train "Hikari" passing near Mt. Fuji on its express service between Tokyo and Osaka.

By BELINDA DAWSON

Today's university student is constantly aware of the limitations of potential employment available to him on graduation.

Yet in Japan, graduates face a far greater problem, according to the five fourth year honors students of Japanese who have just returned from a six month study tour in Japan.

"You need a degree even to sell toys in a Tokyo department store nowadays," commented Allan Trigallis-Smith.

"There are really only half a dozen top universities throughout the country," he said. "Here at least there are a few universities with little variation in standard between them."

Allan and his fellow students — Wendy Smith, Julie Stocks, Bruce Hatfield and Ross Maguire — are the third group of students in the Department of Japanese to travel to Japan. They were attached to the Monash Japanese Centre in Tokyo, a development unique in Australian modern language study.

"Trial" group

The centre, which was devised as a special study program, was formally established last year, after a "trial" group returned from the Japanese capital.

The students at the centre undertake a three-part program:

- an intensive advanced language course — two hours of classwork each weekday for 18 weeks;
- the collection of data for an honors dissertation which they are expected to prepare as partial fulfilment of the requirements for their Bachelor of Arts honors degree; and
- extensive travel throughout Japan.

Gift-giving

Collecting material for the theses was an absorbing part of the stay of the five students.

Allan spent much time assembling data for his thesis entitled "Gift-giving in marriage." He was amazed at the proliferation of institutions concerned with marriage. "Can you imagine the idea of marriage hotels and a Go-between's Federation catching on in Australia?" he queried.

Wendy, gathering data for her dissertation, "The problem facing women doctors in the coexistence of job and family roles", found Tokyo a classic example of a highly urbanised and industrialised city in a traditional setting.

"It would be a tough place to live — it's growing too fast and progressing too quickly, with all the related problems of interpersonal relations, and an inevitable imbalance between the modern and traditional factors," she said.

"Previously the household, which had been the basic social unit, has been broken down, especially through the development of separate residences, and separate incomes."

Allan echoed her observations. He said: "Although, on first acquaintance, Tokyo is a wonderfully exciting city it's really a dirty place, with rivers now little but outlets for industrial waste. There seems to be so many people, and so little space."

On the other hand, the common impression which the Japanese hold of Australia — an impression gained largely from the "surprising" number of television programs and newspaper articles about Australia available in Japan — is that of a "spacious and good country".

Unique opportunity

After the first few weeks the students endeavoured to see as little of each other as possible. They were in Japan to talk to the Japanese, not amongst themselves. Wendy, for example, lived with a Tokyo dentist and his family.

The students all agreed that living in a foreign country for a long period, not just being a tourist, gave them a unique opportunity to gain a wider appreciation of Japan, and to put into practice their language skills. It also helped break down ethnocentrism.

Allan admitted however, that he found himself becoming more aggressively Australian. "So as not to be taken for an American," he grinned.

Scholarships for students who attended the 1972 program of the Monash Japanese Centre in Tokyo were provided by: The Forelanders Trust, The Myer Emporium, Conzinc Riotinto of Australia, Western Mining, Comalco, and Marubeni Australia.

(The writer of the above article, Belinda Dawson, has recently taken up the new position of arts faculty student adviser. It was created in place of the position of sub-dean.)

Study leave report . . .

Australia should study "egalitarian and effective" British Health Scheme

In his recently submitted study leave report, the Dean of Medicine, Professor R. R. Andrew, is full of praise for the British health scheme, nationalisation and all.

He calls it "an egalitarian and effective system which gives reasonable cover for all citizens."

Australia, says Prof. Andrew, has much to learn from the way Great Britain has tackled its health service problems.

Prof. Andrew, who was in Britain from March to June this year, says in the report to Council: "I believe the health services in the UK are far ahead of ours in logical planning in the fulfilment of their stated aims, in cost benefits, and a sense of purpose resulting in the high morale of the general practitioner."

"To pretend that nothing remains to be done, that all are satisfied — doctors and patients — that costs have been curbed within the available finance, would be foolish."

"But there is an unmistakable élan among practitioners and administrators, and a determination to examine new models, honestly to evaluate the present system, and to put into practice plans, for which the UK has for years been notable, but for whatever reason, reluctant to implement."

Harley Street

"Health is no longer the prerogative of the doctors; medicine no longer the preserve of Harley Street; and the care of all citizens at an effective, contemporaneous and high level is demanded and recognised as a right, regardless of socio-economic circumstances," he said.

"There is an exciting atmosphere, and it is hardly surprising that foreign senior officials, some of whom I met, have come from the Department of Health, Education and Welfare, Washington, and from many Commonwealth countries, to examine at first hand the problems and plans in the United Kingdom, and the answers they have provided."

Prof. Andrew goes on in the report to discuss some of the places and medical systems he saw and in the process to comment on the Australian situation.

Commenting on the undergraduate teaching at Nottingham, Prof. Andrew said the students, when they entered, were a year older than students entering medicine in Victoria.

Public disregard

"The students are not required to repeat the chemistry-physics-biology-maths constellation on which we insist, I believe without justification. The degree course is followed by two clinical years and a compulsory preregistration year, mandatory in the UK but not yet in Victoria, which is unique in Australia, and indeed the western world, for its disregard of what is so necessary for the protection of the public."

Prof. Andrew praised the method of student selection at Birmingham, saying there was "increasing dissatisfaction" with student selection at Monash.

"Birmingham, like all UK medical schools, has the tremendous advan-

tage of time to do the job, provisional selection and offers being accomplished 6-9 months before the start of the new academic year," he said.

"There are three interviewing panels each with 3-4 Faculty members. All applicants must come to Birmingham to see the school. Motivation and broad interests, as well as good performance in prerequisites, are sought, and school reports are taken into account."

Middle class

"With only about 1 in 10 being successful, it is not remarkable they enrol good students. But they are worried, as we are at Monash, with the socio-economic profile which results, and which has changed little over many years from a predominantly middle class background."

"In this context it is interesting to observe that at Monash since 1965 the proportion of successful applicants to medicine from independent schools (12% of the total Victorian school population in 1971) keeps on rising (32% to 45%), while at the same time the cut-off point has risen from 200 to 234."

"Admission obviously is dependent on factors which are not the result of ability, and no doubt are effected by the heavy fertilization of independent schools with Federal funds. There are causes for concern here in a society which claims to be egalitarian."

A large part of the rest of Prof. Andrew's report is taken up with a discussion on development of British health centres which employ 10% of all general practitioners and also aid in undergraduate teaching.

Health centre

His comments have special interest because Monash, under the initiative of Professor Basil Hetzel, is in the process of establishing a pilot health centre scheme under the control of the Alfred Hospital.

The centre, which will involve undergraduate teaching in community medicine, will be located in houses donated at a nominal rent by the Punt Rd., Methodist Church.

In his report Prof. Andrew said the UK led the world in the establishment and organisation of health centres; by October 1970 254 centres were open and a further 195 expected to open in 1971-72. Some were large with 14 doctors, some much smaller with only three or four.

"The establishment of the National Health Service (NHS) in 1947 makes these organisational arrangements easier than in a country like Australia with its fee-for-service, and therefore not free-for-all," he said.

"But there is no intention of extending this form of practice to all general practitioners in UK."

"A special attraction for a country like Australia with a different system arises from the basic concept of several GPs, nurses, health visitors, counsellors and secretarial help, and this is applicable either to health centres with all their doctors working in the framework of a NHS or to group practices of private GPs working on a fee-for-service."

"Flexibility is the key note. But in UK they have the inestimable advantage of proper team support from local authorities both at health centres and in group practices."

Prof. Andrew said that excellent young doctors, high on the final lists from the best medical schools, were joining the health centres in increasing numbers.

"Morale is high, pay is satisfactory, hours are reasonable, holidays and pensions generous and postgraduate courses regularly attended, invaluable for professional interest to say nothing of the public's protection."

"I found in those centres I visited job satisfaction so high that the annual flow of 150-200 GP refugees from the NHS, in a steady stream to Australia since the war, has dried up to a trickle."

Prof. Andrew said that he had long been persuaded that while teaching hospitals provided the very core of Australia's clinical teaching, the country needed to look beyond institutions into the community, and plan more carefully the preventive aspects of health care.



"This is an important part of the concept underlying the health centre designed for continuing and comprehensive care, with strong emphasis on preventive medicine, so that some people may be saved from entering unnecessarily the large hospitals, which have in some ways become the costly centres of medical correction."

Careful study

In summary Prof. Andrew said, that those seeking models for future health care and organisational patterns which take into account the profound changes in health care needs, medical progress, and frightening cost escalation, would be well advised to study carefully contemporary planning, experimentation and practice in the UK.

"They have many problems still and are by no means wholly satisfied with the present system."

"But they have eliminated almost entirely the medical ghettos of the past, they have provided an egalitarian and effective system which gives reasonable cover for all citizens, they have done this at a significantly lower cost as a percentage of the GNP than we have in this country, and they have grasped successfully the need for postgraduate and continuing education of all doctors, all their professional lives."

"All this has resulted in an air of excitement and progress of which I was conscious wherever I went."

NEED FOR STUDENT ROLE IN COMMUNITY HEALTH

Medical students should be involved in community health much earlier in their training, Dr. Robert Harbison, senior lecturer in the Department of Social and Preventive Medicine, said last month.

Dr. Harbison said the practice of sending students out to work with general practitioners only a few weeks before their final exams could do more harm than good.

He was presenting a report from an international workshop on medical education at the Fifth World Conference on general practice.

The workshop recommended that special emphasis on preventive medicine and early diagnosis should be linked to the teaching of basic medical sciences.

Students should also be able to work in multi-discipline health teams which include social workers, nurses and other health staff.

The workshop recommended the establishment of departments of general practice or family medicine in all medical schools.

No motivation

It found that many problems of general practice arose because doctors had no motivation to continue their education after graduation.

"The community must recognise that the practising doctor cannot be expected to use his leisure time for continuing education," Dr. Harbison said.

"This time should be taken during his normal working hours," he said.

Caroline's new play

A supply of hippie felt hats at special bargain prices from the 'flower people' of the Monash "Friday Bazaar" has helped producer, Caroline Piesse, to keep down the costs of her production of Sheridan's "The Rivals" at the Malvern theatre next month.

Miss Piesse, the Assistant to the Warden, has also negotiated an order of swords and sabres from the Monash Fencing Club.

Monash is well represented in the play.

Justin Shortal, known for his work with the Monash Players and a student at the Monash Teachers' College, will be one of the male leads.

The lighting will be done by George Bloom of the Monash finance department assisted by Andrew Cidder a first-year science student.

The play will be performed as the Malvern Theatre Company's 100th production at 29 Burke Rd., from Saturday, December 2 to 9.

There will be a gala night with chicken and cider on the Saturday night. Tickets for the Saturday are \$2.50 and for other nights are \$1.20. Reservations can be made with Mrs. Rawson at 25 6650 or with Caroline Piesse, Monash ext. 3101.

DO EXAMINATIONS SERVE A USEFUL PURPOSE?

The often expressed wish to scrap examinations was a dangerous over-simplification because it suggested that there could be no good purpose served by tests or examinations, Mr. J. H. Theobald said at the recent education lecture series.

"Whether one calls them examinations, tests, assignments, projects, continuous evaluation or work contracts, all of these techniques are designed to evaluate learning for some purpose or another and many of the purposes are thoroughly desirable," Mr. Theobald said.

Mr. Theobald, senior lecturer in education, was speaking at one of seven lectures organised by the Education Faculty to mark the first century of state control of education in Victoria. The series was held between August and October.

Mr. Theobald said the fundamental issues in educational measurement were:—

- For what purpose was the assessment made?
- What evidence of student performance was required?
- Against what criterion was the performance to be judged?

Basic issues

These three issues, he said, were basic, whether the student himself was making an evaluation of his own learning or whether, at the other extreme, a university faculty was selecting from a number of qualified applicants a smaller number for admission to a limited number of places.

Mr. Theobald then went on to discuss two contrasting types of examination, the competitive examination and the non-competitive examination, which differed fundamentally in their functions and purposes.

"As a biologist, I see competition as a fact of life, although obviously this competition takes on different forms and is about different things in different societies," Mr. Theobald said.

"I see vocational competition as one of the common characteristics of developed societies, whether the rewards are in terms of money, of social prestige, or related to job satisfaction. And in occupational choice competitive examinations play a large part.

"Entrance examinations, to schools, colleges, universities, or professions are one class of competitive examination, and if there are insufficient places and selection must be made, then I believe open competition to be fairer than private favour or patronage."

"However, openness and lack of private favour should not lead to the assumption that there were no inequities. In competitive examinations inequalities in native ability and environmental advantage were basically the things measured.

"It is all too easy to use a competitive examination as a basis for making apocalyptic judgments about students," Mr. Theobald said.

"In order to have a group who are regarded as successes there must be a group who are regarded as failures. Even if the examination itself is technically sound in that it measures

those skills it set out to measure, the possession of the skills is not only a reflection of the talent of the student but a reflection of his talent modified by such other factors as personality and his educational environment, past and present."

Mr. Theobald dismissed random selection or ballot as a method of selection, although it was a practice favoured in some other social institutions.

"I don't see a ballot for entry to universities as being likely to remove the social inequities of coming from an intellectually advantaged or disadvantaged background — the processes of selection are far too pervasive to be avoided.

"If random selection is little worse than our present methods of selection in terms of predictive validity, the answer, I believe, is not to give up in despair and draw lots, but to improve the predictive validity of our selection devices.

"And, remember, it is not only selection into a university. If everyone comes to a university, there still remains competition for some types of job!"

Mr. Theobald went on to argue for criterion-referenced examinations in the classroom rather than norm-referenced examinations.

He said in competitive examinations the student's performance was related to how other students tackled the same question, not on whether he possessed certain knowledge or skill.

However, a knowledge of the strengths and weaknesses of a student in relation to the requirements of the subject is of more importance to both teacher and pupil. In the classroom context, the performance of other students is largely irrelevant.

"In norm-referenced, competitive examinations, test items may be rejected if they are too simple or too difficult; if everyone gets a question right then that does not help to distinguish between them."

"In choosing a test item for inclusion in a criterion-referenced test the only basic requirement is that the item can distinguish those who possess the knowledge or ability being tested," Mr. Theobald said.

"In many fields of education, but more obviously in the field of skills training, competitive performance is largely irrelevant, we require mastery. We require that a pilot can fly an aircraft, not that he is better than 90% of the general populace at the job."

"We have ways of making the news"

Reports in the mass media on the situation at universities in the Federal Republic of Germany — as also in other countries — usually connected with topical events, tend to distort the true picture.

When students demonstrate when a lecture is disturbed, the public hears about them in the evening newscast and next day under large headlines in the press. Thus, they receive the impression that the students mainly instigate unrest and neglect their studies.

In order to correct such tendentious portrayals, the Federal Ministry of Education and Science recently published the results of a survey. It reveals that the "disturbance quotient" at the Universities last semester lay considerably below 1%.

Thus, for example, of 185,000 teaching events at Bonn University, only one was seriously disturbed. Frankfurt University reported 0.1%, Heidelberg University which is regarded as particularly restless, 0.2%, Hamburg University 0.01% disturbed lectures and seminars — to quote but a few examples. Even at the Free University of Berlin, which constantly gives rise to negative commentaries in the press, more studying is done than demonstrating: of a total of 137,728 teaching events last semester, 42 were disturbed according to details given by its Presidial Office. This represents a percentage of 0.03%. (From 'Bildung und Wissenschaft,' No. 5, 1972, via the University of Sydney News.)

Help available in finding a job

The end of the year is approaching and the search for jobs for next year will soon begin in earnest. The Monash Careers and Appointments Office has a regular publication available which may help graduates find employment.

It is called "Careers Weekly." It is available from the Careers and Appointments Office in the Union or will be mailed to students at the rate of \$1 for four months' issues or \$3 for one year.

OLD PROBLEMS WITH NEW MATHS

AUSTRALIA made virtually all the same mistakes as the USA in the introduction of the new mathematics to its education system, Dr. T. H. MacDonald said in the Education Faculty lecture series.

Dr. MacDonald said that in the US, errors had been cushioned by strong local and community control over education. In Australia they were exaggerated by highly centralised and bureaucratic control over education.

Dr. MacDonald, senior lecturer in education, said the past ten years of mathematical education in Australia had been far from happy.

"Since the last two forms in secondary school—in Victoria at least—face examinations, the tendency has been for the good teachers who know mathematics to be put in charge of forms V and VI," he said.

"The lower forms tend to get anybody teaching mathematics.

"To their everlasting credit many of these teachers have adapted surprisingly well, mastering the concepts and constantly searching for ways to improve their technique.

"For most, though, it has been a disaster, both for themselves and their pupils. It is not uncommon to get a physical education teacher having to take Form I and II Mathematics. He hates the stuff and barely manages to stay ahead of the children.

"Of course, he has only a very tenuous understanding of the whole thing and has to rely heavily on authoritarianism and sarcasm in teaching. After all, if you don't know what you are doing, you can hardly have pupils asking awkward questions and wanting to know why all of the time!

"Even if a teacher stuck in this horrible position really wants to do a conscientious job, he often has difficulty finding guidance.

New slogans

"All too often he thinks of new mathematics as being old mathematics dressed up in a new terminology. He therefore learns the new 'slogans'—equivalent sets, cardinality, etc.—and exemplifies them with old examples from algebra to geometry with which he is familiar.

"This robs the new mathematics of much of its power to unify and generalise mathematical concepts," Dr. MacDonald said.

Dr. MacDonald said the changeover in the 1960s to the new mathematics was worse in Australia than in the US for three reasons.

- Principals in Australia do not pick their staffs, so that they can never

rely on building up a company of teachers committed to a particular mathematical method. Sudden changes in staff are made by the state education department; consequently morale is low and the staff turnover is so great that it is difficult to run a consistent programme.

- The state education departments—except in South Australia—all made the error of installing new mathematics in all schools almost by decree. I was in Western Australia when the order came through to switch over to Cuisenaire. I have never witnessed such confusion.

- The state education departments did not, and do not, have enough money to provide decent in-service workshops for teachers to learn new mathematics and how to teach it. The results are as one would expect.

Two reforms

Turning to the present and the future, Dr. MacDonald said there were two basic reforms needed to improve the teaching of mathematics; one involved the general society, the other involved the structure of the education system.

"First we must ask ourselves what we want mathematics and mathematics

education to accomplish in our society," Dr. MacDonald said. "This should lead us to ask what kind of society we want and why. These questions are the responsibility of all of us.

"Following from this, short-term reforms should be initiated. The bureaucracies of educational administration need to be broken down.

"Principals need to be less concerned with power to expel people and impose superficial rules relating to dress, hair-style and the payment of composite fees," he said.

"They need to be much more concerned with exercising educational power—demanding autonomy so that they can respond more sensitively to community demands.

"At a more technical level, we need reforms in the way in which mathematics teaching is handled.

"Special and immediate attention must be directed to the needs of pupils in forms I to IV by providing long workshops—at least ten sessions each—for all non-mathematician teachers who are beleaguered by having to teach new mathematics."

Dr. MacDonald said each school should have a program run by its most highly qualified mathematician to help other teachers.

He concluded by saying: "To be mean the state of affairs is futile. To talk about it and analyse it without action is academic and sterile. To change it is our mandate. This is the responsibility of all of us here."

Lack of planning and responsibility hinders Westernport

Two unfortunate aspects prevented the proper overall development of the Westernport region, Geoffrey Robinson, senior lecturer in geography at Monash, told the "Challenge of Westernport" seminar.

Mr. Robinson said the whole challenge of Westernport involved taking into account the various pressures from Melbourne and the projected industries, without lasting ecological harm to the region.

To co-ordinate this overall development was no small task, he said, and two aspects stood out as being particularly unfortunate.

● There was no single authority effectively charged with the task.

● Development had been allowed to proceed without there being available the information necessary for planning and co-ordination.

Taking these in turn, Mr. Robinson told the seminar that there were three different planning regions involved.

First the region of the Mornington Peninsula and Westernport Regional Planning Authority. This covered all, or portions of, the shires bordering Westernport Bay, but did not cover its entire catchment. The second region comprised most of the remainder of the catchment and fell under no one planning authority. The third area had the Melbourne and Metropolitan Board of Works as its planning authority.

It was desirable that activities within all three areas should be co-ordinated by one agency, Mr. Robinson said.

Turning to information needs, Mr. Robinson said that, according to the state government, planning for Westernport aimed to achieve a balance between the differing claims of conservation and development in the long term interests of Victoria and its citizens.

It had been acknowledged that environmental studies were necessary to provide the information essential for such a policy, and it was noteworthy that the Fisheries and Wildlife Department began studies into the marine environment of Westernport Bay in 1964 — before the BP refinery opened.

Subsequently marine studies had been extended and in 1967 an environmental study of the entire catchment was initiated under the control of the Environment Protection Authority.

However, development had proceeded and plans for further development made, both in the Hastings-Crib Point areas and in other parts of the Westernport catchment, without that environmental information being available.

Mr. Robinson said that even if the EPA environmental study was ultimately useful, there were two bodies of information unlikely to come out of it but which ought to be available before major planning decisions were made.

Unstable crust

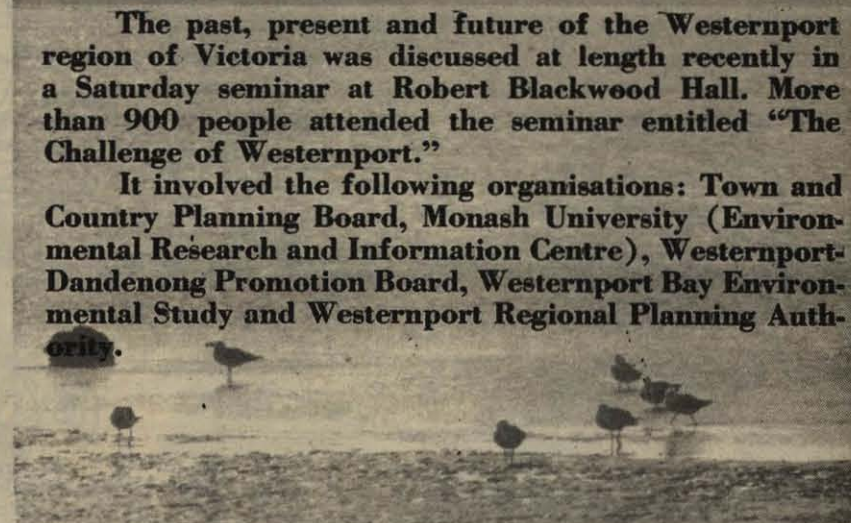
The first related to crustal instability in the Westernport region. In the event of large scale port and industrial developments of the magnitude postulated by some consultants, the likely effects of such large engineering structures upon movements along fault lines in the crust may require investigation. The effects of any earthquakes upon such structures may also be a cause for concern.

Secondly, although information about economic and demographic characteristics of the land area would probably come to light from the environmental study, behavioural questions were not a prime area of the study.

This was a major omission from any planning policy, Mr. Robinson said.

Westernport was influenced by both the growth of Melbourne and the growth of other urban areas within the region. Of necessity such urbanisation involved the redistribution of population by migration.

Although a study of census statistics enabled the general pattern of net migration to be discerned, it did not reveal the more complex actual migration patterns, or distinguish the



The past, present and future of the Westernport region of Victoria was discussed at length recently in a Saturday seminar at Robert Blackwood Hall. More than 900 people attended the seminar entitled "The Challenge of Westernport."

It involved the following organisations: Town and Country Planning Board, Monash University (Environmental Research and Information Centre), Westernport-Dandenong Promotion Board, Westernport Bay Environmental Study and Westernport Regional Planning Authority.

who, how and why of the movers and the stayers.

Economic and residential changes were clearly related to other changes in social structures and organisation, to changes in group and individual behaviours and life styles. It was generally accepted that the large city was a major centre for social as well as economic change.

Primate system

The changes spread from the city to smaller centres and to local rural areas through the urban system, Mr. Robinson said.

Where a primate system operated, as with Victoria, in which one place dominated all others, it was commonly associated with a particular type of economic situation; for example, one with a colonial history, dominated by agriculture and with an export orientation.

There had, however, been little research carried out into the effects of particular urban systems on the behaviour of their inhabitants. Social as well as economic and demographic questions should rank high in the order of priorities for any investigation into the likely consequences of the development of Westernport.

However said, Mr. Robinson, even that would not be enough.

It was a clear case of putting the cart before the horse to decide upon a development before carrying out the investigations into the likely consequences.

No major planning decision should be made without first establishing the desires and goals of the mass of people who would be affected by the decision.

In the final analysis planners had to be somewhat dictatorial. They must be innovatory and should be seen to lead, rather than follow, the desires of the silent majority.

Planning challenge

Here lay the real planning challenge of Westernport, and it was a double-barrelled one.

To many people planning enquiries and implementations were mere bureaucratic interferences with personal freedoms, Mr. Robinson said.

For regional planning to be truly successful, these people needed to be convinced that it was not only a necessary and fruitful, part of economic development, but also a part in which they were involved as people and not pawns.

A second group, however, saw planning in Australia as a 'paper tiger' attempting to reconcile the needs of big business and the larger community and inevitably bowing to the former.

This group feared that irrevocable decisions, causing irreparable harm, had already been made about the development of the region.

It was important that in the planning process public relations were good, Mr. Robinson said.

But to convince both groups that regional planning was on the one hand necessary and on the other effective and benevolent, Westernport would have to be, and be seen to be, the best planned region in Australia.

There were many obstacles, but the challenge had been laid down.

"Dishonest and silly" predictions about the earth's resources

Some optimistic predictions about how long the earth's resources would last were "dishonest and silly", Dr. E. H. Ealey, told a recent meeting of the Adult Education Association.

So far as oil was concerned, the tremendous population and economic growth would exhaust the world's supplies in about 40 years, Dr. Ealey said.

"According to some estimates, even if we discovered five times as much oil as has been discovered, we would only have oil for another 55 years.

"This is because the rate of use is increasing so rapidly. Estimates made at the present rate, it is claimed, are not valid."

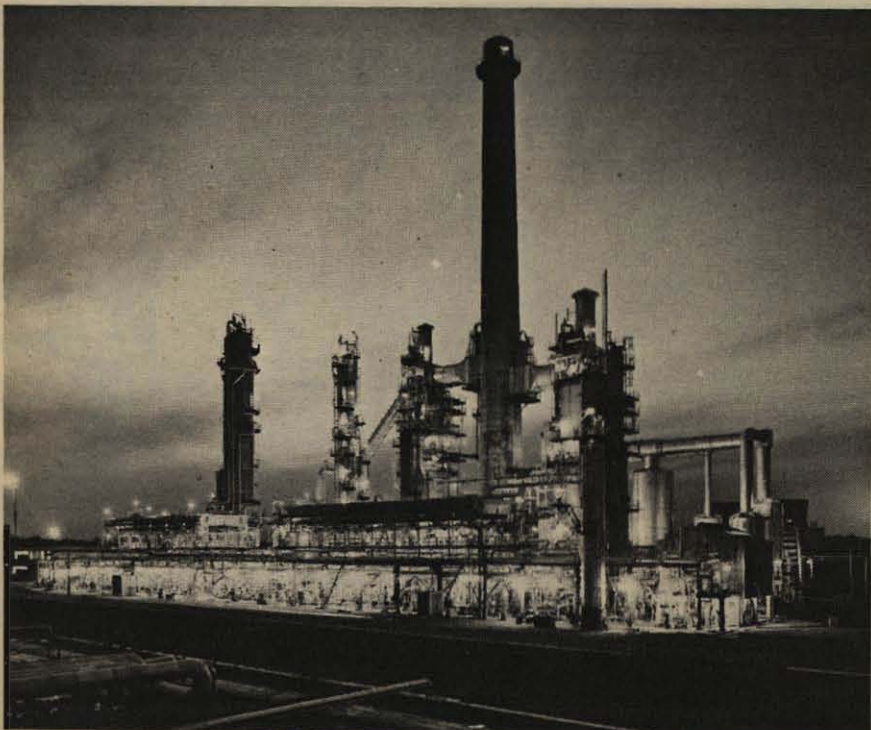
Dr. Ealey, a senior lecturer in zoology at Monash, said that changes to save man from destroying himself would have to be made quickly.

There was so little time that the task would fall on the present day younger generation.

"They feel they are looking at a great rubbish tip which could blow up at any moment," he said. "They urgently want to do something about it."

Dr. Ealey said students were swinging from physics and chemistry to biological studies.

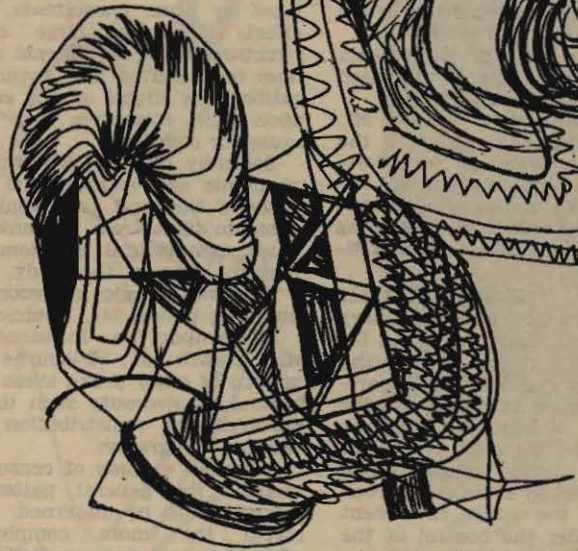
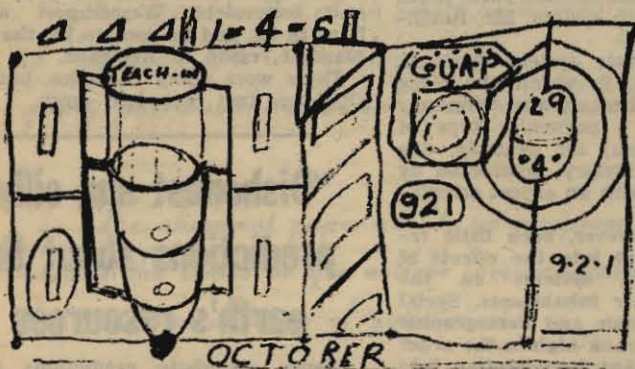
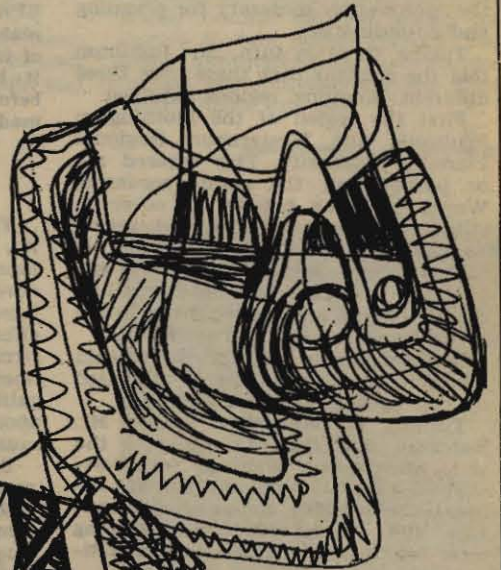
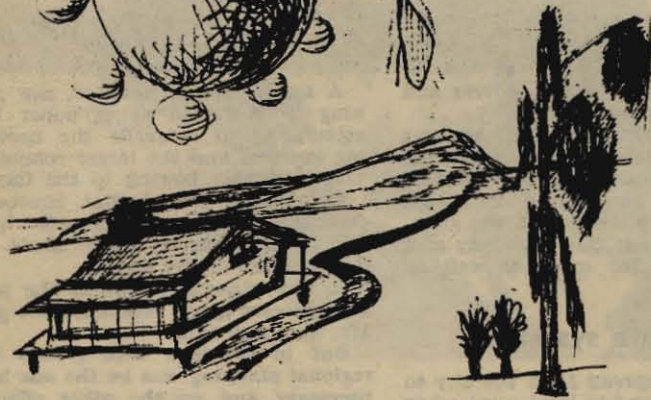
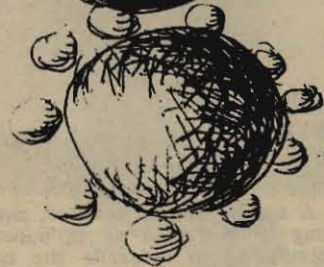
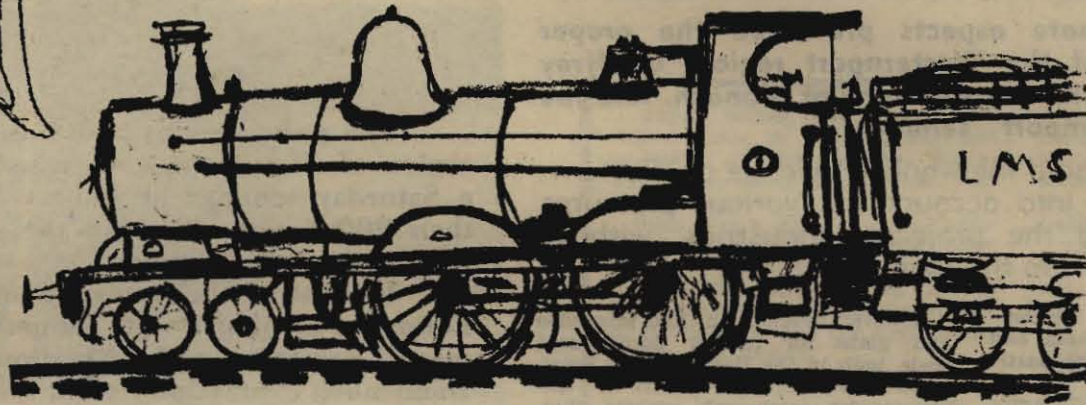
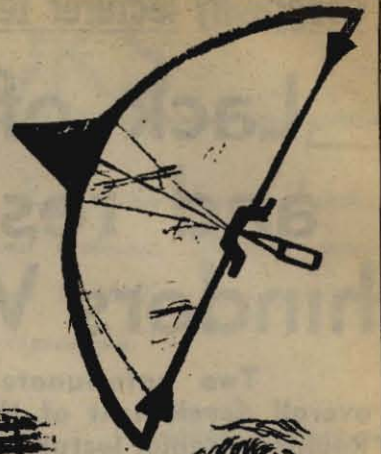
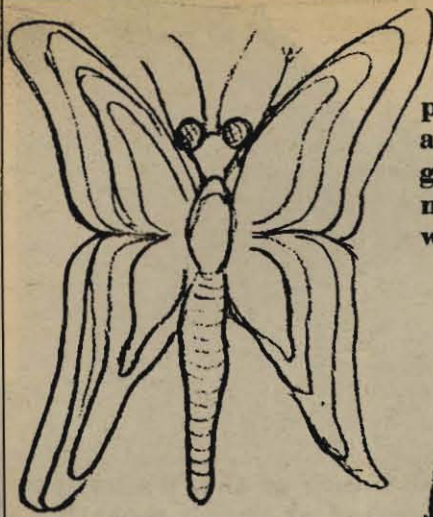
There was so much intense interest in biology that Monash may have to turn away 200 of 800 students who, it is estimated, will apply for enrolment in that subject next year.



The BP refinery at Westernport.

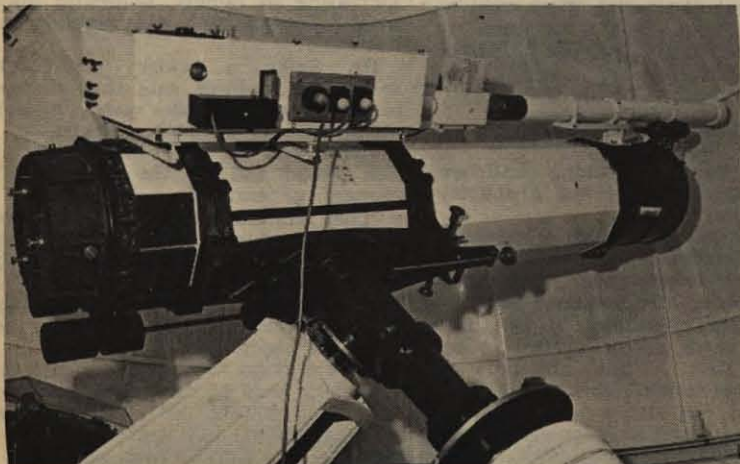
THE REPORTER COLLECTION

More gems from The Reporter's priceless collection of professorial doodles. (A note of no particular significance: Of all the hundreds of sketches, doodles, scribbles and scrawls gathered from Prof. Board, Deans' Committee and Faculty Board meetings over the years, only one was recognisably a nude. It wasn't a very good one, either — so we haven't included it here.)



NEW OBSERVATORY FOR MONASH

Monash has built an observatory for research and teaching at Gembrook, 40 km from the campus. It houses a 40 cm astronomical reflecting telescope.



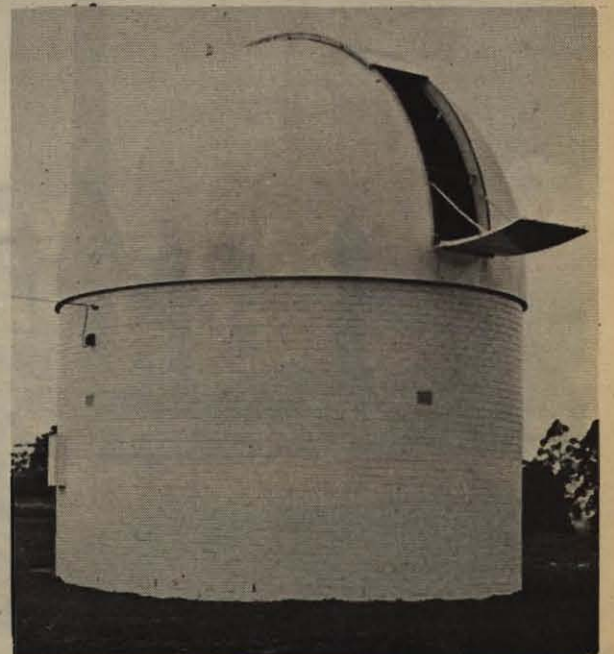
The telescope was built by an amateur astronomer, Mr. L. Jeffree, in Bendigo. He died before it was completed and the telescope was wasting away in the backyard of a Bendigo house until bought by Monash in 1968.

The telescope has been restored by members of the departments of physics and mechanical engineering.

It was originally intended that the instrument be installed on the campus, but in order to obtain better observing conditions it has been sited on leased land at Mt. Burnett near Gembrook.

The physics department is already involved with the instrument. A photometer and spectrometer have been designed and constructed as honors and MSc projects.

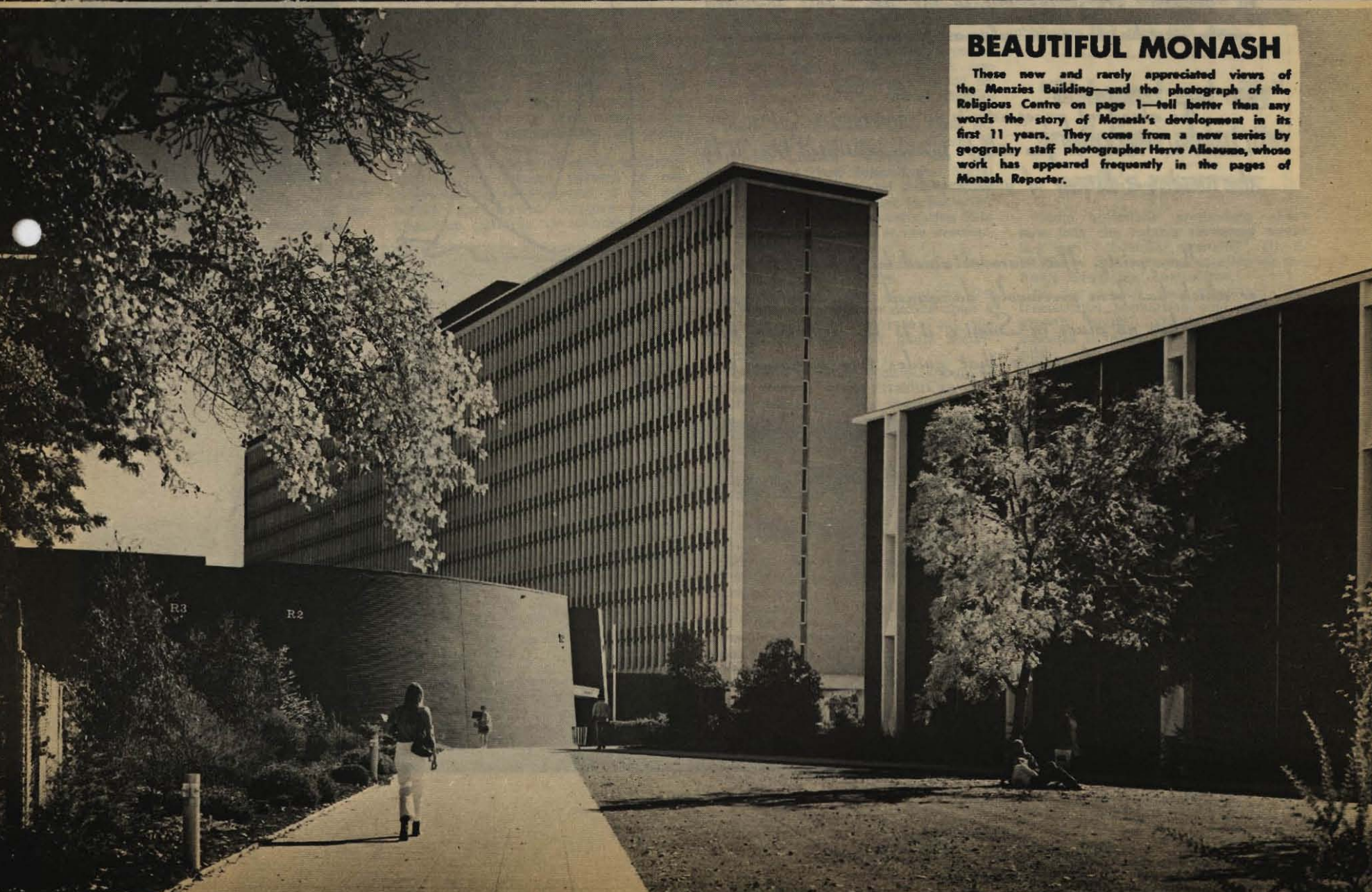
The telescope can also be used for under-graduate teaching, demonstrations to schools and perhaps for general public inspection.





BEAUTIFUL MONASH

These new and rarely appreciated views of the Menzies Building—and the photograph of the Religious Centre on page 1—tell better than any words the story of Monash's development in its first 11 years. They come from a new series by geography staff photographer Herve Alleaume, whose work has appeared frequently in the pages of Monash Reporter.



BOOKS

"Sumi-e, like its related Zen techniques of kyudo, karate, tea ceremony, aikido and ikebana, liberates spontaneity by destroying doubt and hesitation, removing the mental blocks that thwart self-expression."

Andre Sollier, the French-born Union tutor in Sumi-E, has just published an 84-page book, "Introduction to Sumi-E, The Zen Way of the Brush".

Sumi-E is a philosophy and technique of painting brought from China to Japan 1500 years ago.

Its spirit, Andre writes, is the same spirit that guided the swords of the Samurai and the meditations of the Zen monks.

And the wording of his instructions has the same touch:—"Meditate on your brush strokes so that they penetrate your very self"; "practise softness, precision, i.e. hesitation".

He writes that the technical characteristics of Sumi-E painting liberate spontaneity by destroying doubt and hesitation.

The book contains a summary of Sumi-E, a description of the materials and techniques required and a section illustrating the travels of the author through Asia to Australia.

Andre, who has studied Sumi-E for 15 years and has exhibited 10 times in Japan, says the book took him four months to produce. He has dedicated it "to my Australian students".

One thousand copies have been printed and the price is \$6.75.

It is on sale at Monash and at Robertson & Mullens and at Norman Bros.

Andre will conduct two identical 10-day Sumi-E courses during the coming Monash Summer School. For more information on his courses contact the Activities Officer, First Floor, Union, ext. 3160.



"In Sumi-e, the plain white unpainted surface is called 'yohaku'. It is the key to the art. This so-called 'empty' part has the same value as the surface to be painted"

"The absorbent paper admits no compromise. Either you become the stroke or you will be forever separated from it by the timid speculations of your mind."

"These misty effects are obtained by painting on paper which has been previously dampened . . . photographic realism has no place in Sumi-e, it is the expression and suggestion of vital essence that guides this pictorial discipline."



"To seize movement is to seize a little of life."



The artist at work at last year's Summer School.



In Review

THE PRESS

The Mass Media in Australia: Use and Evaluation. J. S. Western and Colin A. Hughes, University of Queensland Press, 1971.

By MAX TEICHMANN

This book, in essence, is "a report on a national survey of adult Australians undertaken just before the 1966 Federal elections."

As such, it possesses mainly antiquarian interest, for a variety of substantial changes have occurred in the ensuing six years.

The pattern of political partisanship outlined by the authors has greatly altered, while the already massive concentration of press and media in a few hands, has proceeded apace.

There are even fewer independent operators now than in 1966. The power struggle between the Big Four has resulted in the decline of Packer, the takeover of the Age by Fairfax, and the rapid rise of Murdoch.

Nevertheless, there is some interesting information to be found scattered among the numerous tables and appendices.

A quite substantial number of readers and viewers are credited with cosmopolitan i.e. international interests, as against basically provincial, provincial-local, and local preferences. This gives the lie to past claims that there is no demand for either sophisticated or overseas features and reportage.

The correlation between an advanced level of interest and a substantial formal education is, predictably, a close one — cutting across party affiliations.

Had the authors spent a sizeable part of their time actually talking, in a structural manner, to journalists, editors and media men, the study would have emerged as something more than a logico-mathematical operation.

Press and media men all have their own characteristic working procedures, value systems and group stereotypes of reader and viewer preferences, which appear to have changed very little, if at all.

They are noticeably unaffected by surveys, criticisms or the supposedly malignant influence of monopoly newspaper owners.

The most striking features of Australian journalists and broadcasters, not mentioned in this survey, is their basic incompetence.

There is little need to censor or caution most of them. They have no dream of excellence, little conception of their social duties, as against their social powers, and most of them are strangers to either good writing or a careful husbanding of whatever factual resources that come their way.

A study of the educational and social background of the practitioners, from the editors down, would throw a harsh light upon their basic incapacity to produce readable or socially relevant material; while an exploration of their emotional attitudes would show, I suspect, the deep seated conservatism which springs from the craft guild mentality. A conservatism having little to do with formal politics, but a great deal to do with the inbred mediocrity, repetitiveness, and lacklustre imitativeness of our opinion formers.

For that is what they are. Even school children spend more time watching television than they do in physical occupation of their school buildings, and the dominance of press and media rises steeply after that particular period of human development. Nowadays we believe that our teachers should be educated, but not our main opinion formers.

(The Diploma of Journalism course at RMIT is a recent approach to over-

come this problem. It is to be hoped that the approach is taken seriously, by both management and potential journalists, and that it becomes more widespread; perhaps then the future of Australian journalism need not be as sour as I have described.)

The authors speak of 'quality' newspapers (as against the others), but nowhere define this vital term except by reference to the preference of seven 'practising journalists, management representatives and academics knowledgeable about the Press'.

The authors simply start with the assumption that we must have quality papers, just as we must possess some quality journalists.

Had a comparison been made with newspapers and writers from other societies of comparable wealth, political composition or general literacy, the authors might have found that our local productions are abysmal. An inspection of English, American, Scandinavian, West German or French political journalism, feature writing, reviewing or artistic reportage, reveals the basic character of the mindless, provincial gossip which Australians have to endure.

The refusal to cater for the substantial group of 'cosmopolitans' comes partly from the character of the media proprietors themselves, the prodding of advertisers and their ratings, and also from the unsleeping attention of mugwump pressure groups. But it also derives from the inability of scribes to either educate themselves, adapt to rising standards, or to become familiar with overseas issues or criteria (as against overseas gimmicks).

A government national newspaper or a redistribution of media licences might be a necessary condition for a meaningful improvement, but certainly not a sufficient one. However, problems such as these were not the concern of our Queensland authors.

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 25 3424.

Sutherland, Alex. Victoria and its metropolis. Two vols. Illus. Pub. Melbn. 1888. \$10.

Tagore, Rabindranath. The Crescent Moon. Trans. from Bengali. Illus. Pub. Macmillan 1919. \$2.

The Lounger. A Periodical Paper Published at Edinburgh in the years 1785 and 1786.

The Mirror. Do. 1779 and 1780. In One Volume \$2.

Simonds, Frank H. How Europe Made Peace Without America. Pub. Heinemann 1927. \$1.50.

Priestley, J. B. English Journey in 1933. Pub. Heinemann 1937. \$1.

Thomson, W. M. The Land and The Book — The Holy Land. Illus. and Maps. Pub. Nelson 1910. Leather bound. \$1.

Finkel, Geo. Cloudmaker. Novel Pub. 1965 A. & R. \$1.

Collins, Wilkie. The Moonstone. Illus. Pub. 1871. Collins. Leather bound. \$1.

Nolan, Cynthia. Paradise, and Yet. Pub. Macmillan 1971. \$1.

Baalman, John. Outline of Law in Australia. Pub. Law Book Co. 1947. \$1.

Ommanney, F. D. Isle of Cloves — a View of Zanzibar. Pub. Longmans. 1955. Illus. \$1.

Chatterton, Fred. English Architecture at a Glance. Pub. Architectural Press 1928. 80c.

Cardus, Neville. Autobiography. Pub. R.U. 1949. 80c.

HISTORY

Heidelberg, The Land and Its People 1838-1900. By Donald S. Garden, Melbourne University Press, 1972. Pp. x, 219. Illustrated. \$8.70.

By JOHN LACK

From 1835 Heidelberg, beautiful of aspect, fertile and well-watered, and less than five miles from Melbourne, experienced 20 years of speculation settlement on the grand scale, and boom as an agricultural area.

It was followed by nearly 50 years of torpor and neglect.

Don Garden attempts an explanation of this paradox in a painstaking and often charmingly written study, based on his Master of Arts thesis in the history department of this university.

From the late 1830s wealthy Melbourne businessmen, seeking rural retreats from the city, and pastoralists seeking town residences in congenial surroundings, established themselves on sizeable estates at Heidelberg, making it the elite district of Port Phillip.

The gold rushes' demand for food in the fifties led to subdivision of most of these large properties for lease as market gardens. Little of the land changed hands, but absentee landlordism became characteristic; so the social composition of Heidelberg changed markedly.

The rest of the story is largely anticlimax. Depression, crop failures, and floods began Heidelberg's decline into a rural backwater — truly an "idle burgh."

When the railway link with Melbourne came it was so late and circuitous that any influence the 1880s land boom might have had was largely lost. The village population rose from 555 in 1856 to a mere 713 in 1891.

Residential problem

Garden's exploration of the reasons for Heidelberg's failure to develop as a large-scale residential area is comprehensive and stimulating, but in part unconvincing.

On the evidence given, it is hard to see why large landowners should have acted as a conservative influence when in control of the Road Trust—wouldn't the owners have benefitted in terms of higher rents for land the value of which would have been increased by an all-weather road to Melbourne, and wouldn't the leaseholders have been paying any rates imposed?

It could well be that extensive absentee ownership had a negative effect, but Garden's discussion of the reluctance of landowners to offer their properties for subdivision in the sixties seems to beg the question of public interest in Heidelberg.

It seems to me all to boil down to a broader issue, treated well but somewhat incidentally by Garden (and not mentioned in the summary concluding note) — the socially bifurcate development of Melbourne north-west and south-east of the Yarra.

"Wrong side"

Heidelberg was one of the casualties: it was on the 'wrong side.' As Garden shows, many local nabobs moved south of the river, so that Heidelberg was supplanted by South Yarra and Toorak as the prestige area.

Another major theme is Heidelberg as a community. The phases the district passed through — commuters' retreat, service centre, and semi-rural village community—Garden examines in turn, as closely apparently as the available sources will allow.

In the absence of certain crucial local government records and of a local press, Garden has relied extensively on Lands Department archives as a means of tracing the landed base of Heidelberg society. His assiduous and imaginative use of those records constitutes a major achievement in Australian local history.

Garden's Heidelberg joins Blainey's Camberwell and Barrett's Inner Suburbs in teaching that factual accuracy and literary polish are not enough in local history, and that the blockbuster epic chronicling the story of every pub and pleshop has had its day.

Local history is to be judged according to the quality of the questions asked and the success in wringing answers from what often appear the most intractable and least appetising of sources. Don Garden's Heidelberg deserves wide reading.

WHAT'S IN A NAME?

Nixon is a very strange name to carry abroad, according to Dr. Mary Nixon, a senior lecturer in the Monash Faculty of Education, who attended the recent 20th International Congress of Psychology in Tokyo.

Today, it is a name of such moment in Japan that a possible relationship with the US President was a matter of conjecture and jest wherever she went.

"It was amusing when I was introduced as President of the Australian Psychological Society, and a friend told them that during my 'term of office' the Australian troops had been recalled from Vietnam," she said.

The congress is held every four years but this was the first time an Asian country had been host. More Asian psychologists attended this congress than any previous one.

Apart from the Japanese, these included Taiwanese, Indonesians and Koreans.

Dr. Nixon says the program of the week-long congress and the papers delivered demonstrated an increasing concern for cross-cultural research and a desire to find the best ways of applying psychological knowledge to areas of social concern.

"I found myself engaged in several meetings and discussions about ways to help psychology and psychologists

in developing countries, especially in Asia and the western Pacific," she said.

"There was a strong feeling among the Asian and Pacific delegates that psychologists from the People's Republic of China may be looking to their geographical neighbours in the near future for exchange of information and scholars — and that the neighbours should be prepared to respond positively."

She said the Japanese psychologists spoke such excellent English that it was a "matter of some shame" that Australian delegates could not speak Japanese.

Because there was so little in the way of language barrier, she suggested Australian psychologists could usefully spend study leave in Japan and invite Japanese psychologists to do the same in Australia.

\$560,500 in grants for Monash

SEVENTY-FIVE grants, totalling \$560,487, have been awarded to members of Monash staff for 1973. The awards, which were made on the recommendation of the Australian Research Grants Committee, were announced late last month by the Minister for Education and Science, Mr. Fraser.

Twenty-one of the grants were for new projects, the remainder for continuing work.

The largest individual grant was \$42,133 to Professor R. D. Brown and Dr. Peter Godfrey (chemistry) to continue their work on molecules in space.

The full list of grants is as follows:

INVESTIGATOR	PROJECT TITLE	GRANT \$
HUMANITIES AND SOCIAL SCIENCES		
New Projects		
Dr. E. M. Eggleston and Mr. P. J. Hanks	A critical analysis of the operation of legal aid schemes in Victoria, NSW, ACT and South Australia	4140
Professor M. I. Logan and Professor M. G. Swift	Policy implications of population migration in West Malaysia	16,750
Mr. G. B. Silberbauer	Socio-ecology of the Chanzl District of Botswana	11,670
Dr. D. M. Thomson	Studies in episodic memory	4580
Continuing Projects		
Dr. J. L. Bradshaw	Human information processing: determinants and correlates of performance	7003
Dr. C. S. Chen	A comparative study of the learning ability and memory of different strains of rats in a temporal maze	2150
Associate Professor M. G. Clyne	Migrant German and migrant Dutch in Australia	1620
Dr. K. I. Forster	The perception of sentence structure under conditions of rapid visual presentation	2803
Dr. H. G. Galber	Australia, the United States Alliance and power relationships in the Pacific	6968
Dr. T. Hore	Teacher-pupil interaction patterns in dyadic situations	1550
Mr. B. A. Knox	The political life and colonial policy of the fourth Earl of Carnarvon (1831-1890)	2300
Dr. L. Li	The place of the military in the politics of modern Japan, 1868-1945	1400
Dr. A. G. Serle	History of Victoria, 1851-1900	1200
Dr. D. B. Waterson	An historical biography of Sir Thomas McIlwraith, 1835-1900.	330
Dr. W. R. Webster	Single unit activity in sensory systems of unanaesthetised animals	4575
PHYSICAL SCIENCES		
New Projects		
Dr. K. Thompson	Measurement of the viscosity of liquid ³ He and of liquid ³ He - ⁴ He mixtures at temperatures below 0.05 Kelvin	10,763
Professor R. Van der Borgh	Finite amplitude convection in a compressible fluid and its application to astronomical problems	15,061
Continuing Projects		
Dr. G. C. Fletcher	Theoretical investigation of the electronic and particularly magnetic properties of transition metals and their alloys	9087
Professor B. R. Morton	Dynamics of convective clouds	13,088
Professor R. Street, Dr. J. D. Cashion and Dr. J. A. Barclay	Studies of solids at low temperatures in high magnetic fields	33,808
Mr. G. J. Troup and Dr. J. R. Pilbrow	Electron spin resonance, nuclear magnetic resonance and anti ferro magnetic resonance in compounds and crystals	13,500
Dr. R. Weber	Measurement of thermal properties of magnetically ordered materials in the temperature range 0.3 to 700 K and in magnetic field up to 60 kG.	7232
EARTH SCIENCES		
Continuing Projects		
Dr. A. C. McLaren	Direct observation and identification of crystal defects and their role in the mechanisms of crystallisation and deformation of minerals and rocks	2485
ENGINEERING AND APPLIED SCIENCES		
New Projects		
Dr. K. N. Han	Dissolution behavior of cobalt oxides	6800
Professor D. G. Lampard and Dr. W. A. Brown	Computer control of respiration and anaesthesia	12,513
Dr. F. Lawson	Study of the kinetics and mechanism of cementation reactions	1117
Professor O. E. Potter	Cyclohexane oxidation	9439
Continuing Projects		
Professor J. B. Agnew	Dynamics of packed tubular reactors for exothermic chemical reactions	1750
Dr. C. J. Bellamy and Mr. L. G. Whitehouse	Research into compiler techniques for small computers aimed at a low cost computer system for teaching computer programming	6800
Dr. D. V. Boger and Dr. C. Tiu	Accelerating and decelerating flows of viscoelastic fluids in conduits of arbitrary cross sections (particularly circular and annular ducts)	6382
Mr. I. H. Lehrer	Mixing studies (i) Influence of various parameters; (ii) Investigation of the properties of 2-phase jets	1030
Professor K. Morsztyn	Modelling, control and optimisation of large dynamic power systems (power systems simulator studies)	5400
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	4747
CHEMICAL SCIENCES		
New Projects		
Professor R. D. Brown and Dr. P. Godfrey	Molecules in space	42,133
Dr. G. B. Deacon	Reactions of polymercurated arenes and heterocycles	5339
Dr. K. S. Murray	Single crystal magnetic and spectral studies of inorganic and bioinorganic compounds	500
Continuing Projects		
Dr. D. St. C. Black	Metal template rearrangements	5589
Professor R. D. Brown, Dr. F. R. Burden and Dr. F. Larkins	Molecular orbital studies of electronic structures of molecules	11,200
Professor R. D. Brown and Dr. F. R. Burden	The study of short lived molecular species by microwave spectroscopy	13,255
Dr. R. F. C. Brown	Pyrolysis and mass spectrometry of organic compounds	5458
Dr. G. B. Deacon	Synthesis and structure of main group element organometallic compounds	1800
Dr. F. W. Eastwood and Dr. I. D. Rae	Synthesis of sporidesmin	6204
Dr. R. J. Fleming	The effects of ionising radiation on some common organic polymer materials, studied at the electronic level	630
Dr. B. M. Gatehouse	Crystal chemistry of the solid state	6046
Professor B. O. West	The reactions of cyclic arsines and phosphines	4605
BIOLOGICAL SCIENCES		
New Projects		
Dr. D. F. Gaff	Desiccation tolerant plants, particularly grasses	3524
Dr. N. D. Hallam	The fine structure of plants adapted to desiccation	7710
Professor A. W. Linnane and Dr. P. Nagley	Informational macromolecules in nucleocytoplasmic interactions	7008
Professor A. K. McIntyre	Properties of somatic receptors in monotremes and sub-mammalian vertebrates	9635
Professor D. A. Lowther and Dr. W. H. Murphy	The biochemistry of cartilage glycoproteins	7800
Dr. I. C. Parsons	Oxygen effects on chick embryonic erythropoiesis	4108
Professor R. Porter	Factors involved in the dynamic control of movement	27,026
Dr. M. Weiss	Biogenesis of steroids by the adrenal tissue of the Australian monotremes and marsupials	2080
Continuing Projects		
Dr. L. M. Aitkin	Central nervous mechanism in sound localisation	8308
Dr. L. Austin and Dr. P. Jeffrey	Synaptosomal protein synthesis	7227
Dr. L. Austin	The origin of axonal protein	7886
Professor M. J. P. Canny	Physiological and structural studies of phloem	5337
Dr. D. J. Collins	Studies of the relation between stereochemistry and biological activity of oestrogens: synthesis of 6, 7-bisnor-1, 11-ethanocestra-3, 20-diol	7089
Dr. G. F. Cross	Mycoplasma-cell interaction	2391
Dr. L. B. Geffen and Dr. B. Jarrott	Molecular basis of synaptic plasticity	4982
Dr. W. R. Gibson	Endocrine factors which influence liquid deposition in chickens	1550
Dr. J. M. Haslam and Professor A. W. Linnane	The effects of altered biochemical composition on the structure and function of mitochondrial membranes	6117
Professor B. W. Holloway, Dr. V. Krishnapillai and Dr. V. A. Stanislach	Genetic control of enzyme regulation in Pseudomonas Aeruginosa	12,954
Professor D. G. Lampard and Dr. S. J. Redman	The application of electrical circuit representations in the analysis of intracellular potentials in neurones and of muscle mechanics	7906
Professor A. W. Linnane and Associate Professor G. M. Kallerman	Effect of antibiotics on mammalian tissues and on human cells in tissue culture	7589
Professor A. W. Linnane and Dr. H. B. Lukins	Biogenesis of Mitochondria	12,315
Professor D. A. Lowther and Dr. H. C. Robinson	Structural studies of connective tissues including factors involved in the maintenance of cartilage	7902
Dr. I. R. McDonald	Adrenal function in the Australian monotremes and marsupials	6238
Dr. B. F. Mark	The function of regenerated synaptic connections in the nervous system	13,352
Dr. B. F. Mark and Dr. L. J. Rogers	The mechanism of vision and memory in lower vertebrates	3615
Professor R. C. Nairn and Associate Professor E. P. G. Gull	Immunological studies of biological specificity	6300
Dr. T. P. O'Brien	Cell biology of grasses with special emphasis on cereals	7585
Dr. B. N. Preston	Physico-chemical and mechanical studies on model connective tissue systems	4240
Dr. R. A. Westerman	Communication between cells in the nervous system	12,442
Dr. J. B. Youatt	Organic chemical aspects of cell differentiation	5613

FROM EXAMS TO CLIMBING MOUNTAINS

Monash science student David Harper is prepared to work in a mine in order to climb mountains.

So that he can spend 21 days at the Himalayan Mountaineering Institute, Darjeeling, West Bengal, next January, David, 20, will work as a miner in WA after his exams.

David, who also worked in a garage and tutored school children to raise the \$770 for the trip, has climbed in New Zealand and Tasmania.

On the trip David will go mountain trekking, rafting on the Tista River, and rock-climbing with 30 students from India and neighboring countries.

The highlight of the trip will be a mountain trek at 16,000 ft.

David will be one of six students from Australia on the trip which is being organised by the Ausventure Wilderness Association.

Professor J. A. Passmore discusses . . .

THE REVOLT AGAINST SCIENCE

"Though no tumbrels in the corridors, nor guillotines in the quadrangles," we have, according to J. A. Passmore, professor of philosophy at ANU, a revolt against science.

This was the topic Professor Passmore took up in his September public lecture, the second Oscar Mendelsohn Lecture, at the Alexander Theatre.

In the underdeveloped world, Prof. Passmore said, science was still the saviour, but in England and the USA (and in Australia in due course) the revolt was on — the cutting down of research funds, fewer students, even unemployment among scientists.

"Scientists are now blamed for most of the major ills of the world: pollution, over-population, the depletion of natural resources, nuclear and biological warfare, threats to privacy, the destruction of wild-life, dehumanisation," he said.

Mechanised routine

"Science is condemned as a bewilderingly perverse effort to demonstrate that nothing, absolutely nothing, is particularly special, unique, or marvellous, but can be lowered to the status of mechanised routine.

"The history of science up to the burgeoning years of 1955-65 can easily be told as a tale in the heroic mould, in which science conquered one enemy after another — church, state, occultism, and even Oxford and the English public schools — and finally emerged triumphant."

Then what went wrong? Prof. Passmore asked.

"In so far as science could be assimilated to the army, the police, the judiciary, it could be said to be a means by which man dominated over man. Science is not tried as a force that upsets the status quo, but as one that represents the status quo."

Accusations believed

Time was when "scientists were independent, self-sacrificing, internationally-minded, devoted only to truth, hostile to any form of secrecy, indifferent to wealth and prestige."

Yet two recent reports by the Australian Academy of Science (on the Concorde and on DDT) were accused of whitewashing the government. Prof. Passmore's point was not merely that the accusations were levelled, but that they were widely believed.

"In government and industry, science has lost, too, its old reputation for open, public discussion. Much of its work — often on matters of great public concern — is now secret." And the powerful, Prof. Passmore reminded us, are enamoured of secrecy.

It was relatively easy, Prof. Passmore said, to build up a picture of the contemporary scientist as a mercenary, prepared to serve any master who would build him his machines.

Scientists, too, "have been tempted to blur the distinction between science and technology, exaggerating the technological consequences of their theoretical investigations".

And what's more, he said, getting it both ways: "dissociating themselves — as no responsibility of theirs — from the sort of technology men now find abhorrent, while claiming credit for the technological achievements men still admire".

Nevertheless, said Prof. Passmore, that picture was far too gloomy.

Some independence survived: funds were granted to bodies whose decisions were not influenced by government; the universities themselves, though largely funded by government, enjoyed a high degree of autonomy — more than many critics thought.

Ecological problems

Our ecological problems had caught up with us because science was too disciplined — unwilling to cut across specialities. "We should certainly have had earlier warnings about the calamities to which our technologies were leading us," he said.

Nevertheless, more recently, "it has been the scientists who have warned us of our fate, if we try to continue our present course".

On the "disestablishment" of science, Prof. Passmore "would like to see a situation in which pure science was supported by the government, in the manner of the arts, purely and simply as a creative activity". Technological innovations would then be thought of as a by-product, not as a dividend.

Talking about the one-time marvels of science, and the imaginativeness of science, and, on the side, the poet's abandonment of the field that saw a distant galaxy as a twinkling star, or the rainbow as a sign in the sky, Prof.

Passmore made the point that the science fiction writer had in part taken the poet's place. (The increasing gloom of science fiction, he says, is a striking manifestation of the revolt against science).

In its imaginativeness over the last few centuries, science had suffered from its own successes: "Scientific innovators have made it unnecessary for the beginning scientist to exercise his imagination: we have an immense variety of principles and practical procedures that can be safely adopted as a mode of solving problems.

Science in school

"Indeed there is some evidence to suggest that school courses can attract quite the wrong sort of person into science — unimaginative boys and girls who like routine — while at the same time deterring the imaginative."

And of course the scientist insists on abstraction on generalisation, on seeing the individual as a member of a reference class.

Not that Prof. Passmore saw anything politically sinister in that, but the revolt does. The trouble with abstraction was that science could not in general tell people what they most desperately wanted to know — about themselves and their future: predictions.

"The revolt against science is, in part, a refusal to admit that fact," he said.

Now for the home work.

Prof. Passmore developed the notion of "the demand for immediate and absolute gratification, which is all-pervading, which cuts across differences in life style".

Slow investigation

Sometimes it expressed itself in violence; sometimes in an absolute disregard for the future; it was the principal source of crime. It was no less reflected in the preference for the journalistic quick-study over the serious investigation.

After decades of delayed gratification (the depression, the war), a reaction was only to be expected.

Yet, Prof. Passmore insisted, the lover of truth could not expect instant gratification. The scientist, the historian, the philosopher was committed to a slow and disciplined investigation.

Here again was the revolt against science, against the very idea that truth could be arrived at by disciplined, critical thinking.

And against the old master-apprentice, teacher-learner relationship, implying in the revolt that the master knows no more than the apprentice, the teacher than the learner.

But in science, Prof. Passmore said, no other relationship was conceivable; the scientist obviously knew a great deal more than his pupils.

And what about the great body of scientific knowledge, not only accumulated, but often enough thrown out by better knowledge?

But this, he said, was a tradition and tradition was a threat to those seeking instant gratification.

Prof. Passmore wound up by saying: "The attack on disciplined thinking, the revival of occultism (with its doctrine of 'hidden truths' to be revealed by magical means), the demand for instant gratification in every area of human life, the rejection of the idea of learning, of discipleship — these, I confess, fill me with horror and dismay."

La Trobe establishes chair on art theory

Mr. Peter Tomory has been appointed to the foundation chair of the History and Theory of Art at La Trobe University. Mr. Tomory who has an M.A. in art history from the University of Edinburgh is at present Curator at the Bingham Museum of Art in Sarasota, Florida.

Mr. Tomory's research has revolved around the desire to find out why certain themes, modes, conceptions and theories occupy artists during a given period. The pursuit of this sort of understanding involves study in relevant literature, philosophy and natural sciences, as well as the social and historical background. Mr. Tomory feels that this approach has as much importance as the traditional study of stylistic analysis.

Mr. Tomory will take up his position on 1 December, 1972.

SEMESTERS DISCUSSED BY POLITICS STAFF, STUDENTS

About 100 politics students and a handful of staff attended the meeting on October 23 to discuss the introduction of semesters into the politics department.

Three main points emerged from the meeting, organised by the politics staff-student committee:

- Semesters could upset the teaching of politics.

- Staff and student work loads were considerable and were detrimental to a proper staff-student liaison.

- If students want to oppose semesters they must organise committees, gauge opinion and present submissions to departments.

Lecturer Harry Redner argued against semesters. Semesters, he claimed, were best suited to specialised technical subjects where teach-

ing could be done thoroughly and quickly.

In politics it was preferable for staff and students to have a year-long course where ideas could be more properly developed and discussed. The tendency of semesterised teaching would be to break up continuous discourse into small goblets of digestible information.

The existing impersonality between staff and students, which was unfortunately inevitable in an institution the size of Monash, would become worse. Semesters would mean the same amount of lectures but tutorials, where a more personal relationship could be developed, would be cut, he said.

Mr. Redner went on to criticise the type of student politics at Monash over the last few years. "I have opposed semesters for the last two or three years, but not once did I get any student support," he said.

"You were too busy putting through revolutions and you forgot about the simple things that affect your existence. You had your heads in the clouds with Mao and Che and forgot what was happening under your feet."

Two solutions

Mr. Redner said two things could be done to oppose the introduction of semesters; one in the short term, the other in the long term:

- Work for change in departments already under semesters; lobby for the idea of sequential units, related but not overlapping.

- For the future appoint student committees who would be responsible for examining semesters, eliciting opinions, and making strong representations to departments. He felt success could well be attained

by this means. But, said Mr. Redner, don't do anything to rile the departments — "this is not the sort of activity comparable to fighting in a revolution."

Dr. Alastair Davidson, senior lecturer in politics, said that although he originally opposed semesters, he now favored the system.

He said that at the present the whole year was taken up with an endless procession of administration, assessment and paperwork.

Politically acceptable

Given what was politically acceptable or possible within the institution, he believed that semesters were a better form of teaching.

Dr. Davidson felt he could be a better lecturer if in one semester he could prepare lectures and do research. If the choice was between a year of being "run off my feet" and of teaching in one half of the year and "contemplating" in the other, he would choose the latter.

Environmental course

The Professorial Board has endorsed the legislation to introduce a two-year masters degree in environmental studies.

The course still has to be approved by Council. Professor J. Warren, the head of the zoology department, hopes that, if approved, the course will be offered next year.

The course will be open to students from a variety of disciplines after completion of their first degree. It could be taught by a unit system with sufficient breadth to include units requiring little scientific background.

Studies in resource management, environmental psychology and man and the environment, are examples of such units.

The course will be two years full time and will include a research project in the second year. For further information on the course, apply to Professor Warren, ext. 2630.

European visit

Mr. D. C. Muecke, Reader in English, has recently returned from a brief visit of Europe. In Cambridge he read a paper ("The Communication of Verbal Irony") to the Twelfth Congress of the International Federation of Modern Languages and Literatures; in Bucharest he read a paper ("The Aesthetics of Irony") to the Seventh International Congress of Aesthetics.

Holiday pantomime

The annual pantomime at the Alexander Theatre next January will be "The Glass Slipper"; like "Peter Pan" and "Pinocchio" before it, "The Glass Slipper" will be directed by Marie Cumisky.

Geraldine Morrow, who recently appeared in "Charlie Girl", will play the part of 'Cinderella.'

The sets for "The Glass Slipper" have been specially designed by Laurie Lane, the stage director of the rock opera, "Godspell".

There will be two performances daily, 10 a.m. and 2 p.m. (only 2 p.m. Sats.) from Jan. 3-27. Tickets are \$2 for adults and 80 cents for children.

Dr. Logan Francey, senior lecturer in physics, has been appointed director of the Alexander Theatre Guild in place of Gordon Troup, reader in physics, who leaves this month for 12 months study leave in Europe.

Children's party

The Monash Women's Society will hold its annual children's Christmas party in the Vice-Chancellor's garden on Saturday, December 2 from 3 p.m. to 5 p.m.

A wide variety of entertainment will be provided. All children of university staff are welcome. Charges: 60 cents per child; maximum of \$2 per family; children under one year, free of charge. Apply to Mrs. M. Coates, c/o Dr. D. W. Coates, physics department, enquiries 232 7540.

Theatre manager

Max Bartlett, who took leading parts in a number of Alexander Theatre plays over the last two years, has been appointed theatre manager at the University of Western Australia. At Monash Max appeared in Othello, Richard II and Peter Pan.

This is the last issue of Monash Reporter for 1972. Publication will resume in Orientation Week and any contributions for next year should be forwarded to the editor, Ian Anderson, in the Information Office, first floor, University Offices (phone ext. 3687).



which was set up a few years ago by Doug Ellis, Deputy Warden of the Union.

Under this scheme, a sum of money is put aside for use by a student with an imaginative idea which falls outside the normal framework of the clubs and societies.

"There are no boundaries and no restrictions in the variety and type of projects which can be suggested," Doug Ellis explained.

"It's up to the student to put a good case up to the Board."

He said that among the "imaginative projects" financed so far were the building of a hovercraft, a trip to Western Australia to help aborigines and films like "Black Fire".

"Black Fire" will be shown to the television stations and Mr. McGuinness is hoping that it will be screened.

He said that the film was available for hire with a guest speaker at a cost of \$30.

With the exception of Mr. Bartfield, all the film "crew" were aborigines.

"The reaction to our premiere was good despite some obvious technical weaknesses in the film," he said.

"I believe that it marks an important stage in developing the aboriginal consciousness."

—by Mietta O'Donnell.

TWO scenes from "Black Fire". Above, the Black Moratorium march in Bourke St., and below, one of the march organisers, Bert Williams.



Diary of events

NOVEMBER

- November 2-20: Ballet — Making a Ballet, with Ballet Victoria. Cinderella or Coppella, at 10 a.m. and 11.30 a.m. each week day in the Alexander Theatre. Limited seats available for the public. For reservations, phone Ballet Victoria, 347 5302.
- 4-11: Play — "Oh, What a Wonderful War", by Burwood Teachers' College. Union Theatre, 8.15 p.m. nightly except Sunday. Admission: adults \$1.75, students \$1. Ticket secretary, Pam Howell, 82 7521.
- 17: The Australian Indonesian Association of Victoria. Trance music and

drama in Java, including a live Javanese dance performance and an illustrated lecture by Dr. Margaret Kartomi, senior lecturer in music. R.8, 8 p.m., admission free.

21: Monash Women's Society — 10 a.m. Vice Chancellor's House, speaker Bill Hick, a potter who conducts classes at Monash. All staff wives and women members of staff welcome.

22-25: Play — "Lysistrata", by Waverley Theatre. Union Theatre, 8.15 p.m. nightly. Admission \$1, including refreshments. For reservations, phone Mrs. R. L. Verso, 277 1200.

23: Recital — Twentieth Century sonatas for violin and piano, by Mrs. Helen Blackmore, violin, and Diana Bresciani, piano. Sponsored by Monash Department of Music. Alexander Theatre, 8.15 p.m. Admission free.

23-29: Chemical Engineering Lectures — an intensive course of lectures, tutorials, laboratory work, demonstrations and films on Rheology and Non-Newtonian Fluid Systems for those in academic and industrial fields. Begins 9 a.m. in Department of Chemical Engineering. Registration fee \$120. Inquiries ext. 3420.

Postgraduate Lecture Course — Selected Topics in Minerals Processing — Pyrometallurgy, sponsored by Department of Chemical Engineering, primarily for graduates in industry. Begins 9 a.m. in Department of Chemical Engineering. Registration \$140. Inquiries ext. 3420.

30: Concert — St. Andrew's Day Variety Concert organised by the combined auxiliaries of St. Andrew's Hospital. RBH, 7.45 p.m. Admission: adults \$1.50, children \$1. Tickets from St. Andrew's Hospital, 63 4411, or RBH booking office, 544 5448.

DECEMBER
December 3: Free Concert — National Boys' Choir, presenting Early Polyphonic Christmas Carols, Australian carols, "Unto us a Child is born", traditional carols. RBH, 2.30 p.m.
13-19: Re-enrolments, RBH.

LEFT: The \$28,000 behaviour-environmental laboratories in the Jock Marshall Zoology Reserve (Snake Gully) are nearing completion, and will be ready for research and teaching next year. The laboratories will contain observation booths equipped with one-way glass to enable research workers to study the animals undisturbed.

"Who discovered Australia?"
The aboriginal fourth graders answering the question were no different from white schoolchildren: "Captain Cook" was the majority reply; a few said "Christopher Columbus."

To Bruce McGuinness the answer was a tragedy: the aboriginal children had forgotten their identity, their heritage; it was their ancestors who discovered Australia, not the white man's navigator.

It is, says Mr. McGuinness, an example of the misconceptions taught by the education system.

The question and the answer are a sequence of a film recently made by Mr. McGuinness, an aboriginal sociology student, and Martin Bartfield, a final year law student.

The 23-minute documentary film, "Black Fire", was premiered at the Union Theatre last week. It was basically financed by a grant through the Union's "imaginative projects" scheme.

Mr. McGuinness, who is in the first year of an arts degree at Monash, said the film aimed to show the attitudes held by young aborigines in an urban situation.

It was shot in Melbourne and features scenes at an aboriginal football club, the July Black Moratorium march and at a session of a 'black study group'.

Mr. McGuinness explained that these study groups were a means for aboriginal children to "learn about their aboriginality, to learn more about their own culture and to shake off the 'jackie-jackie' stigma."

"The traditional tribal values have a lot to offer kids in modern, urban society," he said. "I mean the aboriginal ethos of brotherhood and of believing that man is of far more importance than material possessions."

Mr. McGuinness said studies had shown that aboriginal children living in the city, and attending city schools, still related to each other as aborigines. "They will help each other in ways no one else will."

Mr. Bartfield is an amateur film maker. Mr. McGuinness before he started knew nothing about film making; now he would like to make a full length feature film on aboriginal massacres.

"But," said Mr. McGuinness, "we will need to have a much bigger budget than the \$600-odd we used for 'Black Fire'. We had to scrimp and borrow and use second-rate materials and equipment."

For "Black Fire" he first applied to the Ministry of Aboriginal Affairs for a grant. "They thought it was a pretty hare-brained scheme and refused at first but later gave us \$180," he said.

A grant of \$400 was made under the "imaginative projects" scheme

