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UNIVERSITY OF CANTERBURY 1 6 AUG 1983

Chronicle

Several Treasures Among Gift Of Books From Anglican Cathedral

A valuable collection of 287 old and rare books has been given to the University Library by the Dean and Chapter of the Anglican Catherdraf. The volumes had been housed for nearly 100 years in an upstairs room over morth porch, now the Pacific Chapel, opposite the war memorial in the Catherdraf Square.

The books were included in a collection which was sent from Oxford, England, to Christchurch College during the 1850s, when it was in Lyttelton. Half the books were later sent to the Cathedral from Lyttelton, the other half to Christ's College.

Most of the titles date from the 17th and 18th centuries and include sermons, scripture commentaries, church history and some works of Anglican application One interesting discovery is a copy of the "Royal Version" of the Authorized Version of the Bible, or the King James version, of 1611. It is a very large volume, no doubt designed for use in churches. Unfortunately, the binding of this copy is in very bad repair, the volume lacks its Old Testament title page. and about half of the New Testament has been badly eaten by rats or mice or both. However, the volume can be repaired and restored, and it is most gratifying to receive a first edition of what is perhaps the world's single most famous book.

Another find is a splendid 18th century illustrated book, John Dart's History and antiquities of the Cathedral Church of Canterbury (1726). Included in the Collection are several volumes from the two early to mid-there and Library of the fathers and Library of Anglio-Catholic modoly. These series were very influential theology. These series were very influential processing and the other founders of the Cyford Newment. the idea and execution of the planned colony of Canterbury owed much to this Tractarian inspiration.

A work from the modern period is a the borderl 14-volume set of Lives of the saints by the psychology.

Victorian hymn writer, Sabine Baring-Gould. There is a 1705 Hebrew edition of selected books from the Bible, published in Amsterdam, and a unique album, formerly bellonging to Henry Harper, signed 1890, and containing 71 19th century photographs of illuminated pages from the ancient choral and psalter books that were formerly used in the cathedral of Siena.

The collection as a whole, containing several treasures and many pre-1800 imprints, makes a significant addition to the Library's holdings.

Public Lecture By Canterbury Visiting Fellow

Professor Don Locke, a graduate of the University, who is a Canterbury Visiting Fellow in the Department of Philosophy and Religious Studies, will give a public lecture on Monday next, 8 August, at 8 p.m. in Room A3.

The title is: Why Don't They Behave? the Bases of Moral Behaviour.

Profesor Locke, whose parents live in Christchurch, graduated M.A. with first-class honours in philosophy and then went to Oxford, where he gained a B.Phil. Until 1988 he lectured in philosophy at the University of Newcastle-on-Tyne and then be joined the University of Newcastle-on-Tyne and then be joined the University of Newcastle, where he has been successively a senior lecturer, reader and professor. He has also been a visiting professor at Aucokland, Wisconsin, the American University, Washington and

Professor Locke is the author of Perception and our Knowledge of the External World, Myself and Others, Memory, and A Fantasy of Reason: the Life and Thought of William Godwin.

His current research concerns topics on the borderline between philosophy and psychology.



Miss Jean Herbison, who was reelected Chancelor of the University for a three-year term at the July meeting of the University Council, Miss Herbison will be retiring as Associate Director of the Christchurch Polytechnic from the end of the year and hopes to devote more attention to the position of Chancellor—"not that I intend to live in," she said amid Jauchter.

Mr C. F. S. Caldwell was re-elected Pro-Chancellor

In Person

Miss Mary Patricia Shanhan sat through a meeting of the University Council last month before receiving her reward—an M.A. degree in psychology conferred by the Chancellor, Miss Jean Herbison.

It was the first time, as far as administrators' memories went, that a person has attended a Council meeting to hear a degree conferred.

In conferring the degree (M.A. with second-class bonours, division 1) Miss Herbison offered the warm congratulations of the University Council. "We are delighted that you took the initiative to come along to this meeting to hear the degree conferred," she said

Miss Shanahan, M.A., was applauded by the Council.

Mr R. N. Kennaway has been reappointed Head of the Political Science Department for a three-year term beginning on 1 December.

Dr R. J. Berry (English), Mr C. E. Manning (Classics) and Mr H. L. Wrassky (French) will be attending the XX11 Congress of the Australasian Universities' Languages and Literatures Association in Canberra at the beginning of September.

Dr R. M. Allen (Chemical and Process Engineering) will present a paper at a seminar on Advanced Process Control Methodology and chair a session at the 11th Australian Chemeca Conference in Brisbane 3-9 September.

Dr J. Bercovitch (Political Science) will present a paper at the British International Studies Association annual conference in

U.G.C. Appointments

The following appointments and nominations have been made by the Vice-Chancellors' Committee: James Cook Fellowship Selection Com-

mittee: Dr D. R. Llewellyn (Waikato) and Professor S. M. Mead (Victoria).

Research Committee of the University Grants Committee: Professor J. D. McCraw (Waikato), Professor R. H. M. Langer (Lincoln). Professor D. D. McGregor (Otago). Professor J. K. Svers (Massey from 1 January 1984)

Curriculum Committee of the U.G.C. Professor J. A. Ritchie (Canterbury), Professor A. P. Mulcock, Lincoln (until 31.12 84), Professor G. S. Fraser, Massey (from 1 January 1984), Professor P. N. Tarling, Auckland.

New Zealand Library Resources Committee, Mr W. J. McEldowney (Otago). Central Institute of Technology Council,

Professor H. McCallion (Canterbury), Professor D. M. Paton, Auckland (Deputy). C.I.T. Pharmacy Advisory Committee,

Professor D. Perrier (Otago). University Entrance Board, Professor P.

N. Tarling (Auckland) nominated for a further term of office.

U.E.B. Subject Conveners: The following appointments were approved: Chemistry, Dr M. Carr (Waikato), Economics, Professor J. T. Ward (Waikato), Mathematics, Professor D. Vere-Jones, Victoria (until 31 December 1984), Associate Professor I. Reilly, Auckland (from 1 January 1985). Technical Drawing, Mr J. J. Ward (Auckland), Music, Dr J. Rimmer (Auckland), English, Dr R. B. Corballis (Canterbury).

Birmingham and has been granted leave from 7 December to 10 February.

Miss Jane Chart (Law) will be presenting a paper at the Australian Political Studies Association conference in Lindfield, New South Wales. She has been granted leave 28 August-8 September

Dr.J. R. L. Walker (Botany) will be attending the Third Congress of the Federation of Asian and Ocean Biochemists and visiting the University of Singapore while on leave 28 November-6 December

Visiting Historian To Lecture Here

Professor Austin Woolrych, a former Vice-Chancellor of the University of Lancaster and now professor of history there, will be visiting the University next week.

He will give four lectures in the History and English Departments (he is an authority on Milton's prose works) and he will also lecture on King Charles : A Case of Self-Destruction to the Historical Association on Tuesday 9 August at 7.45 p.m. in the History conference Room (Room 311)

The public is cordially invited to this lecture as well as to a lecture on Wednesday at 1 p.m. in the English Department (Room 104) on Milton, Cromwell and the Good Old Cause.

Professor Woolrych is a distinguished historian who has made major contributions to the study of English politics in the period of the English Revolution and the Cromwellian Protectorate. He is also a Milton scholar and edited one of the volumes of the Yale edition of Milton's prose works

His visit is supported by the British Council and the Vice-Chancellors' Committee

Subject Conferences

The following subject conferences have been approved by the Vice-Chancellors' Committee: English Language and Literature, University of Auckland, 13-15 February 1984, organised by Professor D. I. B. Smith. Accountancy, University of Canterbury, May, 1984

New Member Of **University Council**



Mr G. P. Ward, a member of the Lincoln College Council, has been appointed the Lincoln representative on the University Council in succession to Mr T. D. J. Holderness, who retired two months ago after 21 years' service.

Mr Ward, who is 60, was born in England and educated at Clifton and Cambridge (M.A. mechanical sciences). After three years and a half in the Fleet Air Arm during the Second World War he taught for 10 years in England, South Africa and New Zealand (at Christ's College)

With his family of six he went fruit farm ing at Loburn, North Canterbury, in 1956. He was Canterbury director of the New Fruitgrowers' Federation 1973-1982 and national president from 1978 to 1982. He also served on the National Fruit Research Committee, the Apple and Pear Prices Authority and the Horticultural Export Development Committee He sold his orchard this year.

At Lincoln he is chairman of the management committee of the New Zealand Agricultural Engineering Institute and chairman of the Fruit Tree Coordinating Committee.

For six years Mr Ward served as the University's representative on the Bangiora High School Board and he was chairman of the Rangiora Adult Education Committee for 12 years.

His interests include reading, especially history, tramping, tennis and bird-watching.

Student Labour For Kiwifruit Harvest

Changed Terms Opposed

A solution to the shortage of casual lahour predicted for the Bay of Plenty and Waikato kiwi fruit crop in future could be more easily found among the unemployed than among students, the Vice-Chancellors' Committee believes.

Commenting on a request from the New Zealand Kiwifruit Authority to the University of Waikato to consider an extension of the May university vacation for harvesting kiwifruit the Vice-Chancellors' Committee agreed that prima facie the proposal appeared sensible, but closer consideration cast considerable doubt on its wisdom.

The Kiwifruit Authority, in its proposal, said extension of the May vacation would have two objectives:

To help meet the seasonal labour with specific reference to the Waikato than gains. and Bay of Plenty

To provide university students with additional vacation employment opportunities, in a situation where it has been increasingly difficult to obtain holiday employment during the long vacation in December, January and

The kiwifruit industry, at present still centred in the Bay of Plenty, has been experiencing a very rapid rate of growth. Exports of fresh kiwifruit in 1971 were only a little over 200,000 trays but by 1981, they had risen to 6.2 million trays, a 31-fold increase in just ten years. Kiwifruit is now the single largest horticultural export earner in New Zealand, surpassing even apples, and export production is projected to continue its dramatic growth to something of the order of 60 million trays by 1990.

The Kiwifruit Authority has been implementing a number of forward planning studies to examine the implications of the industry's growth. One of its concerns has been the availability of labour to meet the increasing requirements of the industry and, more specifically, the supply of seasonal labour during the May-June harvest. Seasonal labour requirements in the Bay of Plenty are projected to increase from about 4.000 this season to 19.000 by the end of the decade. In the Waikato, a 15-fold increase is estimated in the number of seasonal workers between 1983 and 1990.

The Vice-Chancellors' Committee saw numerous disadvantages in the proposal. First, there would be major disadvantages for Waikato in moving independently

Outside the established systems of terms and vacations which coincide to a large extent with those in other universities, teachers' colleges, technical institutes and the school system.

Apart from the large number of scholarly conferences, meetings, tournaments and so on that are held at these times, school vacations are used by many organisations to hold conferences which are a vital source of revenue for university hostels. In addition the current pattern of study and assessment would be completely disrupted by a major break (perhaps 6-8 weeks) in the middle of

the academic year. Not only are there disadvantages for teaching and learning, but there may be additional disadvantages for the financial position of students. While many students have had difficulty in obtaining vacation employment the majority found a job and many of these jobs coincided with the long summer vacation. If that period had to be reduced to allow a longer break in Mayrequirements of the kiwifruit industry. June there could be overall losses rather

Nor is it clear from the Kiwifruit Authority's research to date just how attractive a job would be to students. If present patterns of employment continue, the jobs would be mainly for women as three-quarters of the men involved are either working owners or

permanent Presumably this reflects the low paid nature of casual work which at present relies on married women between 25 and 49 with family commitments

At present there is neither provision for transport nor accommodation for casual workers coming into the area. On Labour Department estimates there are only about 830 local university students from the Tauranga district. On the other hand there are much larger sources of potential casual labour in the region, including over 2000 local registered unemployed

Finally the long-term projections for casual labour demand depend on an assumption that the present labourintensive nature of picking, grading and packing will continue unchanged. Given the anticipated increased production in kiwifruit by 1990, it is difficult to believe that there will not be major innovations in harvesting techniques, the committee said, In the meantime the solution to casual labour shortages in the industry could more easily be found among the unemployed than among the student population.



Who was the Hubert whose memorial tablet near the Mathematics Department is pictured above? The guessing is that he was a cat which, like the feline Tom Skinner which

haunted the Student Health Service some years ago, so ingratiated himself that he lives in memory long after exhausting his nine lives

Details of Hubert's history would be welcomed by the Information Office to add to the record of all the odd features of the campus.

last month.

Ingram, in the 1983 Hopkins Lecture

The black magnetic sands attracted interest from the time of the first European explorers and pakeha settlers. Captain Cook noted the deposits on his voyage in 1769, but it was not until the 1840s that the first attempts were made to smelt the sands. In 1848 a Mr Perry erected a small furnace in the cleft of a cliff near New Plymouth and although he managed to smelt a small quantity of iron, he experienced great difficulty because of fineness of the sand blocking the furnace draught.

This was the beginning of a series of trials and tribulations over the next 120 years. Mr Ingram said. "The early history of iron and steelmaking in New Zealand reads like the script of a fanciful Hollywood movie. It contains intrique and double dealing. bankruptcies and acrimonious litigation, political manoeuvering and bureaucratic meddling, as well as the obligatory roques

Numerous serious attempts to smelt the ironsand followed. Perhaps some of these innovations had been encouraged by a newspaper advertisement in 1857 in which Josiah Flight offered a reward of 150 pounds to the person or persons "who shall satisfactorily prove to three individuals that they have produced from the ironsand of the Province merchantable cast or wrought iron, which in its production can be continuously, successfully and profitably carried on.

One prospectus in 1883 proclaimed that bar iron could be made more cheaply from ironsand than from any other ore and predicted that since the supply of ironsand was unlimited, New Zealand should become an iron producer of world significance. Although this company failed, like most of its predecessors and all but one of its successors, N.Z. Steel like to think the promoter saw a glimmer of the truth. So too, did Snelus in 1896. Having puddled pig iron into horse shoes, a hat and coat hook and a pie dish, he said that iron could be made for 50 shillings per ton and boiler plate for six pounds 13s 4d.

One of the most promising of the early attempts was in 1883 when the New Zealand Iron & Steel Company was set up with a capital of 200,000 pounds on a site in Onehunga. The founder, a Mr John Chambers, had seen a patented direct reduction furnace in the U.S.A. which, it was claimed, would smelt ironsand and convert it to wrought iron. The patentee lent the services of one Mr Jones, an ironmaster, and on 8 February 1883, in front of assembled dignitaries, Mr Jones puddled a small quantity of iron from ironsand that had been heating in the furnace overnight.

Unfortunately, a few days later, Mr Jones accused a fellow card player of cheating. The other player retaliated, "You Sir." he said, "have cheated in a much bigger way. You hoodwinked a crowd of Auckland businessmen into believing that you made iron from ironsand when you'd actually used iron-ore." In the resulting quarrel, the American ironmaster shot his opponent and this ended for all time, the hopes of the Onehunga ironworks.

'Why then, with all this interest and with such an abundance of ironsand on the west coast of the North Island, was there no successful iron-based steel industry until so recently?" Mr Ingram asked, "Why had the ironsand resource not been developed and why had all th early attempts failed? The problems, of course, are attributable to the nature of the ore-both its physical and chemical characteristics

"The fine ironsand concentrate particles could not be used in the natural state in a blast furnace. The pioneers attempted to overcome this problem by making brickettes of ironsand concentrate with clay binder and pulverised coal. They were prefired and then fed to the blast furnace with limestone and coke. After short periods of operation, however, the pores of the furnace again blocked and the process stopped. By this time the operators had either lost their money or their enthusiasm or both, and it was not until some years later that Hesketh, who built a 15 m high blast furnace, identified the cause of the problem.

"He studied the accretions which built up on the hearth of the furnace and gradually prevented tapping, and recognised the beautifully intense colours-deep pinkyblues and coppery golds-as titanium carbides and nitrides, now known in blast furnace circles as the grizzly 'titanium bear'.

"It was later recognised that to avoid this problem and also to use our subbituminous coals, the reduction process must take place in the solid phase, that is, without melting it, and therefore the successful utilisation of the material had to await the development of the direct reduc-

'Late in the 1950s, a number of prereduction and direct reduction processes were developed and it was recognised that these could well provide the answer to the utilisation of ironsands. There was a rush by various private interests to obtain prospecting and manufacturing rights but of course there was only room for one enterprise and the Government of the day, unable to choose, decided that there should be a full and detailed investigation.

New Zealand Steel Limited was born as a public company with Government backing as a result. Thirteen years ago it started its iron and steel plant at Glenbrook. It was a very shaky start, but things are going well now, Mr Ingram said. Most of the early difficulties were associated with the reduction kiln. It was a world first and therefore no previous commercial experience existed On top of the normal problems of starting a big enterprise, on a green field site, with new and unblooded systems, a raw organisation, new people who had not previously worked together or even seen molten metal, there was a new technology which did not work.

"The struggle to solve the problems were both long and arduous," he said. "In the early days, we fed the kiln with unfired ore pellets and these broke down to the talcum powder size black grains from which they were made. Most of it went out with the waste gas and was scattered far and wide over the countryside. The rest was accreted as massive iron lumps on the walls of the kiln. Those were the days, thank goodness now over, when we had to keep our black cattle on the roadside paddocks of our farm to avoid the embarrassment of having paddocks full of blackened sheep for all to see.

'In desperation, one of our younger innovative engineers later suggested we should feed unground primary concentrate to the kiln, something which overseas experts said would never work. We confounded the critics, for this change allowed us to eliminate many sequential production steps, it saved costs and energy, improved vields, and largely eliminated our environmental problems. More importantly, it greatly improved plant availability.

'This change meant that we are, in effect, feeding the kiln with a natural small pellet, an ironsand concentrate grain of around 120 microns, which are closely sized, spheroidal in shape and cannot break down further. Since this breakthrough. much has been achieved. Our workforce and managers have advanced their skills and we've climbed the learning curve of the various production units. Plant and processes have been modified and investments made to increase capacity.'

Mr Ingram said the technology used in a number of areas is at the frontier of knowledge and the company's innovations

Productive, Prosperous Future

are recognised throughout the industry. Innovation is a key to its success. If it failed in this area, it would not succeed. It was the ability to innovate which made the export of ironsand concentrate from the Taharoa deposit economic.

The company had also been innovative, at least compared with other New Zealand companies, in its relationships with the workforce. The company was extremely egalitarian with one subsidised cafeteria for all, one superannuation scheme (which the company subsidises on a better than 2 for 1 basis), one staff housing policy, one health insurance scheme, and one employee share purchase scheme for all employees. Its Common Interest Programme increased the opportunity of workers to participate, not unlike the quality circles used so successfully by Japanese industry. Each logical working group has a committee which considers, accepts or otherwise, suggestions for improving the quality of working life and productivity Mr Ingram said.

A productivity base was established by a detailed regression analysis of the significant inputs and outputs over a preceding period, and changes from this base are assessed monthly in dollar terms. These dollars (depending whether the variance is favourable or unfavourable) are either debited or credited to a pool and the credit, if any, at the end of the month is divided equally, half each to the company and to all employees. "The results are published and displayed for all to see and we all get an equal share of the employees' half, whether or not our own group has a positive or negative contribution to the pool," he said.

"Hence the term, Common Interest. I think it is not just coincidence that since we introduced this scheme, (the introduction of which was the unanimous wish of all participants and the company) our safety record has improved by a factor of 3 and there has been a similar reduction in lost time due to industrial relations problems.

"Our most significant achievement by far, however, has been the establishment beyond doubt, of the economic and technical feasibility of converting New Zealand's low grade iron ore and low ranking coal into iron and steel. It is this achievement which has given the company confidence to embark on its major development programme, for it was always envisaged that the company would become an integrated works, supplying the bulk of the nation's flat steel requirements. The obtaining of Government approval to proceed, however, became a marathon of manoeuvring, an endurance test of our determination over a three-year period," he said.

Approval for the expansion was given in November 1981 and in the next week the

Prime Minister turned the first sod and there were 30 earthmoving machines on the site. Since then the contractors had moved over a million cubic metres of earth, placed 3600 piles, poured 22,000 cubic metres of concrete, about half the total, and 20,000 tonnes of plant had arrived on the site.

The project involves a five-fold increase in the company's crude steel-making capacity-from 150,000 tonnes per annum to 750,000 tonnes-and to achieve this it will add four new kilns and multiple hearth furnaces, two big iron-melting furnaces and an oxygen steel-making vessel and casting

Mr Ingram said New Zealand Steel was pioneer breaking new ground, doing things which had not been done before and, as in the pioneering days when engineers played an important role in building the nation's infrastructure, so too had members of the profession been a vital force in the company's development. The 46 engineer-

ing graduates employed at Glenbrook, including four covered all disciplines and performed a wide variety of tasks, depending on individual experience, personality and aspirations. Thirty per cent were senior managers in fields as diverse as marketing. data processing, research and production. There was no doubt that the sound basic engineering education provided by Canterbury and Auckland, and the clear analytical thought it required opened many doors of opportunity.

"Like all pioneers, we've suffered our period of corporate privation-such as losing nearly all our shareholders' funds-but with determination and by innovation we've grasped opportunities, overcome obstacles, become successful." Mr Ingram said. "I think we're recognised as such by our shareholders and hopefully nearly always, by our customers, by our neighbours and our employees."

Harry Hopkins-The Qualities Of A Pioneer

Mr John Ingram, managing director of New Zealand Steel Ltd., believes it is an honour to have his name associated, even somewhat tenuously, with Professor Harry Hopkins, "a man of such distinction"

Beginning the 1983 Hopkins Lecture last month, Mr Ingram said: "I did not know Professor Hopkins as a student, graduating a year before his appointment to the chair of civil engineering at Canterbury, but I know him as a friend and, along with my contemporaries, and colleagues of all ages, admire his outstanding ability as an administrator, an academic and as a truly professional engineer.

"To me, Harry Hopkins's life's work embodies the qualities for success and those on which the future success of our country depends. He has demonstrated integrity, a capacity for hard work, concentration, vigour of mind and imagination and the courage to avoid the temptation of the easy compromise.

'Harry had all the qualities of a pioneer in building our School of Engineering to its current position of pre-eminence. He has demonstrated the ability to innovate, to think of new ways around problems.

"These were the qualities embodied in the first few generations of New Zealanders—qualities which we must recapture if, as individuals, organisations or as a nation, we are to succeed," Mr Ingram said.

Ohrlna:k Ow 3nbb7s"h?g 2?b raI 2?v;nbhvbp?h na 1brc*g £L99.£4P9g v;robh yb?sa:c* ?hvs,,halhlk 3w H?nhlcrhalh?g ir?rtr::ns ybpInheg v;robh?e £g \$0;ne mss7 ;re mhha ocrvhl sa ?heh?th na b;h zrna Nnm?r?* w

The School of Fine Arts has a wayward fw =s* "nb; r mre7hb sC C?pnbg vwEPWPw typewriter, even though it is a mod con electric machine. It has defied the supplier's technician, who made many calls after a minor fault was found, and now produces texts that would baffle the best cipher peo- Mw =rvv; pehg vwEPWP

ple the CIA or KGB could produce. The machine's version of a slide list for an Art History lecture is shown here. The typist kept well clear of the exclamation mark key because the typewriter has a rather endearing habit of beginning !w zrCChn =r?mh?nang vwEPWL sentences with an exclamation mark.

\$rl ":sch

Sml 'hbrnc sC bs?es ral mre7hbw

Sri 3:sch

\$m} 'hbrnc sC ebncc.cnCh ral ;rale

Bw zr?* zr:Irchahg vwEPWPw

A decline in first-year enrolments is of Education did not hold out much hope of predicted by the Liaison Officer (Mr T. H. McLisky) in his annual report to the University Council.

He said national figures showed a steady decline in the matriculation rate. In 1977 about 44 per cent of students with University Entrance matriculated within two years of gaining University Entrance. Last year the figure was about 38 per cent.

"This decline had, until recently, been compensated for by the rising number of pupils qualifying for University Entrance." Mr McLisky said, "If the matriculation rate and schools rolls continue to decline, it seems inevitable that first-year enrolments will also decline

Mr McLisky also noted that since 1979 the number of female candidates for U.E. has exceeded the number of males. Moreover, since 1974 the number of females gaining U.E. had exceeded the number of males gaining it.

In 1977, 1638 females and 1507 males gained U.E., 62.6 per cent of those who sought it by accrediting and examination. In subsequent years the figures, females first, have been: 1689 and 1560; 1711 and 1615; 1770 and 1544; 1725 and 1555; and last year 1728 and 1461.

Referring to the review of entrance to the University, Mr McLisky said the May 1982 meeting of the Universities Entrance Board reaffirmed support for the 1977 Steering Committee Report on entrance to the University. The Steering Committee proposed that the main point of entry to the universities should be Form 7 and that the entrance qualification be maintained at the present standard in the Bursaries examination. It was envisaged in the report that entry from Form 6 should still be available for able students (typically the top 20 per cent of Form 6 who qualify at present for the Tertiary Study Grant). If Sixth Form Certificate were to be the only award in Form 6 the Steering Committee proposed that a statutory and independent Board of Studies should administer the award.

The working party considering the Board of Studies proposals met in December 1982, but little progress was made because of differing opinions on the degree of independence of the proposed board. The autonomy of the chairman of such a board was also crucial, as teacher groups and the Entrance Board had always considered that someone from outside the Department of Education needed to be appointed, he said.

progress being made in the near future, Mr McLisky added. Accordingly the Entrance Board had embarked on major reviews of and History and English, though the latter curricula at Entrance and Bursaries level. Such reviews, normally carried out on a cyclic basis, had been delayed pending a resolution of the U.E.-Sixth Form Certificate

Accounting Popular

A rapid rise in the numbers of can-French, German and Latin entries were and History. noted by Mr McLisky.

He also noted a steady rise in entries in Art History, and recently in Classical Studies entries, a slow rise in Geography two had declined relative to the higher numbers sitting the examination, Pure Mathematics, Chemistry, Physics and Biology all showed entry increases, but only Biology had increased its share of the total number of Bursaries candidates.

Mr McLisky's report also showed a didates attempting Accounting, Economics similar trend in University Entrance subject and Applied Mathematics (Computing and entries over the 1970-1982 period-rapid Statistics) in the Bursaries Examination rises in Economics and Accounting balancover the last decade and a steady decline in ed by declining enrolments in Languages

Australian Universities Warned To Make Room For Women At The Top

Senator Susan Ryan, the new Federal Minister of Education, considers changing the male dominance of university employment structures a

Addressing the University Queensland's Academic Board, Senator Rvan said employment structures at universities had the same pattern as any large corporation or government organisation-that was, women at the most junior levels and the top levels exclusively male.

She said she had introduced Commonwealth sex-discrimination legislation, soon to be enacted, which would apply to employment practices in universities as well as other Commonwealth-funded organisations. She expected that the sex discrimination legislation would be followed up by affirmative action legislation which would also cover all areas of Commonwealth employment, including universities.

A member of Senator Ryan's staff said that affirmative action in this context could be taken to mean the development of a management plan that would address structural discrimination against women in the

Senator Ryan said she realised the implementation of affirmative action could be compromised by the fact that girls were discouraged from taking "hard option" subiects at secondary school, such as mathematics. The Government was trying to tackle this problem through the Schools Commission. But this did not account for all discrimination against women in academic institutions. Women were encouraged to Recent announcements by the Minister pursue the humanities, yet the career struc-

ture among humanities departments in universities did not demonstrate a dramatically changed situation.

In reference to assisting university research, she said that in liaison with the Minister for Science and Technology (Mr Barry Jones) she had developed a pre-Budget submission for consideration by the Cabinet which, if accepted, would allow 100 post-doctoral fellowships to be made available quite soon. This would be a partial implementation of the Government's preelection undertaking to fund 300 new postdoctoral fellowships in universities for research that was specifically related to the needs of the economy

If the Government hoped to stimulate the economy through high technology industries, it had to provide more opportunities for researchers to work in areas that would directly benefit the economy.

She said universities had a major role to play in the development of a democratic society. One criticism she had of universities in recent years was the lack of engagement by university people in major public debates. She hoped the different atmosphere created by the new Federal Government would encourage people in universities to become more involved in

Senator Ryan said that the Government wanted to reinstate education as a central area of government policy. In the past seven years, the role of education had been pushed to the periphery, in both the schools and tertiary areas. There had been a tightening up of funds for tertiary education and, more significantly, there had been a discounting of the contribution that tertiary education made to the economy.

A major retrospective exhibition of the work of Rudolf Gopas opened vesterday in the McDougall Art Gallery, only two weeks after the death of the artist, who for much of his productive life in New Zealand was a lecturer in painting in the School of Fine Arts.

Rudolf Gopas was undoubtedly the most influential of the artists who arrived from Europe at the end of the Second World paintings in which the somewhat barbaric War. He had a distinct leaning towards German expressionism which, if it was alien to his attempt to translate the vividness of the New Zealand painting at the time, later influenced many painters and particularly students. Indeed his familiarity with pre-war modern European painting was widely welcomed and he eventually had a profound influence.

Born in 1913 in Lithuania, Gopas was trained in painting at the National Art School in Kaunas. His six-year course was followed how to express intense feelings in their by study tours of various countries, including Germany, Italy, Latvia and Czechoslovakia. In the thirties he studied and worked in Austria for four years, which, he said, greatly broadened his outlook.

When he migrated to New Zealand in 1949 he went to Dunedin to work in the photographic laboratories of Coulls, Somerville, Wilkie. The work there, and later on his transfer to Christchurch, brought him into close contract with commercial artists working with the realistic techniques of advertis-

Any immigrant artist would have had difficulty in making a career in New Zealand-few native-born artists made the grade-hut Gonas set about doing so with quiet determination and courage. Although all his early work, up to the end of the Second World War, had been lost, he returned happily to painting and in Dunedin exhibited with the Independent Group, which included Colin McCahon and Doris Lusk among its members, and in Christchurch with the Group and the Canterbury Society of Arts

His work rapidly placed him in the front rank. On his appointment as a lecturer in the School of Fine Arts in 1959 he brought a depth of understanding of painting and painters that no New Zealand artist of the time possessed. The work and philosophies of Van Gogh, Matisse and Gaugin were examined and talked about as never before. Not only students, but staff also gained much from his conversation, in his inimitable Middle European accent, and from his acute powers of analysis. The diversity of viewpoint he brought to the School was clearly stimulating

The Goods approach to painting was intellectual rather than intuitive. In his early

days in New Zealand he was troubled by the harshness and rawness of the New Zealand landscape and the brilliance of the light after the maturity of European landforms and the diffuse light, but by the end of the 1950s he felt much more at ease in his new

The theme of a good deal of his work at this stage was harbours, with which he was familiar, and he produced a number of large colours, as he described them, represented landscape

He welcomed the breaking down of the rather obtrusive nationalism of New Zealand painting and painters about this time. It was replaced by a mix of regional and "international" work, Gopas influenced both. Non-objective imagery was strongly encouraged and his students discovered

work. Students like Tony Fomison. Philip Clairmont and Philip Trusttum thrived under a forceful teacher with piercing insights.

When he arrived in New Zealand one of his most treasured possessions was the optics for a six-inch telescope and he subsequently had an even larger telescope built. His astronomical observations inspired a series of paintings based on the galaxies. In his later years, after ill-health caused his resignation in 1977, he produced a number of graphic works with verse set within the complex images. He described the poems as saying in words what the paintings already contained. There was more than a touch of Blake about them.

Rudolf Gopas had numerous exhibitions and there are public collections of his work in Auckland, Christchurch and Dunedin, He will have a permanent place in the history of New Zealand painting.

The University appears to be fruitful ground for the growth of oxymorons. Since he issued a perhaps unwise invitation to staff to contribute campus examples, the editor's mail has swelled with the following offerings:

Acting Head Library Silence Mechanical Engineer Distance Teaching Students' Union

Extension Studies Staff Club (no Ethel, that is not the University Mace) Journalistic Integrity Common Room Contract Research

Editorial Judgement

Administrative Staff Training

As a variation on the general administrative staff training course in 1984 to be held at the University of Canterbury, the Vice-Chancellors' Committee has approved a proposal from the Registrars' Conference that a two-day workshop on Academic Records and Transfers be held in May 1985. The emphasis of the workshop will be on procedures rather than policy and will concentrate on expediting the maintenance and movement of transfer documents within the university system as a whole. It is possible that this more specific problem-centred workshop might set a future pattern of alternating the general training course with courses on particular aspects of university administration.

The link with Australian staff training courses will be maintained by the attendance of Mr K. W. Salmon (Auckland) at the 1983 course to be held at La Trobe University. Mr S. Perrott (Victoria) will also attend as a consultant. Mr Perrott is a former director of the New Zealand course.

A summary of staff training schemes

Care Urged In Car Parks

Additional care in car parks about the campus seems indicated particularly during the winter months when iced-up windscreens or fogged windows make starting or parking manoeuvres more hazardous.

Bumps and scrapes become likely in these circumstances and minor collisions in car parks have resulted in damage to panels and lights.

One staff member who parks his van in the Zoology car park reports that it has been damaged on four separate occasions in the last 18 months-the result, he says, of incompetent driving or lack of respect for the property of others.

There is reason for his annoyance. He has driven 22,000 km in the van and the only damage it has sustained was in a staff car park. In addition, he had to meet the cost of renovations himself as the offender(s) left no note.

and policies for non-academic staff will be compiled by the Vice-Chancellors' Commit-



Staff Vacancies

TECHNICIAN/SENIOR TECHNICIAN (GLASSBLOWING)

Applications are invited for the above position in the Department of Chemistry. The work will include the construction are repair of both standard and specialised apparatus. The salary for this position is on a scale from \$11,351 to \$14,557 per annotation (Grade I) or \$14,952 to \$17,053 (Grade III); commencing salary according to qualifications and experience.

The appointment will commence on 1 February 1984 and applications close on 12 August. Conditions of appointment may be obtained from the Registrar.

SECRETARIAL SHORTHAND TYPIST

(Fine Arts)

Applications are invited from suitably qualified, experienced persons for the above position in the University's School of Fine Arts. The ability to produce reliable, error-free work is of prime importance.

The appointee will assist generally with secretarial duties, predominantly in Art History but also in other areas of the School as required, including Reference services. The salary will be determined on the University's clerical/typing scale up to \$12,522 per annum.

Applications, including full details of work experience, copies of qualifications and testimonials, and a telephone number, close on 12 August with the Registrar.

The problems of taking a penguin census are illustrated by this photograph, taken on the South Sandwich Islands, as a lone scientist tries to count thousands of moulting Chinstrap penguins, their feathers littering the ground, while toxic furnes sweep down from an active volcano on the right.

But work of his nature will be slightly assier in future for Peter Harper (Extension Studies), who is chairman of the New Zealand Committee of the International Survey of Antarcitic Seablins. He has just been advised that B.P. Oil N.Z. Ltd., and the Government, through the Department of Scientific and Industrial Research, have jointly continuous distribution, population and ecology of the birds of the Ross Dependency.

Dr Harper hoped to work in the Antarctic in the coming summer season, but the U.S. icebreaker, Glacier, is undergoing a complete refit and will not be available until the following season. But the lack of logistics support will not halt the research entirely since data collected

by ISAS researchers since 1980 have yet to be analysed and preparations have to be made for the future.

Since the New Zealand ISAS Committee was established, much has been accomplished. Some 41 per cent of the 34 known Adelie penguin colonies in the Ross Dependency have been surveyed, two new colonies have been discovered and several major reports have been prepared.

In addition, the first scientific expedition to Scott Island was made and good working relationships have been established with other nations, particularly Chile, Britain, the United States and France.

Dr Harper said a set of recommendations for future ornithological research in the Ross Dependency had been published. These referred in particular to the impact of oil exploration/exploitation and kill harvesting. "We have been in close contact with the Minister of Science (Dr Shearer) to ensure that he is aware of the potential problems for birds should mineral exploitation take place," In Harper said.

Lectures By U.N. Consultant

Dr Barbara Rogers, a United Nations consultant on development and former researcher at the School of Development Studies, University of East Anglia, will be visiting Christchurch 9-15 August after being a keynote speaker at an Australian conference on Women in Development.

She is the author of The Domestication of Women: Discrimination in Developing Societies and is currently involved in research relating to inner city housing in London. She has a long involvement in campaigns against apartheid and has been a consultant for the United Nations Committee on Apartheid. Her publications in this field include: Race: no peace without justice and Sanctions against South Africe: exploring the myths.

She will take part in an open forum on "Africa and Development" in the Shelley Common Room of the Students' Association at 12 noon on Thursday 11 August. On Fidday 12 August at 9.30 a.m. she will present a paper in the Sociology Department (Room 327) entitle 6: Domestication and Discrimination: Women's Experience of third world development. Dr Rogers will also give a public lecture on development issues in the Centre Gallery of the Arts Centre at 7.30 p.m. on 10 August.