staff with higher degrees obtained in Australia demonstrate that its appointment procedures search for the same qualities of excellence as do those of Newcastle with 62.8% of staff with Australian higher degrees?

While the substantial differences are selfevident the reasons are much more elusive. Unfortunately, correlations on the basis of gender are not possible.

What do these statistics tell us about Australian universities in general? Overall, the

relative position of women has improved but not substantially during the decade under review. The explanation of why some universities have improved their overall representation of women whereas others have made fewer gains requires much more detailed study. The recognition of Australian degrees has also not advanced greatly in that period of time.

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Women in higher education -Changes in the '80s?

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During the past 20 years there has been a growing emphasis on the advancement of women in higher education, more especially in the last decade since the advent of policies of equal opportunity. Reviewing the years 1960 to 1985 the position of women in higher education has improved in both Australia and the UK. By 1985 female participation rates at bachelor level in Australia were nearly equal with those of men while in the UK they had improved to 42%. But such improvements have chiefly taken place at lower levels rather than at the honours and the postgraduate levels and they cluster in a narrow range of fields, chiefly in the humanities and law with some growth in medicine. Changes in fields like engineering have been minimal.

This paper argues that the key to improving the position of women in academe is improvement at honours and postgraduate levels. Our examination of trends in these areas since 1980 finds that gains have been minimal and that the possibilities for further improvements in women's position are limited.

This paper focuses on continuing inequities of gender in academic staffing and postgraduate study in both countries. In Australia by 1984, 27% of higher degrees conferred went to females compared with 24% in 1980. For the UK the figures were 30% and 26%.1 Thus small improvements have occurred, but they seem unlikely to increase. or even continue. An analysis of the Australian figures shows that improvement is

Between 1980 and 1984 the percentage of females receiving Masters degrees has improved but there has been an uneven upward trend at PhD level and a small gain for Doctorates other than PhDs although only 6% of these degrees go to women. The improving trends in all three categories seems to be slowing. Inequities are being slowly reduced but the gap between male and female achievements remains very large. Factors which affect the rate of graduation are: the

	Year	Ma	les	Ferr	ales	To	tal
Doctorate other		N	%	N	%	N	%
than PhD	1980	44	95.7	2	4.3	46	100
	1983	45	93.7	3	6.3	48	100
	1984	47	94.0	3	6.0	60	100
PhD	1980	678	80.6	163	19.4	841	100
	1983	704	77.7	202	22.3	906	100
	1984	761	79.6	195	20.4	956	100
Masters	1980	1556	74.3	538	25.7	2094	100
	1983	1830	70.8	754	29.2	2584	100
	1984	1997	70.2	846	29.8	2843	100

Female Percentage of Postgraduate and Undergraduate Enrolments, 1982-1985 (Fulltime), UK and Australia **United Kinadom** Australia Postgraduate Undergraduate Postgraduate Undergraduate 1982/83 40.2 414 33.3 47.6 41.4 33.6 47.8 39.8 1984/85 40.3 42.2 31.8 48.1 Source: University Statistics, 1984-5, University Grants Commission, 1986

successful transition from honours to higher degree (i.e. are those qualified to pursue postgraduate studies actually doing so?); whether the enrolment is full or part-time: the level of enrolment (Masters or PhD?) and the field of enrolment. In each of these four areas gender is a factor influencing decisions. Men are more likely to complete an honours degree and to enrol in full-time postgraduate degrees (in fields other than humanities). Women are less likely to complete honours, less likely to enrol for postgraduate degrees at all, more likely to enrol part-time, less likely to enrol for PhDs and more likely to cluster in the humanities.

Australian Bureau of Statistics, 1985

Is the transition from honours a barrier to increased female enrolments at the postgraduate level? In the UK the proportion of female undergraduates and postgraduates is very close whereas in Australia they diverge significantly. In the 1980s increased female participation at undergraduate level has not been fully reflected at postgraduate level.

Two major considerations for students undertaking postgraduate study are finance and entry qualifications. Although the two are not unrelated, we need to consider the question of entrance qualifications separately. Are suitably qualified women simply not proceeding with postgraduate study? Or are there insufficient numbers of suitably qualified women (that is, women with firsts or upper seconds)? At the national level these questions cannot be easily answered - what little research exists in the area concentrates on particular institutions because, as Buck-

ridge and Barham found, statistics 'are not easily available in a form in which comparability can be assessed.33

These reservations aside, it seems that the pool from which suitably qualified women can be drawn is considerably smaller than that for males because fewer women than men proceed to the honours year.4 Figures for the U.K. in 1983/4 show a similar trend:

Other

Total:

to win such awards.

Aggregated statistics relating to honours are not available in Australia so the relationship between honours and postgraduate entry is less clear-cut. What is clear is that fewer women in Australia enrol for higher degrees than women in the UK. Whether this results from their poorer performance or lesser participation in honours is difficult to ascer-

tain since honours statistics must be obtained

from individual universities. Buckridge and

Barham found that for Griffith University

'the proportion of women proceeding to

honours was only about half the proportion

of men,'5 In Australia an honours degree is

four years whereas in the UK a student may

graduate with honours after three years of

study. For women the extra year may be a

significant barrier to taking out an honours

degree. This may go some way to account

for the seemingly better performance of

British women at honours level which in turn

may contribute to their superior participation

Another explanation for gender inequities

at postgraduate level may be the continuing

imbalance in male and female enrolments in

certain fields of study. This imbalance has its

origins at the undergraduate level:

rates at higher degree level.

lagging behind men. Nevertheless women in the UK are doing slightly better than their Australian counterparts in engineering and technology. In Australia in 1980, female enrolments in engineering made up 4.7% of the total although there has been a steady increase since then. Imbalances in field of study affects women's chances of receiving postgraduate awards since 50% of these are awarded in the traditionally male dominated areas of the natural and applied sciences.6

> Although Australian women have increased their participation rate in postgraduate studies since 1970 much of the increase, especially in the 1980s, is in part-time enrolment. In 1978 only 27% of female postgraduate enrolments were part-time; in 1983 the figure had increased substantially to 38%. This trend can only slow down improvements in the female share of higher degrees conferred.

When it comes to other traditionally male

dominated areas, however, women are still

Women in Australia and to a lesser extent in the UK are opting to take higher degrees part-time which prolongs enrolment and reduces their chances of obtaining financial support. Unless more realistic attempts are made to fund women their participation in higher education may not improve. This seems unlikely given that governments would like universities to become more 'relevant' and 'market oriented' which means increased funding for male dominated

Have the slight gains at postgraduate level been reflected in academic staffing levels in UK and Australian universities?

In 1980 women were 13.6% of academic staff. This had moved to 15.6% in 1985. Overall in Britain the position of women has not changed dramatically. More men than women became lecturers (30% of men in 1978/9: 11% of women).8

% of Graduates at each level by gender Men 0/0 N Women % N 3335 72.35 1274 27.65 1st class hons: 2nd class hons: 28479 56.00 22357 44.00 11586 66.00 5942 34.00 43400 59.50 29573 40.50

Total Graduates (1983-4), Males and Females, UK

by Level of Bachelor Degree

Source: Vol. 2 First Destinations of University Graduates, Table One, pp.12, 13, University Statistics, Students and Staff, published by the Universities' Statistical Record on behalf of the University Grants Committee, March, 1986.

Using the above figures it is interesting to note that of all women completing bachelors degrees 4.3% gained first class honours; 75.5% gained second class honours while 20,2% took out other bachelor degrees. Of all male graduates, 7.7% took out first class honours: 65.5% took out seconds while 26.7% gained other bachelor degrees. In 1984/5 13.193 men (or 59.7% of the total) entered full-time postgraduate study while 8.910 women (or 40.3% of the total) entered full-time postgraduate study. These percentages roughly correspond to the percentages of men and women receiving bachelor degrees. While it cannot be asserted that the 1984/5 postgraduate cohort corresponds exactly to the 1983/4 final year bachelors degree cohort, the male postgraduate enrolments for 1984/5 are about 30% of the total number of males graduating with bachelors degrees in 1983/4. The female postgraduate enrolments for 1984/5 are about 30% of the total number of females graduating with bachelors degrees in 1983/4.

women receiving firsts in 1983/4 and compare these figures with the numbers of men and women entering postgraduate study in 1984/5 a slightly different picture emerges. There were 13,193 men entering postgraduate study in 1984/5 and 3335 men received firsts in 1983/4. This proportion is 25%. There were 8910 women entering postgraduate study in 1984/5. In 1983/4 1274 women received a first class bachelor degree. Potentially the proportion of women entering postgraduate study with firsts is only 14%. The fact that in general women taking on higher degrees have lower entry qualifications than the males may well be a factor in explaining why fewer women enrol for a higher degree. Given the extreme competition for postgraduate awards to finance further study, women are less likely

Full time and Part-time Undergraduates and Postgraduates 1984-5, Males and Females, UK and Australia Field of Study Country Males **Females** Total If we look at the number of men and Ν % N Ν UK 1244 31.7 2814 69.3 4058 Australia 5083 40.6 7427 59.45 12510

3636 9.9 36572 100 Engineering/Technology UK 32936 90.1 13330 92.5 1076 7.5 14406 100 Australia 47.5 29618 100 52.5 14069 Medicine/Dentistry/ UK 15549 53325 40.9 61021 100 59.1 7696 Australia 9741 30.3 22432 69.7 32173 100 Language/Literature/ UK 16548 36.2 29170 63.8 45718 Area Studies Australia

Source: University Statistics, Tertiary Education Australia, from Table 2.11, 1984, P.23, University Grants Committee, UK, March, 1986

In the UK women are still moving into education in large numbers, more so than in Australia. There is still a concentration of women in humanities in both countries. In the medical field, women have certainly increased their participation rate in Britain,

More men than women entering university teaching had a PhD (75% of men; 60% of women).9 Women lecturers and assistant lecturers in the UK still cluster in arts, social. administrative and business studies. About half of female lecturers and assistant lec-

Staff UK Universities, 1984/5					
Status	Males (%)	Females (%)			
Professors	97.6	2.4			
Readers/Snr Lecturers	93.1	6.9			
Lecturers	82.5	17.5			
Others	65.8	34.2			
Total:	84.4	15.6			

Source: Equal Opportunity Commission, Women in Universities: A Statistical Description, Statistics Unit, Manchester, April 1985.

Australian Universities: Female Teaching and Research Staff 1980 and 1984					
Status	1980 %	1984 %			
Professors	2.1	2.7			
A.Prof./Readers	4.2	4.9			
Snr Lecturers	8.3	9.7			
Lect./Tchg. Registrar	19.0	22.7			
Principal Tutor	48.9	56.1			
Snr Tutor, Dem./Asst. Lect.	38.4	40.3			
Dem./Tutor, Tchg.F.	40.9	44.3			
Total	16.2	17.1			

Source: Australian Bureau of Statistics, Table 2.21 and 2.22, pp.37-38, Tertiary Education Australia, 1984.

turers are in these fields while a further third of female lecturers are in medicine, science or education or are higher grade staff in arts subjects. 10

In the UK there has been a decline in the percentage of Professors who are female from 2.7% in 1979 to 2.4% in 1984/5.

In Australia at the tutorship/demonstrator/teaching fellowship level, the lowest rung of the status ladder, the participation of women has increased from 38.4% in 1980 to 40.3% in 1984. Given that more women are gaining doctorates, albeit slowly, this should be reflected in staffing. In 1975 the percentage of doctorates received by women was 11.7%. ¹¹ By 1984 the percentage of women receiving doctorates (PhD and other) was 19.7% but female staff had increased by only 0.9%.

In 1984 in Australia, 2.7% of all professors were female which is an improvement on the 1980 figure. This is also true at the associate professor/readership level. While there have been some increases at all status levels, the biggest increase has been at the principal tutor level — by 7.2 percentage points. The percentage increase for women at the lecturer level has been 3.7% — slightly more than half the increase at the principal tutor level. But overall it cannot be claimed that women academics in Australia are gaining much ground.

A University of Melbourne report raises the question of tutorships in relation to equal opportunity.¹² This report suggests that given the nature of tutorships, 'many women currently employed in Australian universities may be considered ineligible for academic careers despite their involvement in teaching, departmental administration and student service'. ¹³ If the trend for women entering postgraduate study is either to defer for a period or enrol as part-time students, this means inevitably that women will be older when they apply for their first academic position. If they proceed to the lowest academic rung, they will be even older when applying for a lectureship and then they will be rejected by selection committees because they do not fit the idealised image of the 'young scholar'. ¹⁴

The UK Equal Opportunity Commission states that women have remained a minor proportion of the academic staff and have failed to make gains in areas of science and technology which are the traditional preserves of men. 15 Moreover in its response to the Government's Green Paper on the development of higher education the Commission states . . . 'that expected expansion of part-time education will neither attract nor benefit the majority of women unless the funding of part-time students is reformed substantially'. 16 It is pertinent that the Commission in this 1986 report cites an earlier 1979 report which pointed out that 'the present system was weighted in favour of fulltime students and militated against women'. 17 Thus while government instrumentalities and industry are saying that something should be done, governments continue to do nothing.

Further recommendations by the Equal Opportunity Commission include asking the Department of Education and Science to encourage institutions to provide compensatory courses in science, technology or engineering for women. It also suggested that changes be made to the Grant Aid scheme to help part-time students as is the case already with some part-time teacher training courses. Given the imbalance of women academics in lower status positions, the Equal Opportunity Commission recommendation that institutions of higher education examine recruitment and promotion policies is also pertinent.¹⁸

While it is generally agreed that universities need to initiate changes within their own institutions, subordination of funding submissions to market forces and attempts by government to control universities may discourage female students especially those attending part-time. Substantial improvements in female participation at upper levels may in part depend on the provision of more scholarships or other forms of funding. This could go some way to overcoming the barriers of expectation and career stereotyping which are apparently still blocking the progress of women in the groves of academe.

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Life after Dawkins: teaching and research with diminishing resources¹

appear to have included many excellent university teachers, researchers or leaders.

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I am honoured to be here, and happy for a sentimental reason. The first lecture I gave in a university other than my own was here, twenty-five years ago, on the subject of higher education in Australia. Being about to retire, today's address on the same subject in the same place is likely to be the last. That symmetry would be even happier if it were not for a change in the subject matter. Then, we were considering how the universities should use growing money and freedom. Now we must think what to do with dwindling money and freedom.

It is convenient to begin with four contributions to that conference in 1964. First, George Howie argued for educating all school teachers in universities. Government chose instead to follow the Martin Report of the same year, so a lot of teacher education remained on the cheap side of the binary divide. But three other themes have fared better

Sol Encel contrasted the instrumental or 'service station' role of universities — training doctors and lawyers and engineers as economically as possible — with the critical and cultural role which they should also play, but had generally failed to play in Australia. We have since done a lot of what he asked — you may not agree with all the arguments that academics address to business, government, the arts and the public these days, but there are certainly plenty of them.

Don Anderson reported surveys of students' responses to good and bad teaching. There is no good mass teaching: good teaching engages students in active discussion in small groups and gives expert individual attention to the work each of them does. Some honours students and some clinical students have always had that sort of care; but from the 1950s to the 1970s we extended varying amounts of it to most students. For that and other reasons first-year failure rates have fallen dramatically and there are now more distinctions and credits than passes. We teach better than we did - though the quality is now declining again as our resources decline.

In 1964 we already perceived conflicts of interest about university size. Some big research can get bigger resources in big universities. But plenty of the best research, much of the best teaching and most of the sensitive, quickly responsive administration are done in medium sized and small ones. In big ones administration is normally more expensive and inefficient as business has to

be duplicated at several levels of hierarchy, and thought and choice by principals have to give way to rule-book administration by subordinates. Big universities don't actually economise. What they do is make it easier for the mass of undergraduates to be short-changed and alienated by cheap mass instruction, to yield surpluses to pay for big research and administrative tophamper.

We also discussed how to get useful research, and the public cultural and critical work that Sol Encel was asking for, from

We also discussed how to get useful research, and the public cultural and critical work that Sol Encel was asking for, from scholars of the kind who need time, libraries and sometimes study leave, rather than research grants. A good deal has since been achieved. In the department to which I belong there is more and better undergraduate teaching, plus output of three other kinds which were rare or non-existent a generation ago: substantial postgraduate teaching and research; a lot of public broadcasting, book reviewing, serious journalism and services to government, public enterprises and trade unions; and books and articles in print at the last count in eleven languages.

Thus in about twenty years from the onset of the Menzies reforms our universities were transformed, and contributed noticeably to transforming our society. They became respectable members of the international league and substantial contributors to our own economy and culture. We should not forget who contrived that: a Liberal Prime Minister decided to revolutionise the universities. He commissioned three excellent teachers, researchers and academic administrators to tell him how to do it. And he did what they advised.

There were good reasons for another review in the changed conditions of the 1980s. The demand for higher education was growing, but governments had been cutting the real resources per head for supplying it every year since 1976. They have continued to cut them, while increasing the total provision for higher education to meet a fast increase in student numbers. How much of the growth could be met cheaply by getting the academics to work harder?

Competent investigators were commissioned to review the universities' efficiency and effectiveness. They found that the universities were running fairly efficiently with their costs cut to the bone. Faced with that unwelcome message the Hawke Government took the imaginative step of dispensing with competent investigators. It replaced the Minister of Education and hurriedly introduced drastic changes of system designed by people, mostly anonymous, who don't

My subject is how we should work under the new regime rather than what is wrong with it. But to characterise what it is that we must work under I will begin, for a reason which will appear at the end of the lecture, by summarising the way three of its distinguished critics see it.

In a notable lecture to your medical school four months ago David Penington, Vice-Chancellor of the University of Melbourne, sketched the changing conditions which called for a review and expansion of Australia's higher education, and paid generous tribute to Mr Dawkins for recognising the need, for promising some funds for expansion, and for the stated aims of his policies. But three of the policies contradict the stated aims: good principles of management and intellectual independence are contradicted by a gross increase of central political and bureaucratic control over the universities; by a power to subject every research grant to central political control; and by forced mergers of disparate institutions.

Mr Dawkins responded to those criticisms with personal attacks on Penington, and untruthful or misleading statements about the policies in question. He denies that he has increased political control, or the possibility of political control, of the universities.

Colin Howard, Professor of Law at Melbourne University, has shown (in *The Age*, 27 June 1989) how untrue that is, and how well Mr Dawkins knows it. The Commonwealth can attach conditions to the universities' funds. There are no effective constitutional limitations on the conditions it may attach, and the new Commonwealth Act leaves no legislative limitations either.

In its published policy papers the government asserts that it will use a wide construction of the States Grants legislation to achieve compliance with its wishes, even in the matter of the internal government of the universities; and the Act provides that most of its wishes will in fact and in law be the Minister's. Funds voted for higher education are to be distributed 'as the Minister determines', without any requirement that parliament or public see the details of his determinations. The funds must be used in strict compliance with 'educational profiles' prepared by the universities under guidelines specified by the Minister. The initial guidelines were public; future guidelines need not be. The universities must also link their proposals to national priorities chosen by the government, and prone to change with each change of government.