Book Reviews

The Making of the Australian National University 1946-1996

S. G. Foster & Margaret M. Varghese

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'We are all happy, are we', asked Nugget Coombs at one of the wartime meetings of the conceptual planners of the Australian National University, 'that it will be a full research university?' On this evocative note, the authors launch their large history of the ANU.

The notion of a supra-university, an 'Australian Oxford', had been floated in the country from the 1870s, reaching some prominence in the 1920s when it was pressed by Melbourne scientists T. H. Laby and David Rivett, the latter of whom, as head of the new Council for Scientific and Industrial Research, envisaged that his own CSIR heads of divisions might find a place in it as honorary professors. A University Association was formed in Canberra in 1929 with, among others, the young National Librarian, Harold White, historical scholar, Laurie Fitzhardinge, and Sir Robert Garran as its chair, and on the outbreak of World War II, the Association presented a novel scheme to attract 'refugee professors' from the Continent 'on modest terms', an idea not surprisingly quashed by government, leaving Australia, as the authors point out, to miss the chance of starting a research university 'while brains were cheap'.

The shaping thrust for a university focused on research and post-graduate study came, however, from a corps of wartime public servants, many of them economists, charged with the task of snatching positive social improvement from the exigencies of war, who made far-reaching plans for the Commonwealth's involvement in post-war education which would include a national university. As the plan took shape within the close purview and vision of the Director-General of the Department of Post-War Reconstruction, H. C. Coombs, independent manoeuvres were also afoot for the establishment of a national institute of medical research. Pushed along by influential bureaucrat, Alf Conlon, and R. D. 'Pansy' Wright, Professor of Physiology at Melbourne University, and favoured by Prime Minister Curtin, the medical institute proposal centred around Australian scientist, Howard Florey at Oxford, whose research on penicillin was resonating around the world.

It was the beginning of a composite plan that would lock three leading Australian expatriates, Florey, physicist Mark Oliphant and historian Keith Hancock, together with New Zealand anthropologist, Raymond Firth, into the protracted and challenging business of moulding the form of a research university distinctive from any other in Australia. The Australian University Act of August 1946 embodied its initial goals and, launching it, Minister J. J. Dedman defined it optimistically as 'a kind of intellectual powerhouse for the rebuilding of society'. Succeeding his Labour predecessors, Curtin and Chifley and their interests in the scheme, Prime Minister Menzies, while supportive of higher education, questioned the decision to locate both a medical and a physics school in Canberra, was fearful of the prospect of depriving the State universities of

funds, and hostile to the name 'Australian National University', but nonetheless received much historical credit for the event.

Foster and Varghese's history, aptly named 'the making of the Australian National University', is highly enlightening on the genesis of these ideas and on the men who played seminal parts. It also gives spacious attention to 'the four wise men', the 'maestros', Oliphant, Hancock, Florey and Firth, who as an Interim Council, steered the post-Act planning of the university. The analysis of their personal and professional impulses, their hopes and idiosyncracies, and the stops and starts in their dealing with the embryonic institution, makes a substantial contribution to Australian institutional and scientific history.

Sir Mark Oliphant's extended role forms one of the critical cadences of the book. Fresh from the Manhattan Project and at his spellbinding best, Oliphant was judged by Chifley as a dynamic drawcard vital to the direction of the Research School of Physical Sciences and, as a research leader, critical to the ANU's future in putting Australia on the international map. Oliphant's program for a new accelerator, the cyclo-synchroton, backed by the Commonwealth government in a vast financial grant that signalled a unique leap in Australia's science funding and policy, became rapidly enwrapped in problems. The design gave massive trouble. Downgraded to a proton synchroton that was speedily outstripped in potential power by accelerators in the United States and Russia and plagued by engineering problems, it was finally converted into a homopolar generator whose scope and function were very different from the original plan. When, after nearly a million pounds had been squandered, an explosion from an alloy blinded a staff member in the early 1960s, there was real anxiety that the Oliphant project would become a financial and political disaster for the whole ANU.

The authors give a franker and more critical account than do Oliphant's biographers of these events, 'Oliphant', they sum up pertinently, 'always accepted responsibility [for the lack of progress and disasters], yet managed to convey the impression that Australia was somehow to blame'. The experience, however, had revealed severe flaws in the university's overall approach to an ambitious pioneering project. The economist Vice-Chancellor, Sir Douglas Copland, realised that he had never asked Oliphant if his Birmingham accelerator had (as it had not) worked; there was a lack of critical outside assessment across the fifties, and a naive acceptance in ANU circles of a key man's self-evaluation and influence.

The work also gives an in-depth evaluation of Sir Keith Hancock as father figure, first highly individual Director of the Research School of Social Sciences, and conceptual founder of the *Australian Dictionary of Biography* whose search for 'growing points' imparted an important interdisciplinary cohesion to the early development of the social sciences.

In a period of 'God professors', the evolution of the major science Schools, the John Curtin School of Medical Research (JCSMR), the Research School of Physical Sciences, and the Research School of Organic Chemistry, depended heavily on the personality of Directors and the talent they attracted to 'the great intellectual adventure' of the ANU. Australian born Sir John Eccles's presence in the JCSMR added one of the world's great neurophysiologists to the University. His research was to win him (and the ANU) a Nobel Prize in 1963, but his mandatory retirement three years later at the height of his career, stirred a public outcry, raised significant questions about the retirement of brilliant men, and drove Eccles to continue his highly productive life in the USA and Europe, never to return to Australia.

Contrastingly, the appointment of J. C. Jaeger, an outstanding applied mathematician, to the Chair of Geophysics in the early 1950s, raised the testy question of pursuing practical scientific applications against pure research. Yet it led to the founding of the

first Australian Department and later Research School of Geophysics and Earth Sciences whose research on the earth's core, mantle and the moon propelled Australia into the centre of world geophysical scholarship. The advent of another highly distinguished expatriate scientist, Professor Arthur Birch, as a founding Director of the Research School of Organic Chemistry in 1968, further emphasised the overriding lure that the ANU exerted on Australia's outstanding scientific researchers and the contribution in research and teaching they could make.

Foster and Varghese's treatment of the amalgamation between the Research Schools (the Institute of Advanced Studies) and the former Canberra University College in 1961 penetrates the conflicting views which ANU academics held on the relationship between research and teaching, and the lurking fears some felt that such a union would suggest that the ANU experiment had failed. Geoffrey Sawer's warning against sounding 'snobbish, pharisical, condescending or impertinent' echoed Coombs's consistent advocacy for union, and the final shot-gun marriage owed much to Menzies' insistence that there were no limits to a truly national university.

This dense but lucid study of scholarship, men and women offers a rich and complex diet, but the presence of a substantial index, and of subsections in the text, help the reader explore those disciplines and developments of their special interest. Written with style and pace and refreshing flashes of wit, the book yields a mine of material on individuals and their influences in economics, anthropology, philosophy, demography, statistics, biology, environmental science, political science, linguistics, international relations, Pacific and Asian studies, the slow rise of Women's studies, as well as the struggle itself of women for a more representative academic part, the amalgamations and change, the far-reaching training of Ph.D.s, and the rise of a major undergraduate university. Inevitably in such a canvas, the earlier history draws on the deepest scholarship, while history 'while it's still smoking' invites prudent condensation. However, the Appendix of Sources of papers, private records and oral history interviews underlying the whole work makes for impressive reading.

Whether the Australian National University has served the nation as a power house of ideas as its founders hoped now waits for a wide and thematic assessment by others. And here the history stands as an enduring landmark source. Characteristically, it ends where it began, with Nugget Coombs, visionary and adviser, now in his nineties, 'as the person', the authors conclude, 'who contributed more than any other to the making of the ANU . . . and who recognised that the continuing potency of any vision depends on its capacity to adapt to the times'.

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Tendencies and Tensions of the Information Age: The Production and Distribution of Information in the United States

Jorge Reina Schement & Terry Curtis

New Brunswick, USA, Transaction Publishers, 1995, viii + 285 pp., ISBN 1-56000-166-6

Apart from the substitution of information for knowledge, the sub-title of this book is the same as the title of Fritz Machlup's pioneering 1962 work. This is fitting. Working with 'the wide lens' advocated by Machlup, the authors have given us a much needed book which can help shift attention from IT or information machines to information as the