

**The Ownership of Knowledge in
Higher Education in Australia 1939-1996**

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Declaration of Originality

This thesis contains no material that has been accepted for the award of any other degree or diploma in any university or institute of higher learning.

I affirm that the intellectual content of this thesis is the product of my own work. I certify to the best of my knowledge that all sources of reference have been acknowledged.

.....
Hannah Forsyth

Abstract

This thesis traces transformations in the history of higher education in twentieth-century Australia from the perspective of the ownership and regulation of knowledge. Using primarily archival sources from universities and government, I argue that after the Second World War, the university's place in society and the economy was radically altered because of challenges to its authority over knowledge.

In the 1940s and 1950s, the Australian government increased its interest in research. Among political and tertiary leaders, this led to questions about the role of research and higher education for society, resulting in uncertainties about the ongoing independence – and thus reliability – of university knowledge. A growing reliance on higher education to support government aims linked the growth of universities in Australia to nation-building and the government's economic strategies. But in the 1960s and 1970s, a small but influential group of university staff and students resisted the connection of higher education in Australia to established goals and values, exposing the university's vested interests in society and its role in legitimising and perpetuating social and economic injustices. As a result of mounting questions about its integrity, in the 1980s, the university's authority waned. This opened the door to increased control by government, who confronted changing economic priorities. Facing new pressures, university leaders sought to regain their standing in society by reconfiguring their task in commercial terms. By the 1990s, the question about the role and autonomy of higher education had developed into a significant contest over the ownership and control of knowledge as a form of intellectual property. Unlike the public institutions they had been in the 1940s and 1950s, universities were treated as an industry, competing with others for government support and commercial revenue.

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We are specialists in examining, analysing and measuring. We are the guardians and constant verifiers of all alphabets, multiplication tables and methods. We are the bureaus of standards for cultural weights and measures. Granted, we are other things also. In some circumstances we can also be innovators, adventurers, conquerors and reinterpreters. But our first and most important function, the reason the people need and keep us, is to preserve the purity of all sources of knowledge.

- *Herman Hesse, The Glass Bead Game*

Chronology of Higher Education in Australia

- 1850s: Universities of Sydney (1852) and Melbourne (1853) established
- 1874: University of Adelaide
- 1890: University of Tasmania
- 1909: University of Queensland
- 1911: University of Western Australia
- 1930s: Six universities enrol total approximately 10,500 students
- 1930s: Canberra University College (1930, Melbourne), New England University College (1938, Sydney)
- 1942: Universities Commission established
- 1946: Australian National University
- 1949: NSW University of Technology (to become UNSW in 1958)
- 1944 – 1951: Commonwealth Reconstruction Training Scheme
- 1949: Total university enrolments 31,753
- 1957: Murray Review of Australian Universities
- 1960s: New universities established. Institutes of Technology established.
- 1965: Martin Review of Tertiary Education
- 1965: Berkeley 'Free speech' movement (USA)
- 1968: Total university and CAE enrolments 138,794
- 1968: May 1968 Paris Barricade uprising (France)
- 1973: Sydney Philosophy Strike
- 1975: Annual growth rate of student enrolments 8.6%
- 1974: Whitlam government takes over all funding of Higher Education, establish Commonwealth Tertiary Education Commission
- 1975: Total university and CAE enrolments 276,559
- 1981: Annual growth rate of student enrolments has dropped to 1.3%
- 1986: International 'export market' higher education established
- 1986: Total university and CAE enrolments 389,968
- 1987: Annual growth rate of student enrolments lowest since 1953 at 1%.
- 1987: Dawkins Reforms
- 1988: Total university enrolments 420,850
- 1990: Total university enrolments 485,066
- 2000: Total university enrolments 695,485
- 2008: Bradley Review of Higher Education
- 2009: Total university enrolments exceed 1 million

Introduction

At the outbreak of the Second World War, the Australian government did not immediately turn to the universities for help in the war effort. This reflected the principles of the public university tradition in Australia. Universities and their scholars occupied a place in the nation's high culture that precluded them from the pragmatic problems of wartime science. Professors were certainly figures of public importance whose arrival, normally from Great Britain, was announced in the newspapers, as was their attendance at official functions, where their wives' outfits were documented as items of public interest.¹ Their standing enabled academic staff to promote the university and their disciplines in the public sphere. But within the institution, professors protected and imparted truth by reading, teaching and setting examinations that would test and assure the accuracy of their students' learning.² What they rarely did was research.

By the 1990s, research infused university life.³ Research defined the very idea of the university and the creation of new knowledge that was useful to others (even if only other scholars) was now the key source of academic distinction. Professors were not lauded as they had been, but many still had substantial standing and respect on the

¹ For example, Professor Eric Ashby's arrival to take up a chair in Botany at the University of Sydney was announced in the press: 'Eric Ashby' *Daily Telegraph*, 22 February 1938. Unlabelled Press Clipping of Eric Ashby's Arrival in Sydney. *Eric Ashby Biographical File 1939-1993*, USYD/961. (Sydney: University of Sydney Archives, 1938). Also in 1938, Sir Robert Wallace, Sydney University's Vice-Chancellor, held his birthday party in the Union Refectory. Mrs Wallace, the *Sydney Morning Herald* reported 'wore a frock of pale blue romain' and a 'velvet cape in a deeper shade of blue, edged with ostrich feathers'; Mrs Sadler, wife of Professor Sadler, wore 'black velvet, with green satin bishop sleeves'; and Eric Ashby's wife wore 'lavender and blue taffeta with a short lavender cape' 'Two Birthdays Celebrated. Parties at University and Town Hall', *Sydney Morning Herald*, 2 August 1938.

² When James Conant visited Australia and asked university professors about their roles, this is what they told him. James B. Conant, 'Confidential Report to the Carnegie Corporation on the University Situation in Australia in the Year 1951', Reproduced in *History of Education Review*, 39 (1), 2010, 7.

³ Julia Horne and Geoffrey Sherington, *Sydney: The Making of a Public University* (Melbourne: Miegunyah Press, 2012, in press), Chapter 7.

basis of their research and its impact. Academics continued to promote their discipline, but their purpose, often, in doing so was to attract new research funding. New income was always needed to enable them (and, commonly, whole teams of collaborators) to keep developing new ideas and discovering new applications. The worth of research was now often valued by the amount of funding it brought into the university, changing that institution's sense of purpose.⁴ No longer a monument to the guardianship of truth, higher education was increasingly identified – particularly by government – as an industry, trading in the intellectual property that was the product of academic research. What had been deemed, albeit exaggeratedly so, 'disinterested scholarship' in the 1940s no longer seemed to make any sense. The university not only explicitly served particular interests and economic purposes but was also now itself re-imagined, often by its own leaders and staff, as an interested party.

This transformation raises some important questions about the connections between university knowledge and the development of the nation's identity and economy. The shift towards a substantial national investment in research reveals the changing relationship between the government, public expectations, and Australia's public universities. But what if academic staff and students did not wish to endorse government goals? What were the implications for academic freedom and institutional autonomy? Perhaps more to the point, as universities continued to change, what if they *did* seek to conform, assenting to a government imperative that they operate in an increasingly commercial manner? The commercialisation of higher education is a familiar story, but there are aspects that remain elusive. For while the character of the university as an institution and its importance to society and the

⁴ Simon Marginson and Mark Considine, *The Enterprise University: Power, Governance and Reinvention in Australia* (Cambridge: Cambridge University Press, 2000), 136–50.

economy have been frequently articulated, the ways the different parties characterised and sought to regulate university knowledge through research funding, teaching, examination and a trade in intellectual property has not been readily explained.

It is an important set of relationships, however, for in the twentieth century society grew to rely on university knowledge to a considerable degree. To be deemed the possessor of knowledge granted individuals access to professions and social standing: examining and legitimising knowledge conferred, then, considerable authority to the university over labour supply and social capital. The university's growing research focus amplified this influence. Research fuelled economic growth, which in the second half of the twentieth century was underpinned by technological development, so that the control of university research priorities became central to national economic management. Even parliamentary decision making was increasingly legitimised by expert opinion, making academic advice a key tool of modern democracy. Given this importance, was it really plausible in a capitalist democracy like Australia that research, education and the legitimation of expertise be left to the vagaries of an unelected, socially elite group of scholars?

Literature Review

The loss of academic control of the university is a global pattern that scholars of higher education describe as a symptom of the 'corporate university'. These observations have been most potent in the United States, where a substantial for-profit sector emerged in the 1990s.⁵ Among the critics, Stanley Aronowitz has pointed to the drift in the universities away from 'academic' values, replaced by a growing focus on

⁵ Derek Bok, *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton: Princeton University Press, 2003), 1–17.

commercialism.⁶ Aronowitz is not alone in arguing that this has led to universities that are now more controlled by administrators than professors. In *The Fall of the Faculty*, Benjamin Ginsberg claims that the re-focus of the universities towards profit has led them to replace collegial, academic-run systems with corporate-style bureaucracies.⁷

Aronowitz and Ginsberg are representative of a substantial American critical literature on ‘academic capitalism’. Anthony Grafton has recently divided this body of work into ‘polemical’ and ‘research-based’ categories. The first represents what Grafton calls scholarly ‘Jeremiads’ whose work is based solely on their experience and observations. The latter describes books grounded in empirical educational research, though the message delivered by each classification is similar.⁸ In this genre as a whole, ‘academic capitalism’ covers a multitude of criticisms that vary between authors. Nevertheless, the phrase generally refers to patterns of knowledge exchange that resemble commercial structures, so that the pursuit of knowledge and the pursuit of profit no longer seem distinct enterprises.⁹ Scholarship along these lines is not confined to the United States, despite the distinctiveness of its large for-profit sector. In fact, in the mid-1990s a comparative study by Sheila Slaughter and Larry L. Leslie

⁶ Stanley Aronowitz, *The Knowledge Factory: Dismantling the Corporate University and Creating True Higher Learning* (Boston: Beacon, 2000).

⁷ Benjamin Ginsberg, *The Fall of the Faculty: The Rise of the Administrative University and Why It Matters* (New York: Oxford University Press, 2011).

⁸ Anthony Grafton, ‘Our Universities: Why Are They Failing?’, *The New York Review of Books*, 24 November 2011, <http://www.nybooks.com/articles/archives/2011/nov/24/our-universities-why-are-they-failing/?pagination=false> Retrieved 26 January 2012.

⁹ See Sheila Slaughter and Larry L. Leslie, *Academic Capitalism: Politics, Policies and the Entrepreneurial University* (Baltimore and London: The Johns Hopkins University Press, 1997). Sheila Slaughter and Gary Rhoades, *Academic Capitalism and the New Economy* (Baltimore and London: The Johns Hopkins University Press, 2004). Marc Bousquet, ‘The Informatics of Higher Education’, in Marc Bousquet and Katherine Wills (eds) *The Politics of Information: The Electronic Mediation of Social Change* (Stanford, CA: Alt X Press, 2003), 233–57. Marc Bousquet, *How the University Works: Higher Education and the Low-Wage Nation* (New York: New York University Press, 2008). Daniel S. Greenberg, *Science for Sale: The Perils, Rewards and Delusions of Campus Capitalism* (Chicago: University of Chicago Press, 2007).

found that between the United States, Canada and Australia, academic capitalism had progressed most quickly in Australia.¹⁰ Their observation was that market-derived values had infused university priorities as a result of rapidly implemented government policies. This had led, they argued, to a new focus on commercialisable research, a growing for-profit biotechnology sector with strong links into the universities and a tendency to identify student fee income in market terms. Australian universities, then, provided an early indication of the pattern as it was emerging internationally.¹¹

Globally, more mobile students were now consumers, according to Slaughter and Leslie, their consumer choice expressed in course selection and a new prominence given to student evaluation. In addition, universities in each of the countries they analysed were increasingly compelled, under a growing requirement to commercialise research, to act as businesses.¹² Other scholars made the same observations. Reduced government funding in Australia and the United Kingdom, critics argued, had led universities to look to other sources of income, pushing institutions into a new global marketplace for higher education.¹³

The narrative of decline and crisis that permeates this literature is common, but not universal: there are those who support the recent changes in higher education globally. The decision by governments to fund a mass university system was likened,

¹⁰ Slaughter and Leslie, *Academic Capitalism*, 100–8, 216–9.

¹¹ *Ibid.*

¹² *Ibid.*

¹³ Simon Marginson, 'The New Higher Education Landscape: Public and Private Goods, in Global/National/Local Settings', in Simon Marginson (ed.), *Prospects of Higher Education: Globalisation, Market Competition, Public Goods and the Future of the University* (Taipei: Sense Publishers, 2007), 29–78. Michael Peters, *Knowledge Economy, Development and the Future of Higher Education* (Rotterdam: Sense Publishers, 2007). Mark Olssen and Michael A. Peters, 'Neoliberalism, Higher Education and the Knowledge Economy: From the Free Market to Knowledge Capitalism', *Journal of Education Policy* 20 (3), 2005, 313–45. Leonard J. Waks, 'In the Shadow of the Ruins: Globalisation and the Rise of Corporate Universities', in Simon Marginson (ed.), *Prospects of Higher Education: Globalisation, Market Competition, Public Goods and the Future of the University* (Taipei: Sense Publishers, 2007), 101–20.

by Martin Trow, an American sociologist and scholar of higher education, to the development of a mass consumer market. To him this was a positive transformation. A mass system, such as the American one, as he had observed it in the 1970s, reflected an industrial economy underpinned by equal economic opportunity. When nearly everyone could go to university, Trow argued, they could also access the economic benefits resulting from an educated workforce. By contrast, a small and elite tertiary system, like in Britain at the same time, reflected and perpetuated a more stratified society by restricting access, usually on the basis of class, to educational and thus economic aspiration.¹⁴ In the 1990s, Trow praised the shift in Britain and elsewhere (which would have included Australia) towards what he called the ‘massification’ of higher education, a drift towards universal access, which Trow saw as the inevitable conclusion to mass tertiary education. Such expansion could not be wholly paid for from the public purse, Trow argued: egalitarianism was enabled by the conversion of higher education from a state-funded privilege to a market.¹⁵

In *Unmaking the Public University*, Christopher Newfield argues that the conversion of America’s public universities into a mass market had the opposite effect to the one that Trow described. Reduction in public spending on higher education since the 1970s, Newfield claims, was a systematic undermining of the economic power of the tertiary-educated middle class: now that there were so many of them – around one quarter of American adults – they presented a threat. By transferring the costs of higher education from the state to private citizens, the middle class lost the wealth gained from ‘university type’ jobs by paying for the universities themselves, leaving

¹⁴ Martin Trow, *Twentieth Century Education: Elite to Mass to Universal* (Baltimore: The Johns Hopkins University Press, 2010), 88–141.

¹⁵ Trow, *Twentieth Century Education*, 513–47.

the majority of American wealth in the hands of a very small percentage of its population.¹⁶

According to most of the literature on academic capitalism in Australia and internationally, the move towards a mass market for higher education has led to a repositioning of academic work as the fleeting and replaceable provision of ‘content’.¹⁷ While academics have retained some control over knowledge itself, the significance of that control has declined in a changing environment where non-academic managers who control funding streams, have set institutional teaching and research priorities.¹⁸ Critiques of ‘audit culture’, meaning the structuring of academic priorities of the basis of administrative requirements to report, reflect a similar concern.¹⁹

Among the critics of the corporate university, few point to a way forward, a tendency that frustrates Anthony Grafton.²⁰ Derek Bok, former Harvard President, is an exception. His *Universities in the Marketplace* and *Our Underachieving Colleges*, are among the more respected of those works not based on empirical research. Bok argues that academics should accept the multiple purposes of higher education – embracing both ‘knowledge for its own sake’ as well as professional skill development, for instance – and focus on continually improving the pedagogical,

¹⁶ Christopher Newfield, *Unmaking the Public University: The Forty-Year Assault on the Middle Class* (Cambridge M.A.: Harvard University Press, 2008), 1–15.

¹⁷ Eric Gould, *The University in a Corporate Culture* (New Haven: Yale University Press, 2003). Frank Donoghue, *The Last Professors: The Corporate University and the Fate of the Humanities* (New York: Fordham University Press, 2008). Slaughter and Rhoades, *Academic Capitalism and the New Economy*. Greenberg, *Science for Sale*.

¹⁸ Marginson and Considine, *The Enterprise University*, 64–7.

¹⁹ Cris Shore and Susan Wright, ‘Coercive Accountability: The Rise of Audit Culture in Higher Education’, in Marilyn Strathern (ed.), *Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy* (London: Routledge, 2008), 57–89.

²⁰ Grafton, ‘Our Universities: Why Are They Failing?’

curricular and extra-curricular aspects of their work.²¹ In research, while commercial opportunities have helped the universities better address society's requirements, Bok argues that the long-term sustainability of American higher education will be dependent on the university's ability to hold fast to academic values.²²

Before considering the specific issues in Australia, some context is needed: what are these values that so concern scholars of higher education and how is it that they are deemed to be so opposed to the values of the market? Why do critics think it matters that academics retain authority, not only over their own expertise, but also over the priorities of the university? When higher education commentators are asked to enumerate the scholarly values they insist upon for their institutions, they often turn, as if to a theologically foundational and even prescriptive text, to Cardinal John Henry Newman.²³ In the 1850s, just as Australia's first universities were being formed, Newman prepared nine lectures examining and proposing a university designed for Irish Catholics, who were then excluded from Oxford and Cambridge. These lectures were later collated as *The Idea of the University*.²⁴ In 1992 Jaroslav Pelikan, a theologian in Britain, undertook a study of Newman's *Idea of the University* from the perspective of contemporary higher education. On its basis, Pelikan articulated six values, or virtues, that he considered central to university scholarship. They were free inquiry; intellectual honesty; trust in rationality; the imperative to communicate results; a valuing of humanity; and finally, the practice of self-discipline, by which he meant the hard work, long hours and passion that is the

²¹ Derek Bok *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More* (Princeton: Princeton University Press, 2005).

²² Bok, *Universities in the Marketplace*.

²³ Sheldon Rothblatt, 'Thinking in Perfect Paragraphs.' *Minerva* 45, 2007, 445–58.

²⁴ John Henry Newman, *The Idea of a University Defined and Illustrated in Nine Discourses Delivered to the Catholics of Dublin in Occasional Lectures and Essays Addressed to the Members of the Catholic University* (New York: Holt, Rinehart and Winston, 1852: 1966 Edition), 75–93.

habit, Pelikan argued, of good scholars.²⁵ The similarity to monastic values was intentional. The long-historical connection of tertiary and ecclesiastical education imbued the values Pelikan wished to promote with a sense of permanence and universality. Are these the values Bok and others seek to retain?

Those who consider academic values historically rather than theologically describe the growth of the university's authority on the basis of its reputation for reliability. Such reliability was grounded on an assumption that work was conducted honestly. Academic freedom and institutional autonomy were reassuring to the beneficiaries of research. Joan Wallach Scott has recently reflected on the tradition of academic freedom in Western universities. She argues that the aim of those traditional structures was to protect university scholarship from vested interests that might lessen the reliability of knowledge.²⁶ University leaders had in the past been particularly concerned to defend their institutions from interference by sectarian and political groups: the university would be of most use to society, argued leaders and thinkers like John Dewey, if it could offer critical perspectives without being compelled to take sides in the community's most divisive debates.²⁷ Similarly, it was also central to the reliability and authority of the university, at least since the mid-nineteenth century, that it be detached from commercial interests.²⁸

Concern that a mass, commercial market for higher education and research would undermine the university's long-fought reliability is as present in Australian

²⁵ Jaroslav Pelikan, *The Idea of the University: A Re-examination* (New Haven: Yale University Press, 1992), 44–56.

²⁶ Joan W. Scott, 'Knowledge, Power and Academic Freedom.' *Social Research* 76 (2), 2009, 451–80.

²⁷ *Ibid.*, 454–5.

²⁸ Corynne, McSherry, *Who Owns Academic Work? Battling for Control of Intellectual Property* (Cambridge M.A.: Harvard University Press, 2001), 37–8. Conrad Russell, *Academic Freedom* (London: Routledge, 1993), 78–81.

scholarship as it is internationally. This literature is concentrated in the discipline broadly described as ‘higher education studies’. Grant Harman, Simon Marginson, Anthony Welch and Kim McShane are among those who have critiqued the shift in government policy to encourage universities towards more market-like approaches.²⁹ Their focus is the recent past, particularly the Dawkins reforms of 1987 and subsequent policies under Australian Prime Minister John Howard, elected in 1996. Cultural studies scholars like Guy Redden concur with the perspective provided by higher education studies that the marketisation of Australian universities is a result of neoliberal policy.³⁰ Neoliberalism is the ideology and economic theory that several governments deployed worldwide, to varying degrees, beginning in the early 1980s. It was characterised by a move away from centralised state regulation of the economy and the maintenance of a large public sector. Deregulation of markets and privatisation of publicly owned assets were core methods, in line with the theory, for allowing the ‘free’ market to determine the allocation of resources, an approach they believed would better assure quality and efficiency.³¹ In a neoliberal policy framework, universities were expected to behave in a more entrepreneurial manner.³²

The ‘entrepreneurial university’ has even been analysed by the Australian Federal government: in 2000 the Department of Education, Training and Youth Affairs under

²⁹ Grant Harman, ‘Adjustment of Australian Academics to the New Commercial University Environment’, *Higher Education Policy* 19, 2006, 153–72. Simon Marginson *Education and Public Policy in Australia* (Cambridge: Cambridge University Press, 1993). Anthony Welch, *Australian Education: Reform or Crisis?* (Sydney: Allen & Unwin, 1996). Anthony Welch, ‘Challenge and Change: The Academic Profession in Uncertain Times’, in Anthony Welch (ed.) *The Professoriate: Profile of a Profession* (Dordrecht: Springer, 2005), 1–20. Kim McShane, ‘Technologies Transforming Academics: Academic Identity and Online Teaching’ (PhD Thesis, Sydney: University of Technology Sydney, 2006).

³⁰ Guy Redden ‘Publish and Flourish, or Perish: RAE, ERA, RQF, and other Acronyms for Infinite Human Resourcefulness.’ *M/C Journal* 11 (4), 2008, <http://journal.media-culture.org.au/index.php/mcjournal/article/viewArticle/44> Retrieved 20 January 2012.

³¹ David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005), 2. Simon Marginson, *The Free Market: A Study of Hayek, Friedman and Buchanan and Their Effects on the Public Good* (Sydney: Public Sector Research Centre, 1992).

³² Marginson, *Education and Public Policy in Australia*, 57–8.

Michael Gallagher reported on ‘The Emergence of Entrepreneurial Public Universities in Australia’, citing ‘government push’ and ‘market pull’ factors as equal causes.³³ Best known, however, is *The Enterprise University*, an empirical study of changes in university governance conducted by Simon Marginson and Mark Considine, published in 2000. ‘Enterprise’ captured the change better, they believed, than ‘academic capitalism’ for in their study they identified a blend of academic and market values. Their research found that the environment in which universities were managed had changed since the Dawkins reforms of the late 1980s. University leaders – vice-chancellors, deputy and pro vice-chancellors, registrars and administrative managers – now had a range of incentives, which had not previously existed, to look to new markets, to adjust the administration of universities towards techniques more commonly associated with commercial organisations, to seek productivity increases and to centralise decision-making to smaller, more flexible leadership groups.³⁴ Many of these resembled corporate strategies and the universities were increasingly focused towards entrepreneurship. Despite that, there were nuances in the shift, suggesting some academics adapted the new approaches to more traditional modes of scholarship, creating a hybrid commercial and non-commercial scholarly enterprise.³⁵

Analyses of the growth of commercial values in higher education in Australia and internationally argue that market priorities disrupted the university’s authority over knowledge. This is the source of scholarly anguish over the shift of control within institutions away from academic faculty. The entrepreneurial university, according to this body of literature, was trading on its past reliability for profit, even though that

³³Anthony Welch, *Australian Education: Reform or Crisis?* Anthony Welch, ‘Challenge and Change.’ Kim McShane, ‘Technologies Transforming Academics.’ Michael Gallagher, *The Emergence of Entrepreneurial Public Universities in Australia*, DETYA (Canberra: AGPS, 2000).

³⁴Marginson and Considine, *The Enterprise University*, 68–91.

³⁵Marginson and Considine, *The Enterprise University*, 3–7.

reliability was derived from its separation from commerce. Such a position conveys the sense (often by default) that universities operated under one, long, uninterrupted tradition before 1980s politicians applied neoliberalism to the universities as they did to other sectors. But in so doing they conceal, in fact, the changes commercialisation had on the production of university knowledge, not just its governance structures.

Such an approach often leads to an unintended impression of an earlier, ‘golden age’ of university research and governance. Nostalgia is not confined to higher education studies: in fact, it infects history even more, particularly in the many histories written by academics who were present at the events that they recount. The authority of having been there often leads to an idealisation of the particular type of university they sought to create. One example is Gavan Butler, Evan Jones and Frank Stilwell’s account of the struggle to establish Political Economy at Sydney University. This history, along with other accounts of 1960s and 1970s student and academic radicalism, offers an archetype against which neoliberal structures are contrasted. These works idealise a particular construction of the ‘community of scholars’ – a dissenting, debating egalitarian community – as the proper body to legitimise knowledge.³⁶ Alan Barcan’s accounts of the ‘old left’ and ‘new left’ at Sydney University similarly recall periods of university political and intellectual activity that to him are unmatched in later eras.³⁷ These books are important, along with Alison Mackinnon’s recent history of women in American and Australian universities in the 1950s and early 1960s, for they are among the few detailed studies of student life in

³⁶ Gavan Butler, Evan Jones, and Frank Stilwell, *Political Economy Now! The Struggle for Alternative Economics at the University of Sydney* (Sydney: University of Sydney Press, 2009). See also Barry York, *Student Revolt! La Trobe University 1967-1973* (Canberra: Nicholas Press, 1989).

³⁷ Alan Barcan, *Radical Students: The Old Left at Sydney University* (Melbourne: Melbourne University Press, 2002). Alan Barcan, *From New Left to Factional Left: fifty years of student activism at Sydney University* (Melbourne: Scholarly Publishing, 2011). Alison Mackinnon, *Women, Love and Learning: The Double Bind* (Bern: Peter Lang, 2010).

twentieth century Australian universities. These histories often present an implicit ideal in which student refusal to accept dominant values contributed to social change. Nevertheless, they do not offer a real understanding of the ways academic, political and civic leaders identified the relationship of higher education to society.

If some collections of nostalgic histories idealise rebellion from below, the corpus of vice-chancellor memoirs suggests the reverse. Beginning with A.P. Rowe's *If the Gown Fits* in 1960, vice-chancellors' autobiographies structure professorial leadership as the source and location of university distinction.³⁸ Unlike in some national tertiary systems, where 'professor' refers to any teacher, in Australian universities, as in most other Commonwealth countries, the title of professor is granted only to the most senior of academic staff. Throughout much of the period explored in this thesis, boards consisting only of professor-level scholars ruled the academic function of the universities. The position is affirmed by most vice-chancellor accounts of the university's history, who have drawn on that authority themselves to reflect and reminisce about their own leadership style and its effects.³⁹ The role of professorial power and authority over other staff and students in the university was a key item of contention and the vice-chancellor accounts give insight into the perspective of leaders. In fact, it may well be Rowe's book that sparked a longstanding confrontation between professors and sub-professorial staff. In a review of the book, P.H. (Perce) Partridge commented in the staff association journal *Vestes* that Rowe's key theme

³⁸ A.P. Rowe, *If the Gown Fits* (Melbourne: Melbourne University Press, 1960).

³⁹ See, for example, David Penington, *Making Waves: Medicine, Public Health, Universities and Beyond* (Melbourne: Melbourne University Press, 2010). Bruce Williams, *Making and Breaking Universities: Memoirs of Academic Life in Australia and Britain 1936-2004* (Sydney: Macleay Press, 2005).

was the power of the ‘professor-god’, provoking opposition to the figure of the ‘god-professor’ by a subsequent generation of student radicals.⁴⁰

Institutional histories, by contrast, focus on a more collegial authority, tending to tell the story of small, struggling numbers of professors, the gradual development of new disciplines, periods of growth as a result of philanthropy or government policy and the key struggles and controversies that shaped each institution. Histories of the oldest two Australian universities, the Universities of Melbourne and Sydney, established in the 1850s, offer the most comprehensive accounts.⁴¹ Institutional histories are also available for the University of Adelaide, inaugurated in 1874, and Tasmania, established in 1890, the University of Queensland (1909) and the University of Western Australia that opened in 1911.⁴² S.G Foster and Margaret Varghese’s history of the Australian National University, which began in Canberra in 1946 and Patrick O’Farrell’s account of the University of New South Wales, established in 1949, both give important accounts of post-war university concerns and innovations.⁴³ To these

⁴⁰ See P.H. Partridge, ‘Universities in Two Countries.’, *Vestes* 3 (2), 1960, 54.

⁴¹ Added to older histories, such as Geoffrey Blainey’s 1956 short history of Melbourne University, both universities have long histories, written in the 1990s, in two volumes. At Melbourne, Richard Selleck’s *The Shop* covers the period up to the Second World War while John Poynter’s and Carolyn Rasmussen’s 1996 book *A Place Apart* begins with the war. Sydney’s too is split at the Second World War, though the two volumes are more self-consciously paired. See Geoffrey Blainey, *The University of Melbourne: A Centenary Portrait* (Melbourne: Melbourne University Press, 1956). R.J.W. Selleck, *The Shop* (Melbourne: University of Melbourne Press, 2003). John Poynter and Carolyn Rasmussen, *A Place Apart: The University of Melbourne: Decades of Challenge* (Melbourne: Melbourne University Press, 1996). C. Turney, U. Bygott, and P. Chippendale, *Australia’s First: A History of the University of Sydney Volume 1 1850-1939* (Sydney: Hale & Iremonger, 1991). W.F. Connell et al., *Australia’s First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995). Both universities have also more recently prepared shorter histories, see Stuart Macintyre and R.J.W. Selleck, *A Short History of the University of Melbourne* (Melbourne: Melbourne University Press, 2003). Horne and Sherington, *Sydney: The Making of a Public University*.

⁴² W.G.K. Duncan and Roger Ashley Leonard, *The University of Adelaide 1874-1974* (Adelaide: Rigby, 1973). Richard Davis, *Open to Talent: The Centenary History of the University of Tasmania* (Sandy Bay: University of Tasmania, 1990). Malcolm I. Thomis, *A Place of Light and Learning* (St Lucia: University of Queensland Press, 1985). Fred Alexander, *Campus at Crawley: A Narrative and Critical Appreciation of the First Fifty Years of the University of Western Australia* (Melbourne: F.W. Cheshire, 1963).

⁴³ S.G. Foster and Margaret M. Varghese, *The Making of the Australian National University* (Sydney: Allen & Unwin, 1996).

larger institutional histories can be added accounts of the smaller, more specific ones. Histories of residential colleges, of sections of university organisation, such as the university staff associations and particular departments are complemented by studies of disciplines, such as James Franklin's history of philosophy in Australia.⁴⁴ But in most cases, the institution is the subject: it is acted upon by government, economic circumstance and by the vagaries of its own administrators. The question ignored in all these genres is what is the relationship between the universities and society? Such a question and its implications for the regulation of knowledge is not readily explained in the institutional accounts, not even in each university's contributions to the public good, despite the genre's tendency to cautious triumph. Gestures to the national historical context, occasional links to local politics and perhaps the local economy raise, but do not elucidate, the ways that knowledge, nation, economics and culture were seen and linked throughout Australian university history.

Broader histories of Australian higher education have been rarer, though they do tend to take a more national perspective, giving more context. These help to explain the connections between the character and priorities of higher education in Australia in relationship to the concerns of government; the qualities of labour conditions and economic development and their effect on curricula and research as well as the social conditions the universities perpetuated and sometimes sought to change. J.J.

Auchmuty's 1963 article 'The Idea of the University in its Australian Setting' was among the first of these and was much cited for some decades. Auchmuty argued that

⁴⁴ See, for example, James Franklin, *Corrupting the Youth: A History of Philosophy in Australia* (Sydney: Macleay Press, 2003). Butler, Jones, and Stilwell, *Political Economy Now!* Sybil M. Jack, *History of the Sydney Association of University Teachers 1943-1993* (Sydney: University of Sydney Printing Service, 1994). Barbara Caine, 'The Department in the 1970s', in Barbara Caine, et al. (eds), *History at Sydney, 1891-1991: Centenary Reflections* (Sydney: Sydney Studies in History, 1992), 69–82.

Australian pragmatism had left the universities under funded and undervalued, colonial institutions with no clearly defined role in the community or for the nation.⁴⁵ If Auchmuty's analysis was fair, it was too soon for him to see that the 1957 Murray Review was changing that, giving higher education a new and esteemed place at national level, with substantial new funding and an official national body to oversee it. Peter Tannock's 1969 PhD thesis and some articles that followed it outlined government policy before and after the Murray review. He exposed the power – still latent in 1969 – that the Commonwealth had gained, giving government the potential, Tannock warned, to take control of the universities; a warning echoed in A.P. Gallagher's 1982 account of the Australian Universities Commission.⁴⁶

Stuart Macintyre's 2010 book *The Poor Relation*, takes a different view of the relationship between government and the universities, focusing on the social sciences specifically, since the Second World War. In this account, the nation is centre-stage. Social scientific research was embedded in Australia as governments and bureaucrats in the 1940s sought expertise and new knowledge to formulate a vision for the collective national good. Those social scientists hoped that a science of society, a project they believed had unique potential in Australia, would help the world prevent the disasters of war and economic depression that had recently been so devastating.⁴⁷ By the 2000s, according to Macintyre, the social sciences, by contrast to their 1940s incarnation, were professional, well-funded and consisted of thousands of specialist researchers. But as a result of the neoliberal policies to which they had responded, the

⁴⁵ J.J. Auchmuty, 'The Idea of the University in Its Australian Setting', *The Australian University*, 1 (3), 1953, 146–70.

⁴⁶ P.D. Tannock, 'A Study of the Role of the Government of Australia in Education since Federation 1901-1968' (PhD Thesis, John Hopkins University, 1969). A.P. Gallagher, *Coordinating Australian University Development: A Study of Australian Universities Commission 1959-1970* (St Lucia: University of Queensland Press, 1982).

⁴⁷ Stuart Macintyre, *The Poor Relation: A History of the Social Sciences in Australia* (Melbourne: Melbourne University Press, 2010), 1.

contemporary disciplines lacked coherent vision. Each researcher sought a niche in the market for their research as part of the project that, Macintyre argues, infected the sciences: the formation of intellectual property.⁴⁸ The key contrast from the present to the 1940s, in Macintyre's view, was that those older advances in knowledge were public goods, available and accessible to all, unlike contemporary intellectual property, which is privately owned and traded.⁴⁹

Knowledge as a public good, as opposed to a form of private property, is a central preoccupation of Simon Marginson's, whose postgraduate research Macintyre helped supervise.⁵⁰ In the 1990s, Marginson published four major books: *Education and Public Policy in Australia* sought to question the dominance of economic reasoning in educational policy, particularly the Dawkins reforms; *Educating Australia* gave a history of economics and education in Australia since 1960; *The Free Market* was a monograph, critiquing neoliberalism and *Markets in Education* considered the character of educational markets as they were just emerging.⁵¹ Through each of these, Marginson interrogated the economic assumptions used in formulating education policy. He began by investigating the economic value of education. The value of higher education for graduates, he demonstrated, was not primarily in the knowledge gained and skills learned. Rather, the degree was a 'positional good', giving university graduates social and economic advantages derived from the degree's credential rather than its substance.⁵² Later, Marginson extended this to show that some credentials were worth more than others, depending on the reputation of the

⁴⁸ Macintyre, *The Poor Relation*, 1–29.

⁴⁹ Macintyre, *The Poor Relation*, 7.

⁵⁰ Simon Marginson, *Markets in Education* (Sydney: Allen & Unwin, 1997), xv.

⁵¹ Marginson, *Education and Public Policy in Australia*. Simon Marginson, *Educating Australia: Government, Economy and Citizen since 1960* (Cambridge: Cambridge University Press, 1997).

Marginson, *The Free Market*. Marginson, *Markets in Education*.

⁵² Marginson, *Education and Public Policy in Australia*, 131–4.

institution from which the credential was received – making global university rankings important signifiers of value.⁵³

The economic value of higher education was therefore the degree, not knowledge. For Marginson, this freed knowledge from the market. In *Education and Public Policy* he articulated a theory that university knowledge was an inherently non-market product. It was ‘non-rival’, an economic term that refers to a purchase which, despite its sale, does not remove the commodity or its utility from its original owner. The construction of markets around knowledge that were based on the possibility of owning knowledge as a private good, Marginson concluded, was therefore not commensurate with the nature of the substance of knowledge.⁵⁴

The political aim of this analysis was to ensure university knowledge remained publicly owned. The private ownership of intellectual property was, to Marginson, part of the 1980s and 1990s government project to privatise public assets.

Transforming university research into privately owned intellectual property was similar to privatising (as the Hawke-Keating government did) the Commonwealth Bank, Qantas and other national institutions.⁵⁵ A key distinction was that instead of selling the institution, intellectual property reconfigured the nature of knowledge to be a different kind of commodity. When knowledge was public property it had the potential to benefit everyone. Private knowledge, however, would only benefit the few who traded it. In this approach to intellectual property, Marginson believed he

⁵³ Simon Marginson, ‘The New Higher Education Landscape’, 43–8. Simon Marginson, ‘Global University Rankings’, in Simon Marginson (ed.), *Prospects of Higher Education: Globalisation, Market Competition, Public Goods and the Future of the University* (Taipei: Sense Publishers, 2007), 79–100.

⁵⁴ Marginson, *Education and Public Policy in Australia*, 174.

⁵⁵ Nick Dyrenfurth and Frank Bongiorno, *A Little History of the Labor Party* (Sydney: UNSW Press, 2011), 153.

located a weakness in the neoliberal agenda: a weakness that, when exposed, would demonstrate that privatising university research would undermine its intrinsic economic value. He sought to take on the neoliberal economists using their own tools.

This led Marginson to construe knowledge as a public good. In repeated economic discussions, this public good – meaning publicly-owned commodity – exactly equates with *the* public good, meaning the public benefits of knowledge. This was to contrast with neoliberal economic interpretations of education as a commodity that had ‘positive externalities’ – benefits resulting from, but not intrinsic to, the character of knowledge.⁵⁶ Marginson instead detached education from knowledge. Once conceived as a distinct substance, knowledge could also be separated from the market for education. He then reconstructed knowledge as a publicly owned commodity. Even though a university degree was a privately-possessed good, knowledge was not: its non-rival character, Marginson argued, required it to be publicly owned.⁵⁷ But there was a problem with equating public ownership with public benefit, for what if knowledge was not always beneficial? This question had a very odd answer – these were not public goods. They were, he argued, ‘public bads’.⁵⁸

What exactly ‘public bad’ implies for the ownership of knowledge is not at all clear. Nor does the non-market argument hold up. Non-rival commodities – music downloads, for example – are commonly traded as privately-owned goods. Who is to say that a public ‘good’ (or bad) could not be privately traded? The problem appears to be Marginson’s angle of analysis. Looking at education from the perspective of its

⁵⁶ Jon Stanford, ‘International Trade in Education’, in Roselyn R. Gillespie and Colin B. Collins (eds), *Education as an International Commodity Volume 1* (St Lucia: Australia and New Zealand Comparative and International Education Society, 1986), 47.

⁵⁷ Marginson, *Education and Public Policy in Australia*, 172–9.

⁵⁸ Marginson, ‘The New Higher Education Landscape’, 37.

economic good immobilises knowledge; it means education and knowledge which, from other angles may or may not be treated as commodities, must be. This position seems to result eventually in Marginson adopting an at times ambivalent, even contradictory stance. Whereas in the 1990s, Marginson's intention to critique commodified, privately traded knowledge is stated up front, in his post-2000 work, where Marginson's attention shifted from public policy to the institution, such an intention is no longer clear. In considering education as a global positional good and knowledge as a public commodity, in his recent work it becomes very difficult to tell whether Marginson is critiquing university entry into a global marketplace or providing instruction on how to do so to greater effect.⁵⁹

The historical implication of Marginson's account is that the government approach to higher education prior to the 1970s was, like the Keynesian economics that dominated public policy, focused on public benefit as the endpoint to widespread private gain. Government faith in the theories of John Maynard Keynes had led to an enlarged public sector, which aimed to use government spending to assure circulation and distribution of capital, leading to full employment and a growing middle class.⁶⁰ When their faith in Keynesian strategy was undermined in the economic turmoil of the 1970s, so was the government's focus on the public good. Government interest would now concentrate on the regulation of higher education as an industry, rather than as a function of the state.⁶¹

Keynesian-inspired approaches to public policy did not previously have a wholly benign influence on higher education, however: government commitment to the

⁵⁹ See *Ibid.*

⁶⁰ Tim Rowse, 'Coombs the Keynesian', *History of Economics Review*, 30, 1999, 108–25.

⁶¹ Marginson, *Education and Public Policy in Australia*, 55–7.

universities for specific public benefits was no recipe for independence and autonomy. Higher education was a part of the nation-building project that dominated political sensibilities in the post-war period.⁶² University research funding was therefore, in part, for the purpose of strengthening the state. Such a tendency was not new: since the establishment of Australian universities in the nineteenth century, some university scientists sustained connections to imperial research networks, positioning the university within the imperial mission.⁶³ Twentieth century funding of research for the purpose of bolstering the state was a practice inherited from its use in earlier centuries to nourish imperialism.

The connection of science in Australia to empire went deeper than the provision of colonial data to the metropole, however: it went to the core of the nature of the scientific endeavour.⁶⁴ Historians highlight the colonial power asserted by early science in Australia and the imperial assumptions informing its applications.

Indigenous knowledge, for example, was appropriated by scientists and sent to Great Britain as their own discoveries.⁶⁵ Race and ‘whiteness’ was connected to population health management, so that medical advances and the colonial project worked in concert.⁶⁶

The argument that science functioned as a type of imperial authority is founded in Michel Foucault’s claims to a nexus between knowledge and power. The impulse to

⁶² See Macintyre, *The Poor Relation*, 22–4.

⁶³ For example, see D.J. Mulvaney, *So much that is new: Baldwin Spencer, 1860-1929, A Biography* (Melbourne: University of Melbourne Press, 1985).

⁶⁴ Raewyn Connell, *Southern Theory: the global dynamics of knowledge in social science* (Sydney: Allen & Unwin, 2007), 4–25.

⁶⁵ *Ibid.*

⁶⁶ For example, Sybil Jack, ‘Cultural Transmission: Science and Society to 1850’, in R.W. Home (ed.), *Australian Science in the Making* (Cambridge: Cambridge University Press), 45–66. Warwick Anderson, *The Cultivation of Whiteness: Science, Health and Racial Destiny in Australia* (Melbourne: Melbourne University Press, 2005). Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (Basingstoke: Palgrave, 2004).

colonise the world was paralleled in the scientific desire to know it. Ownership claims by humans over nature was a kind of imperialism of the knower over that which they knew.⁶⁷ Observations of the natural world were by necessity ‘objective’, in that they described a world that existed beyond its discoverer and would exist whether they discovered it or not. Such knowledge was thus deemed ‘truth’ and granted a status above other ways of knowing.⁶⁸ This type of knowledge gave authority to the expert not only to shape the public’s understanding of the world but, in doing so, to also make implicit demands on the behaviour of those living within the boundaries of the world they described.⁶⁹ As nineteenth-century universities across Europe and the world slowly welcomed the sciences into its mission and purpose, the implications for the university was an elevation of its authority: the kinds of claims to truth that science permitted gave higher education increased power in society. By the twentieth century, other disciplines and activities – history, economics, sociology, even cooking (‘domestic science’) sought, particularly in the ‘social sciences’, some of the legitimacy scientific knowledge had acquired.⁷⁰ Scientific authority enhanced the university’s entitlement to the guardianship of knowledge – to possess truth and its purity, or ‘universal’ knowledge, as Foucault described it.⁷¹

Scientific authority, however, was augmented by the tangible role of the university in national development, increasing still further the university’s influence. For this to occur, the universities needed to acquire a more local perspective. Historians of science describe the shift from imperial exploration of Australia to a science *for*

⁶⁷ Roy Macleod, ‘Organising Science under the Southern Cross’, in Roy M. Macleod (ed.), *The Commonwealth of Science: ANZAAS and the Scientific Enterprise in Australasia 1888-1988* (Melbourne: Oxford University Press, 1988), 19–39. Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings 1972-1977* (New York: Pantheon Books, 1972), 112.

⁶⁸ Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007).

⁶⁹ Foucault, *Power/Knowledge*, 146–65.

⁷⁰ See Macintyre, *The Poor Relation*, 11–3.

⁷¹ Foucault, *Power/Knowledge*, 128.

Australia, developing an eye to the national (rather than imperial) benefit, as a gradual one.⁷² Despite the increased nationalisation of science, however, especially after Australian Federation, scholarly connections to the Empire, as Peter Hobbins, Kathryn Hillier and Tamson Pietsch demonstrate, were long maintained.⁷³ Ongoing links notwithstanding, the rise of institutions such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the development of disciplines, academies, societies and universities are depicted – for example in collections such as those edited by Rod Home and Roy Macleod – as providing the intellectual infrastructure for the modern, maturing nation.⁷⁴

The value of scientific infrastructure for the nation was explicitly economic, since science translated into new technologies.⁷⁵ This too asserted a type of power, argues Stanley Aronowitz (in a study of science that preceded his critiques of the contemporary university). Arguing from a Marxist perspective he sees scientific knowledge as having wrested control of labour away from expert crafts-men and women.⁷⁶ The use of science to innovate and create new industrial technologies thus made science a tool of capital, promoted as progress. Technological progress, based

⁷² Roy Macleod, 'From Imperial to National Science', in Roy Macleod (ed.), *The Commonwealth of Science: ANZAAS and the Scientific Enterprise in Australasia 1888-1988* (Melbourne: Oxford University Press, 1988), 40–72.

⁷³ Ibid. Peter Hobbins and Kathryn Hillier, 'Isolated Cases? The History and Historiography of Australian Medical Research', *Health and History* 12 (2), 2010, 10. Tamson Pietsch, 'A Commonwealth of Learning? Academic Networks and the British World, 1890-1940' (PhD Thesis, New College, Oxford University, 2008).

⁷⁴ R. W. Home (ed.), *Australian Science in the Making* (Cambridge: Cambridge University Press, 1988). Roy Macleod (ed.), *The Commonwealth of Science: ANZAAS and the Scientific Enterprise in Australasia 1888-1988* (Melbourne: Oxford University Press, 1988).

⁷⁵ See George Currie and John Graham, *The origins of CSIRO: science and the Commonwealth Government 1901-1926* (Melbourne: Commonwealth Scientific and Industrial Research Organisation, 1966). George Currie and John Graham, 'CSIR 1926-1939', *Public Administration* 33, 1974, 230–52. C. B. Schedvin, 'Environment, Economy and Australian Biology, 1890-1939', *Historical Studies*, 21 (82), 1984. C. B. Schedvin, *Shaping Science and Industry: A History of Australia's Council for Scientific and Industrial Research, 1926-49* (Sydney: Allen & Unwin, 1997), 11–28.

⁷⁶ Stanley Aronowitz, *Science as Power: Discourse and Ideology in Modern Society* (Minneapolis: University of Minnesota Press, 1988), 189.

on scientific discovery, was the marker of modernity as economies and cultures sought mechanisation, automation, speed and constant change. The universities were an important component of this development.

The adoption of technological knowledge by the university was – as this thesis will discuss – a contentious decision. As Nicholas Brown argues, this was partly a result of a longstanding division between utilitarian and liberal aims in higher education.⁷⁷

The division between practical and liberal education, however, does not wholly explain it. In the late 1970s, philosopher Jean-Francois Lyotard suggested that the shift of university attention from scientific observation to technological development constituted a transformation that challenged the legitimacy of the university's authority over knowledge.⁷⁸ If Lyotard was right, defending the university from a shift towards technology was not just a defence of liberal knowledge over vocational training. It protected a past epistemology that defined the university's traditional role in society.

According to Lyotard, the modern university (since the German Enlightenment and the French Revolution) was founded on two modes of legitimacy, or authority over knowledge, both based on scientific research norms. One form, derived from German idealism, stated that scientific knowledge legitimised itself – that is, the value of knowledge was knowledge itself. This suggested that knowledge was elemental – it was life or spirit. The state had no authority over this knowledge – indeed, only knowledge could 'say what the state and what society are'.⁷⁹ The university's

⁷⁷ Nicholas Brown, *Governing Prosperity: Social Change and Social Analysis in Australia in the 1950s* (Cambridge: Cambridge University Press, 1995), 206–43.

⁷⁸ Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), 37–41.

⁷⁹ Lyotard, *The Postmodern Condition*, 34.

separation from the state was thus, ironically, a mechanism to legitimise it. As an independent institution, with the capacity to develop and guard truth, the university could give the state an authority to rule that was deemed, by the structure of the pursuit of knowledge, independent and reliable. This was a position of great power that the universities would battle to defend.

There was, however, a second mode of legitimacy for the university that did not sit easily with the first, according to Lyotard, though they both arose almost simultaneously. Eventually this second mode dominated the other (although never absolutely), for it was founded in a larger, more inclusive and compelling narrative of human liberty. Knowledge was legitimised, not by elitist mastery as in the first form, but by consensus. Knowledge was thus found to be ‘truth’ or ‘untruth’ by the people. It was, Lyotard explains, a heroic myth, depicted as a part of a human struggle for freedom. This mode of legitimacy had expression in democracies: the people decided what knowledge was and through their control of knowledge they also controlled the state. As democracy began to dominate the Western world, national universities were established in the name of freedom, argued Lyotard. The struggle by researchers to win control of knowledge reflected exactly the struggle of democratic people to rule themselves. As citizens overthrew other tyrannical forms of rule to establish democracy, so would researchers conquer nature and, in doing so, rule themselves, no longer subject to the caprice of unpredictable natural forces.⁸⁰

This second mode of legitimacy meant that university knowledge was pushed towards action rather than truth.⁸¹ The value of science would be determined by the people,

⁸⁰ Ibid., 30–1, 35–41.

⁸¹ Ibid., 39–40.

who sought observable, practical benefits. Science became what the people required it to be – useful. This, Lyotard explained, meant that inquiry swayed from its ‘pure’ and independent form and became increasingly technological. An important consequence of this was the connection between usefulness and the market. Once knowledge was useful in this way, that use had market value.⁸² As a result, the worth of research was no longer located in itself; it was realised when it worked and valued when it was sold.

The ascendancy of that second mode of legitimacy over the first, Lyotard argues, carried within it the seeds of the delegitimisation of the university. Given that authority was now located in the people, not in mastery, the university was not necessarily more able to offer technological solutions than any other sector.⁸³

Knowledge was not ‘life’ or ‘spirit’, it was merely another tool to effect progress. Progress, not knowledge, therefore became the goal of the university, undermining its formerly unique position in modern society. The university’s role, as a result, was less and less attached to the state and democracy, the two structures that had made it so powerful. Its efficiency in achieving progress became the key measurable way of evaluating society’s need for higher education.⁸⁴

Moreover, technological use became of value to the university too, as it could often also be applied to enhance knowledge itself. Some technologies – like laboratory equipment – would improve research outcomes. In fact, *without* some technologies there could be no guarantee of proof. As a result, knowledge would be increasingly reinvested into the production of more knowledge. Since research leading to

⁸² Ibid., 44–7.

⁸³ Ibid., 37–44.

⁸⁴ Ibid., 52.

technologies was also translated into market value, investment in the efficiency and effectiveness of research increased: ‘whoever is the wealthiest has the best chance of being right’, Lyotard suggests, and whoever produces quality knowledge is also likely to be the wealthiest.⁸⁵ This link between knowledge and wealth, Lyotard argues, resulted in a situation where the circulation of knowledge came to resemble the circulation of capital, since surplus knowledge was reinvested into the university for the purpose of producing more.⁸⁶

University and political leaders, navigating the shift to the technologically-focused university did not typically undertake such complex philosophical reflections. Nevertheless, the issues Lyotard outlined are reflected in simpler form throughout debates over the inclusion of technological knowledge as the proper domain of university activity (see Chapter One). The significance of technological universities and their link to the economy is not, however, reflected in the historiography. While technological development occurred in Australia as it did across the Western world, fuelling the post-war economic boom, its global emergence is a narrative in which Australia rarely features. As a result, historians have not closely considered the significance of Australian technological development, particularly in its relationship to the universities. Terry Irving, Raewyn Connell and other historians have pointed to the skilled workforce, led by ‘technocrats’, that contributed to Australia’s post-war manufacturing capacities.⁸⁷ And yet despite the evidence that technological development and technological education was central to Australian post-war

⁸⁵ Ibid., 45. See also Foucault, *Power/Knowledge*, 93–4.

⁸⁶ Lyotard, *The Postmodern Condition*, 45.

⁸⁷ Raewyn Connell and Terry Irving, *Class Structure in Australian History: Documents, Narrative and Argument* (Melbourne: Longman Cheshire, 1980), 292–7. Richard White, *Inventing Australia: Images and Identity 1688–1980* (Sydney: Allen & Unwin, 1981), 147.

modernisation, the structures that enabled the development of a skilled labour force have been largely ignored.

An exception to that broad neglect is Nicholas Brown's *Governing Prosperity*, which documents the post-war rise of the universities among the key social changes of the 1950s in Australia.⁸⁸ In this period, the university's link to applied technology forged its connection to the nation and the government's aims for its economic growth.⁸⁹ It was an international phenomenon that drew the objections of philosopher Jacques Derrida in the 1980s. In its alliance to modernity and the state, Derrida argued that universities had revealed the emptiness of everything they had claimed to be. In his view, the apparent decline of the university under neoliberal policies, and the loss of its claims to truth was timely and deserved.⁹⁰

Taking up Derrida's argument, scholars in the 1990s – in part a response to the North American 'culture wars' – argued that the university's authority had been false, its knowledge claims constructed on elaborate apparatuses of power. This scholarship is primarily represented by Bill Readings's *The University in Ruins*.⁹¹ Readings suggests that academics, like the student radicals of the 1960s and 1970s (who he idealises as those who knew best how to engage with the university), 'dwell in the ruins'.⁹² The university has no value, no *raison d'être* according to Derrida, an emptiness of

⁸⁸ Brown, *Governing Prosperity*, 206–43.

⁸⁹ Ibid. Andrew Spaul, *Australian Education in the Second World War* (St Lucia: University of Queensland Press, 1982), 219–31.

⁹⁰ Jacques Derrida, Catherine Porter, and Edward P. Morris, 'The Principle of Reason: The University in the Eyes of Its Pupils' *Diacritics* 13 (3), 1983, 3–20.

⁹¹ Bill Readings, *The University in Ruins* (Cambridge M.A.: Harvard University Press, 1996).

⁹² Ibid., 166–79.

purpose that Readings sees as an improvement on the oppressive structures of its past.⁹³

Readings' criticisms of the effects of the university's past claims to truth are difficult to reconcile, however, with the types of value in knowledge that political, civic and academic leaders have had to navigate in building the university: issues like the health of the people, their ability to participate in democracy and their standard of living. Nevertheless, Readings does raise some important questions. Was it legitimate for the university to maintain such authority over knowledge? Is the loss of that authority (if indeed it has been lost) in fact just and correct, redistributing the ownership of knowledge beyond the university's still-elite membership?

Corynne McSherry argues that instead of 'living in the ruins', as Bill Readings would have them do, many academics have chosen to invoke the concept of intellectual property to stake their claim to the ownership of knowledge. She suggests, however, that this is not only about market participation. Rather – or perhaps more accurately, also – it is a claim to academic freedom.⁹⁴ To understand how she makes this argument requires a turn to a different author, Henry Etzkowitz.

In the late 1990s, Etzkowitz and his Dutch colleagues prepared an argument for university collaboration with society based on the metaphor of the 'triple helix'.⁹⁵ Towards the end of the twentieth century, they argued, universities, government and industry had formed a bond – an unstable, but productive relationship that created

⁹³ Derrida, Porter, and Morris, 'The Principle of Reason'.

⁹⁴ Corynne McSherry, *Who Owns Academic Work?*, 19.

⁹⁵ Henry Etzkowitz and Loet Leydesdorff, 'The Dynamics of Innovation: From National Systems and 'Mode 2' to a Triple Helix of University-Industry-Government Relations', *Research Policy* 29 (2), 2000, 109–23.

new knowledge.⁹⁶ In this argument, Etzkowitz was responding specifically to a widely-read book by Michael Gibbons and colleagues, which had observed a significant change in the patterns of university research.

Gibbons and colleagues had suggested that the marketisation of universities was associated with changes in research behaviour. Rather than a linear pattern where discovery was turned into application, research was now more often conducted in multi-disciplinary teams that included industries – a relationship that brought profit-motives into the university. The risks, Gibbons argued, were that the university's unique reliability was based on its separation from financial and political interests. Alliance with the state and industry threatened that status.⁹⁷ Etzkowitz contested the novelty of what Gibbons had defined as 'Mode 2' research. The production of knowledge for profit, Etzkowitz argued, was in fact the original mission of the university, an approach that had been disrupted by the claims to objectivity derived from German idealism.⁹⁸ This offered the universities a justification for engagement in knowledge for profit, where profit 'means different things' to different stakeholders.⁹⁹

Extending the analysis by Etzkowitz and his colleagues, McSherry argues that the university's separation from profit had its origins in the leisured scholarship of past aristocratic amateur scientists, rather than in principled claims about truth and reliability. Their leisured discovery, she maintained, was contrasted to the lesser status of industrialists who pursued applied innovations for profit. It was thus a class-

⁹⁶ Henry Etzkowitz et al., 'The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm', *Research Policy* 29 (2), 2000, 313–30.

⁹⁷ Michael Gibbons et al., *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies* (London: Sage, 1994), 46–69.

⁹⁸ Etzkowitz et al., 'The Future of the University and the University of the Future', 313–30.

⁹⁹ Etzkowitz and Leydesdorff, 'The Dynamics of Innovation', 109–23.

based distinction that informed university research norms and gave the university an authority over others. This granted university research a higher status than workplace-based or industrial knowledge – a status that universities converted into a claim for greater moral integrity.¹⁰⁰ The defence of academic values, then, is seen – particularly among advocates, like Etzkowitz, for university research commercialisation – as much a reflection of scholarly arrogance as a desire to protect the integrity of research. The university’s turn to commerce does not collapse any genuinely moral high ground, they argue, only some out-worn elitism.¹⁰¹

For McSherry’s analysis of intellectual property, this ability for profit to ‘mean different things’ offered academics the opportunity to reclaim the ownership of knowledge, using the market’s own tools. Academic claims to intellectual property fulfilled Derrida and Readings’s plea for ‘interested’ scholarship – though a stake in intellectual property was, she admitted, unlikely to be the sort of interest they meant.¹⁰²

The growth in the emphasis on intellectual property in higher education globally is a sign of the importance of the issues of ownership, control and regulation that became attached to university knowledge towards the end of the twentieth century. And yet, while the legal and moral implications have been discussed throughout the scholarship, the historical complexities that have led to them have not. In the history of Australian higher education, the regulation of knowledge is an issue that sits tantalisingly beneath the surface of the historiography (including, as is needed here, the contributions of other disciplines than history). Tensions between government

¹⁰⁰ McSherry, *Who Owns Academic Work?*, 32–51.

¹⁰¹ Etzkowitz and Leydesdorff, ‘The Dynamics of Innovation’, 109–123.

¹⁰² McSherry, *Who Owns Academic Work?* 19.

aims, economic necessity and university autonomy were present in accounts of the universities during the war; in the expansive and hopeful plans of post-war reconstruction; in histories of the ‘long boom’ of post-war economic prosperity and in critiques of higher education policy from the Whitlam and Dawkins reforms up to the present. In accounts of all these well known events, however, the mechanisms for setting the boundaries of knowledge and controlling research priorities are unclear. By contrast, having power over knowledge was at the forefront of histories of science, as historians recognised connections between the projects of empire and nation and the aims of science.¹⁰³ Their recognition of the link between scientific discovery and imperial goals did not ordinarily extend to reflections on higher education, however, so that the implications of imperial science for the idea of the university were rarely specifically articulated. In an exception to this general tendency, histories of student radicalism often carry an underlying challenge to the legitimacy of university rule over the realm of knowledge by idealising dissent as the source of progressive scholarship. And yet, those separate criticisms have not been connected to consider which historical actors controlled, owned and validated knowledge in Australian universities or, moreover, what the implications were as that control shifted. Even Marginson, who closely considered the market for knowledge, only focused on its economics, not its regulation. The issue raises further questions: where among all this, was academic freedom? To what extent, despite the pressures, have universities and academics retained control of knowledge – and has it made any difference when they have done so?

¹⁰³ For example, John Gascoigne, *Science in the Service of Empire: Joseph Banks, the British state and the uses of Science in the age of revolution* (Cambridge: Cambridge University Press, 1998). Anderson, *The Cultivation of Whiteness*. Bashford, *Imperial Hygiene*.

Approach, Methodology and Sources

This thesis traces changes in the university in Australia from the beginning of the Second World War until the mid-1990s, exploring the control, regulation and ownership of university-based knowledge. It is focused on moments of change or crisis, where in controversy, issues and assumptions that often lay beneath the surface of academic norms, are better able to be seen. These events include: the use of universities in the project of war, post-war reconstruction and nation-building; the inclusion of technology in the university; the Cold War decision to send government spies to observe and influence academic ideas; academic and student rebellion against the expectation that the university reinforce and justify social and political norms and hierarchies; government interventions in university priorities and values; and the decisions that made university research and teaching objects for sale and trade. Science features prominently among these, but this is not just a history of science: it is a story simultaneously about changes to the idea of the university in Australia in the twentieth century and shifts in the use and value of the knowledge attached to it.

In considering the issues that academic, political and civic leaders believed threatened academic values and the integrity of the university, this thesis identifies the changing ways that university knowledge was imagined, understood and valued. The questions university members confronted were remarkably consistent throughout, despite significant changes in the implications of their answers. At every point, academics found that they needed to agree on the basis for inclusion of topics and disciplines in the university and the right people and institutions to judge their validity and quality. They were also compelled to negotiate on the university's responsibilities to society and to stand firm in the instances that they agreed it must remain autonomous. As

time passed, any ability to remain separate seemed increasingly difficult. This led to new questions about the political, ideological and economic elements of university work and the possibility – and desirability – of maintaining the ideal of disinterested scholarship that had given the university so much authority. In short, this thesis examines university autonomy, academic freedom, legitimation and the commodification of knowledge. It focuses on research, but does not ignore teaching and examination as other key areas where knowledge was perpetuated, legitimised and sometimes challenged.

These issues, particularly prior to the 1980s, were often seen as a crisis of the professoriate. The struggles of university professors to maintain the integrity of university knowledge were paralleled by their effort to maintain the right to control and legitimise it. The personal papers of professorial staff, used extensively in this thesis, have often been compiled, organised and archived with a view to demonstrating the rightfulness of their authority and actions. The value of this tendency is that personal papers often contain concentrations of material that pertain to the moments of controversy that arose within the universities. Their personal and professional bias, when compared to the university histories and other institutional sources, provide useful insights into the strategies and concerns of the different interests and players as the university environment evolved and was transformed over the decades.

For this reason, minutes of university meetings are useful sources, for they demonstrate the responses and decisions of Australian universities collectively as well as distinctions and nuances between the institutions. The minutes of past decades, assiduously taken, transcribed and indexed by the armies of secretaries who laboured

in the universities, very helpfully specify far more than the disciplined minutes that are the preference of the chair of many contemporary meetings. Disputes and their originators are often detailed in extensive accounts of even the most contentious meetings, providing useful inroads to the key debates as they arose within the universities. Policies, media releases and ephemera kept in university archives (and occasionally on university websites), while offering a more sanitised perspective on the institution, also reveal the issues that university leaders considered to be significant.

The concerns of key organisations and individuals in the system as a whole are reflected in published primary sources of the Australian Vice Chancellors' Committee and other university and civic leaders. Divisions between those documents and the evidence available through the National Tertiary Education Union, alongside records of the staff associations scattered through personal collections, reveal controversies that are distinct from the institutional ones, helping to identify their differing, and sometimes competing interests.

Student publications reflect their concerns, preoccupations and position in the university. Student engagement with the issues and questions raised throughout the institutional evidence, their support or opposition to university and government aims and decisions, are scattered through their publications: student union newspapers, publications of the National Union of Australian University Students and collections of student ephemera, which all help reveal students' place in the system of university knowledge. These sources are often not the best foundation for reliable facts, but they display the diverse interests and perspectives of students in each era of university history.

In particular, in the 1960s and 1970s when students most challenged the university's right to control knowledge, the roneoed student 'broadsheets' give, in stark and often melodramatic polemic, the claims and debates that concerned students. These are often difficult to navigate. While there were a few student organisations that stood out, maintaining a large membership over a relatively sustained period, the number of student organisations that formed and published their own broadsheet – sometimes in just a handful of editions – is staggering. Those publications often targeted their criticisms towards other, competing student groups, debating details of their ideological distinction. Rather than try to capture the grievances differing student organisations had with one another, I have concentrated on the issues that had broad support among student radicals: issues such as opposition to examinations, student participation in university governance and the role of the university in perpetuating social injustices. While many of the student radicals of the period carefully considered the role and importance of the university and its knowledge, individual broadsheets do not often bring those out clearly. Collectively, they do, however, particularly when used in conjunction with the records of staff radicals, and even the papers of some of the professors who opposed them.

Despite the volume of these records, student sources do not offer a terribly coherent picture of the impact of student and staff radicalism on the subsequent right that society granted to the university to legitimise knowledge. Public reception of student radicalism was recounted in State and Federal parliaments and in the media, so that Hansard, newspapers and magazines, used carefully and cross-checked with other material, are important sources.

Records maintained by agents and analysts of the Australian Security Intelligence Organisation (ASIO) provide significant insights into student and staff radicalism and the government's fears and responses of student revolutionary movements as well as of radical academics in the earlier part of the Cold War. ASIO files are notoriously inaccurate: histories of ASIO recount the instances where agents made significant errors in identification, analysis and recording.¹⁰⁴ What the ASIO records do provide, however, are an insight into the concerns that fuelled government involvement in the universities.

In addition to the clandestine records of ASIO, official government records are also significant, for they provide the policy context and the public debates that informed them. The reviews, reports, recommendations, discussion papers, policy documents and parliamentary records all offer specific angles on university teaching and research, indicating the government's evolving interests and priorities in higher education. I have focused on the university system nationally, so these are primarily Federal, not State, records. A different, and perhaps more detailed, story would emerge from those State-based accounts, particularly in the establishment of new institutions. This thesis does give an account of some new institutions: the New South Wales University of Technology (which became, and is referred to in this thesis, as the University of New South Wales), the Australian National University and, later, Bond University are considered rather more closely than the rest. It has not, however, been my task to detail all the intricacies even of those institutions except as their establishment pertains to changes in the regulation of knowledge.

¹⁰⁴ Fay Anderson, *A Historian's Life: Max Crawford and the Politics of Academic Freedom* (Melbourne: Melbourne University Press, 2005), 237–9. Fiona Capp, *Writers Defiled: security surveillance of Australian authors and intellectuals 1920-1960* (Melbourne: PcPhee Gribble, 1993), 32–5.

Government records are comparatively narrow, but provide evidence on official positions, although (with the exception of confidential items, such as some Cabinet notes) they normally limit their expression of controversy to simplified debates. The ‘backroom’ discussions that forged the details of key government policy changes, particularly the Dawkins reforms, are not normally publicly available. A small number of oral history interviews have been conducted, with Human Research Ethics Committee approval, to gain an understanding of some of the events that occurred ‘off the record’ in the formulation of government policy. Additional details of political, bureaucratic and university leadership decisions, considerations and implications were drawn from archived oral history recordings.

The risks of a reliance on oral history are well known. As Alistair Thomson and other oral historians have shown, memories can be shaped to fit with public perceptions and interviewer expectations. Long-nourished narratives of self, rather than memory, can inform oral history interviews. Moreover, such narratives, many historians have argued, come to shape memory itself. This is evidenced by the content of my interviews with former vice-chancellors and bureaucrats, as they sought to make sense of their roles in a complex, quarrelsome and rapidly changing segment of Australian university history.¹⁰⁵ I was able in many instances to check their recollections against one another, and also against documentary evidence contained in the public record to iron out some of the effects of memory and assist in the development of a more verifiable historical account.

¹⁰⁵ Alistair Thomson, ‘Four Paradigm Transformations in Oral History’, *The Oral History Review*, 34 (1), 2007, 49–70. Alistair Thomson, ‘The Return of a Soldier’ in Richard White and Penny Russell (eds) *Memories and Dreams: reflections on twentieth century Australia* (Sydney: Allen & Unwin, 1997), 62–76.

In the course of my research, several scholars and university administrators shared their experiences, giving me insights into events and issues that I have needed to acknowledge. Some handed me unpublished manuscripts of memoirs, speeches and articles, not all of which I used. The ones I have were treated in the same spirit as the oral history interviews; facts were checked, opinions noted while the memories of key disputes and their meaning for their author's idea of the university were gleaned. Such items provided a helpful comparison to interviews, elucidating some of the more contestable issues that are difficult to raise in person.

Archived recordings and transcripts of oral history interviews from national and university collections have been used less for facts than to gain a sense of the personalities and nuances at stake in the negotiation of change in higher education. Recollections were relatively easily verified against public records, but the opinions and players that they rounded out were unavailable in any other form.

The ways the universities were presented and understood in the public sphere are diverse and difficult to gauge, though newspapers and magazines have been used for this purpose where needed. A systematic and detailed study of *The Australian Higher Education Supplement* was conducted to evaluate public perceptions of higher education in the 1980s, where such opinions had a significant impact on public policy decisions and university responses. The *Higher Education Supplement* was inaugurated in 1980. Within a few years, its coverage, authorship and letters to the editor suggest that its readership was widespread in the sector as academics, university administrators, union staff and politicians with responsibility for education contributed to it and commented on its contents. The Murdoch-owned *Supplement* arguably influenced as well as reflected opinion and policy in the 1980s. My analysis

therefore sought to identify the propensities of particular journalists and editors and the patterns of argument the *Supplement* presented to the higher education sector in the 1980s.

In intellectual property especially, there is a significant legal angle to this thesis. Legislation governing academic employment, Industrial Relations Commission findings on academic work conditions and judgements on the ownership of patents are crucial sources for the structure of ownership and control in the universities. In addition, a sample of eight institutional intellectual property policies were selected and analysed for the final chapter, largely based on which universities readily made them available. In each case they were the first policy of the institution to use the phrase ‘intellectual property’ (rather than ‘patent’ or other terminology). Such policies do not always reveal the intentions underlying them, however, or the motives and catalysts for intellectual property protection. Some institutions – Monash, Macquarie and the Royal Melbourne Institute of Technology – also made available their intellectual property files, which helped overcome this issue, revealing concerns, priorities and uncertainties about the nature of academic work and intellectual property ownership that the universities confronted as the policies were formulated.¹⁰⁶

Some issues of terminology and scope should be clarified. This thesis considers changes to higher education, not tertiary education more broadly: it does not therefore

¹⁰⁶ Access to their first Intellectual Property policies was granted by Adelaide University, Australian National University, Macquarie University, Monash University, Royal Melbourne Institute of Technology, University of New England and University of Wollongong (also representing a range of university types in Australia). The University of Western Australia’s policy is available as an attachment to the publicly available case of *UWA v Gray*. Some details about the University of Melbourne’s policy development process are included in the files at Monash University, for reasons that will be discussed in Chapter Five. I did not seek access to intellectual property files or policies at the University of Sydney, where my research has been based. See *University of Western Australia v Gray*, French, J. FCA No. 20, FCA 498 CORRIGENDUM 2 (Perth: Federal Court of Australia Western Australia District Registry, 2008).

consider Technical and Further Education (known as TAFE) except where there was a direct relationship between the sectors, as there was during the Second World War and in the lead up to the development of technological universities. Higher education does, however, include the degree-awarding Institutes of Technology. From 1965 to 1987, Australia also hosted Colleges of Advanced Education. These too are included, though their role is secondary and supplementary to the wider discourses on universities. This is partly due to the fact that I have used ‘higher education’ and ‘universities’ somewhat interchangeably, avoiding the awkwardness of repeatedly specifying ‘universities and Colleges of Advanced Education’. The ending of that ‘binary’ system is described (in Chapter Four), but, despite the fact that there were indeed tensions surrounding the control of research between the two sectors until the 1987 Dawkins reforms and, arguably, beyond, I have not focused heavily on these debates and developments. The battle within higher education has been considered elsewhere and, while it is not completely absent here, if given too much attention would have distracted from other, less explored, themes of the period.¹⁰⁷

‘University knowledge’ also needs clarification. Throughout the thesis it refers to the types of subjects, approaches, focus and research that academic staff of Australian universities considered to be their task to explore, protect, teach and discover. Change was frequent and consensus rare, so the concept did not sit still for long enough to define with real precision. My position throughout has been to assume that knowledge of some sort, understood in uneven and transient ways, was the substance at the core of the university.

¹⁰⁷ See Susan Davies, *The Martin Committee and the Binary Policy of Higher Education in Australia* (Melbourne: Ashwood House, 1989).

‘Knowledge’ does not only refer to research outcomes, for often university members saw their role as the protection and promotion of existing knowledge, without necessarily creating or discovering anything new. It never refers, in this thesis, to what might be better called ‘information’. Knowledge, unlike information, has at least one agent, a knower of some kind. This is not to suggest that for all scholars at all times the knower was the *cause* of knowledge: sometimes academics perceived knowledge to be a single body, to which every individual only has partial access. At other times scholars believed it to reside only within the knower, as an inalienable and subjective substance, acquired only through personal journey. Other approaches are also evident. One of the tasks of this research has been to identify its jagged and shifting boundaries as university members navigated the changing intellectual environment.

The term ‘university’ itself turns out to be surprisingly ambiguous. It has been used here in three main ways. One is the university as an individual institution. To differentiate institutions from other ways of using the term, when a university is referred to specifically, it is normally capitalised as ‘the University’. A second usage is the concept of ‘the university’. There was, of course, never just one concept. The initial ‘idea of the university’ in Australia was largely derived from the British and Scottish traditions that informed the earliest colonial institutions. Over time, as the thesis will discuss, research – a practice that defined much of the American system, based as it was on German ideas about the university – began to infuse the concept.¹⁰⁸ As a result of these shifts, like knowledge, the concept of the university changed regularly: such changes are the subject of this study. As a concept, the university is

¹⁰⁸ See Abraham Flexner, *Universities: American English German* (London: Oxford University Press, 1930).

referred to throughout simply as ‘the university’, though, as its ideals played out in reality, this sometimes slips into a third usage, the description of the system collectively as ‘universities’.

A far more difficult question, with implications for terminology, is whether ‘the university’ is, by definition, a collective description of its members (meaning ‘they’ might own or act) or whether it is proper to consider ‘the university’ as a singular legal and institutional entity (meaning ‘it’ would be the owner or actor). Technically, between the different institutions and different legal events, they are often both.¹⁰⁹ This leads, particularly in Chapter Five where that differentiation is in fact key to the issues at stake, to some inconsistencies in the use of ‘its’ intellectual property (for example) and objects that are ‘theirs’, in the collective sense. Not wishing to be too pedantic about it, it is my hope that the slippage between the two in fact helps to demonstrate the ambiguity in the character of Australian public universities and its consequences for the ownership of knowledge and academic freedom.

Thesis structure

Taking a broadly (but not strictly) chronological approach, this thesis is structured in five chapters, each focusing on key themes. Spanning a period of more than fifty years, it begins in 1939 with the growth of university research to support national, economic and military goals and concludes at 1996, with the end of the Hawke-

¹⁰⁹ Of Australia’s thirty-nine universities, thirty-six are public institutions, twenty-five of which (or sixty-seven percent) are membership-based. Membership-based institutions are organisations that are defined by their members, normally the academic staff, students and graduates. No university in Queensland is membership-based: seven of the nine public universities that are not membership-based are located in Queensland. The other two are the University of Canberra and the University of South Australia. See Acts of the Universities, Australasian Legal Information Institute <http://www.austlii.edu.au/> Retrieved 18 October 2011.

Keating Labor government under which the momentous Dawkins reforms were instituted.

The first chapter, 'Knowledge and Technology 1939-1957' begins with the Second World War and the influences that war work had on university members' sense of responsibility to society. The chapter considers the university's growing links with the economy in the 'long boom' that followed the war. Focusing especially on the establishment of the University of New South Wales, this chapter uses archival sources to document controversies over the growth of technological disciplines in the universities. While its emphasis is on changes in Australia, the international character of the debate is acknowledged and links are drawn with British and North American developments, particularly where they influenced Australian opinion and decisions. In so doing, the chapter explores the effects on the university in Australia as it shifted from observation of the world to a facilitator of innovation within it.

Next, the changing relationship of the universities with the Federal government is explored. Chapter Two, 'Knowledge and the Nation 1945-1965' begins with the use of the universities in nation building and the various forms that took: it analyses the cultural, social, diplomatic and political concerns as well as the economic needs of the emerging 'technological society' that shaped the development of a national system of higher education. In particular, the chapter considers the implications of the tension between this nation-building project and the worries of politicians and the emerging academic union during the Cold War.

Those tensions coalesced in the student revolutionary period with a new focus among students and junior staff on university reform. Chapter Three, 'Knowledge and

Revolution 1965-1975' considers the arguments for a revision to ways of thinking about and teaching university knowledge among student and staff radicals. Student radicalism across Western countries posed a significant threat to university claims to authority over knowledge by exposing the ideologies that such claims to truth perpetuated. In the instances in which that threat was articulated on Australian campuses, the ways 'god-professors', academic staff, politicians and the public responded were specific and unique, while at the same time international, general and even sometimes clichéd. The chapter draws out the implications of student radicalism for the university's ongoing control of knowledge in Australia. The chapter concludes with the Whitlam government and the effects of the OPEC oil crisis, demonstrating that between student radicalism and the political and economic crises of the 1970s, the university's reputation and role in the public sphere had irrevocably shifted.

The consequences of the 1960s and 1970s, however, were mainly realised in the 1980s. Chapter Four, 'Knowledge Economy 1975-1987' examines the influence of public opinion on the universities as government sought to embed higher education in a radically transformed Australian economy. New academic values and structural transformations in the ways that universities were funded and managed influenced their priorities, escalating fears among scholars for their intellectual and administrative independence. This chapter describes the growth of neoliberalism and its effects as government, the universities and the commercial sector debated the relationship between higher education, public sector regulation and the market. The Dawkins reforms and the universities' response are recounted, with a view to considering their effects on the subsequent control of research priorities in Australia.

The final chapter 'Knowledge and Property 1986-1996' considers the attempt by universities to seek independence from government in the market. The patterns of research commercialisation that led to a re-imagining of university knowledge as a type of property are analysed. In intellectual property the metaphor of property and the reality of university policy development are simultaneously explored, in the context of a changing government research policy framework. This chapter's conclusion also concludes the thesis.

There are three reasons to end the thesis at 1996. Firstly, it marks the end of the period of new policy development for intellectual property in the universities. This is not to say that universities stopped using the concept, rather that the policy development phase was complete: they all had policies by then. Secondly, the emergence of the internet and the possibility for marketing online courses marks a new phase that would have unreasonably extended the scope of the thesis. Finally, the 1996 election of the Howard Liberal government marks a natural end point for analysis of public policy implications for the issues the thesis explores. While the introduction of full domestic fees under Howard was a significant step in the commodification of higher education, it also reflected a continuation of much of the logic of the Dawkins reforms. In other words, post-1996 changes under Howard were important, but not transformational. One more recent event is potentially transformational, however. The case of the University of Western Australia versus Gray, an intellectual property case that was still unfolding as this thesis was written, is recounted in the Epilogue.

The importance of understanding the dynamics of the control and regulation of knowledge in Australian higher education might be expected to be related to the

purpose of the university. Claims for the purpose of the university are often lofty, reflecting the very wide reach of its research and teaching areas. The university is made variously responsible for the health, safety, civility, prosperity and sustainability of the nation. Indeed, with its links into a global education and research network, it is increasingly deemed to be responsible for the well-being of the world and the longevity of the planet's natural resources. Such goals are so enormous that governments despair of measuring their success, choosing instead to evaluate higher education in dollars or in money-equivalents: the hundreds of thousands of students enrolled each year in Australian higher education, the billions spent on research, the measures of quality and institutional efficiency that cause academics and administrators such angst. The value that resides in the university, however, is only symbolised by those measures. Regulating or owning knowledge controls the university's value in ways that those numbers can only imitate.

Chapter One: Knowledge and Technology 1939-1957

The Second World War called for a level of technological innovation and economic efficiency unknown in prior conflicts. Robert Menzies, Prime Minister throughout many of the changes that followed the war, later reflected:

The Second World War brought about great social changes. In the eye of the future observer, the greatest may well prove to be in the field of higher education.¹

Universities had to change substantially. Their members needed to consider the university's role in education and training for new segments of Australia's workforce and promote research to serve national needs. All this required the negotiation of new relationships with government and industry.

A number of technological developments that supported the war effort were afterwards utilised in peacetime: preserved food that once fed soldiers now found its way into family kitchens while factories that had manufactured weapons made household appliances.² This 'technological society' brought with it new professions requiring new skills and a vastly increased demand for employees trained in them. For the universities this meant a rapid growth in the number and type of student they enrolled: the 31,753 enrolled in 1949 represented three times the number studying at university before the war.³ New employment opportunities led more Australian youths to aspire to a university education, making tertiary study increasingly common, with positive implications for career development. It was an international

¹ Robert Gordon Menzies, *The Measure of the Years* (London: Coronet, 1970), 84.

² R.W. Home, 'Science on Service, 1939-1945', in R.W. Home (ed.), *Australian Science in the Making* (Cambridge: Cambridge University Press, 1988), 220–51.

³ W.F. Connell et al., *Australia's First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995), 46. DETYA, *Time Series Report* (Canberra: Australian Government Publishing, 2000).

phenomenon. In the United States Marvin Lazerson has argued that for this reason post-war aspirations drew a consumer-type sentiment toward college education as surely as it directed desire towards picket-fenced homes, fast cars and televisions.⁴ The literature recounting the influence of the American university in this period is substantial, for American post-war affluence rested on university-produced innovations and readily available higher education.⁵

There is a surprising absence of similar historiography in Australia. A notable exception is Nicholas Brown's *Governing Prosperity*, which includes universities but focuses more on government, bureaucracy and economic policy.⁶ This is a significant neglect given the profound changes in the post-war Australian economy. In this period industrial chemicals, electronics, wireless, aeronautics, processed food, household appliances, agricultural interventions, antibiotics and new energy sources transformed the social and economic environment. Many of these were the result of research and development that had taken place in universities. Such research established a new connection between university-based knowledge and the success of the national economy.

In grappling with this change, the universities not only had to undertake relevant research, they also had to negotiate their role in the development of a technologically skilled national workforce. This meant entry to areas and fields of education

⁴ Marvin Lazerson, *Higher Education and the American Dream: Success and Its Discontents* (Budapest: Central European University Press, 2010), 2–3.

⁵ Jonathan R. Cole, *The Great American Universities: Its Rise to Preeminence, Its Indispensable National Role, Why It Must Be Protected* (Philadelphia: Public Affairs, 2009), 75–108. Lazerson, *Higher Education and the American Dream*, 13–40. Henry Etzkowitz, *MIT and the Rise of Entrepreneurial Science* (London: Routledge, 2002), 9–30. Thomas Bender, 'Politics, Intellect and the American University', *Daedalus* 126 (1), 1997, 1–38. Wilson Smith and Thomas Bender, *American Higher Education Transformed, 1940-2005: Documenting the National Discourse* (Baltimore: John Hopkins University Press, 2008).

⁶ Nicholas Brown, *Governing Prosperity: Social Change and Social Analysis in Australia in the 1950s* (Cambridge: Cambridge University Press, 1995),

traditionally the preserve of other, in some cases older, institutions. The world of mechanics' schools and institutes of technology was long established. Their role and their relationship to the development of post-war universities in Australia had a substantial influence on the shape and character of higher education for the remainder of the twentieth century as the idea of the technological university took hold.

Unlike those older training centres, however, universities also had to grapple with an emerging demand for a more vibrant research culture. Experimental scientific research had been expanding for some decades but blossomed through the necessity induced by world conflict. This inculcated the idea of research as the task of the university scholar in a new way, with implications for most disciplines.⁷ To conduct research, academics were required to be specialists in an area rather than scholars who mastered a wide range of fields.

The specific requirements of war complicated this changing culture. In wartime universities worked intimately with industry and government. Andrew Spaul has shown that the Commonwealth government's first incursion in higher education was during the Second World War.⁸ But what was the universities' stance? Their exceptionalism in the production and protection of knowledge was disrupted, certainly, but institutional histories all show that there were many observable benefits for both universities and for research emerging from their new connection to the world beyond the academy. The challenge for universities as they navigated first war

⁷ Julia Horne and Geoffrey Sherington, *Sydney: The Making of a Public University* (Melbourne: Miegunyah Press, 2012, in press), Chapter 7.

⁸ Andrew Spaul, *Australian Education in the Second World War* (St Lucia: University of Queensland Press, 1982), 220, 226–30. See also P.D. Tannock, 'A Study of the Role of the Government of Australia in Education since Federation 1901-1968' (PhD Thesis, John Hopkins University, 1969), 209, 212, 403–4.

and then peace was not how they would maintain their distance from society, but how they could engage with it and still retain the sense of being a university.

Universities and the ‘war of experts’

University students were a tiny minority in Australia before the war. Only around 10,500 students were at university, less than 0.2 percent of the population. At the University of Melbourne in the 1930s, seventy-five percent of approximately 3,500 students had been educated in private schools, but private schools overall only enrolled one quarter of school boys in Victoria.⁹ The proportion of public school students in New South Wales, however, was higher: forty-eight percent of science students in 1939 had attended state schools.¹⁰ Nevertheless, the preponderance of private school students from middle class backgrounds in universities was very evident. While there were always exceptions, families during the 1930s depression could rarely prioritise lengthy education for their children: even staying at school long enough to qualify for university often seemed an unaffordable indulgence.¹¹ But economic conditions mask more fundamental social realities. While some poorer students were supported by scholarships, the majority had long tended to be from the middle upper classes, mostly from families who were in the top ten percent of earners.¹² When the war started, there were 3,500 students at Sydney University,

⁹ John Poynter and Carolyn Rasmussen, *A Place Apart: The University of Melbourne: Decades of Challenge* (Melbourne: Melbourne University Press, 1996), 40.

¹⁰ W.F. Connell et al., *Australia's First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995), 25.

¹¹ Eric Ashby, *The Challenge to Education* (Sydney: Angus & Robertson, 1946), 67–8, 87–9.

¹² Poynter and Rasmussen, *A Place Apart*, 40. Ashby, *The Challenge to Education*, 67, 70.

slightly more at Melbourne, around 1,000 each at the Universities of Adelaide, Queensland and Western Australia and a few hundred at Tasmania's university.¹³

Academic staff, themselves numbering no more than a few hundred on each campus, made for a small, socially cohesive (although often intellectually discordant) community. Teaching was their primary responsibility but to be effective and command respect they also had to be scholars, experts and masters of their field. Reading, therefore, was a key task. They read published work, occasionally publishing research and scholarship themselves. They were members of informal networks of scholars that went beyond their own institutions: letters, drafts of papers and exchanges of ideas traversed universities in and beyond Australia.¹⁴ The oldest of the six Australian universities, however, had only around eighty years in which they had taught the youth of the former colonies, nurturing the knowledge that would support the emerging nation. Disciplines were small. Networks, scholarship and research were important, but teaching and thus developing new scholars, was foremost.

The outbreak of the Second World War galvanised university campuses. Students and staff at the University of Sydney launched themselves into campus wartime activities with verve. Moral philosopher Professor Alan Stout organised rosters of 'runners' to ensure communication in an emergency, sleeping on camp beds around the university. They planned bomb shelters and dug trenches: 'it was great fun', said Stout. Medical

¹³ Connell et al., *Australia's First*, 5. Poynter and Rasmussen, *A Place Apart*, 44. Duncan and Leonard, *The University of Adelaide 1874-1974*, 189. Malcolm I. Thomis, *A Place of Light and Learning* (St Lucia: University of Queensland Press, 1985), 126. Fred Alexander, *Campus at Crawley: A Narrative and Critical Appreciation of the First Fifty Years of the University of Western Australia* (Melbourne: FW Cheshire, 1963), 212. Richard Davis, *Open to Talent: The Centenary History of the University of Tasmania* (Sandy Bay: University of Tasmania, 1990), 69.

¹⁴ Tamson Pietsch, 'A 'Commonwealth of Learning'? Academic Networks and the British World, 1890-1940' (Phd Thesis, New College, Oxford University, 2008), 102.

students were unable to pass their examinations unless they also fulfilled trench-digging quotas.¹⁵ The Student Representative Council exposed other students who did not dig their share in the campus newspaper, *Honi Soit*.¹⁶ The University of Queensland was still building its St Lucia campus when General Sir Thomas Blamey took over occupation of the buildings.¹⁷ Although students and staff had not yet moved to the new campus, now the drills and parades of the services echoed through the grounds, strengthening the ever-present feel of wartime.¹⁸ Students began to enlist in large numbers, so that one student from the University of Melbourne described the campus as a ‘condemned playground’.¹⁹

Academic staff at all Australian universities volunteered their labour to the war. Science was needed the most but philosophers, historians and literary academics were not excluded from all the activity: academic minds and bodies were recruited for organisation, administration, censorship and intelligence.²⁰ Management of morale, which included establishing considerable social science research studies, involved a large number of academics.²¹ Self-sacrifice was common as the feeling of emergency escalated. One scrupulous professor at the University of Tasmania asked that his salary be reduced in compensation for the reading he had not done due to his war work.²² Anthropologist Adolphus Elkin at the University of Sydney was keen to

¹⁵ W.F. Connell et al., *Australia's First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995), 9–10.

¹⁶ ‘Dig or Be Damned!’, *Honi Soit*, 16 April 1942.

¹⁷ Thomis, *A Place of Light and Learning*, 208–10.

¹⁸ *Ibid.*, 209.

¹⁹ Poynter and Rasmussen, *A Place Apart*, 67.

²⁰ Connell et al., *Australia's First*, 14–5.

²¹ John Pomeroy, ‘Morale on the home front in Australia during the second World War’ (PhD Thesis, University of Sydney, 1995), 156–338.

²² Davis, *Open to Talent*, 108.

disband the entire Faculty of Arts, which he considered irrelevant to the needs of the war and therefore wasteful of resources.²³

Australia was, as Geoffrey Blainey has argued, the ‘arsenal of the South Pacific’ and its resources were all directed to the war.²⁴ But the special thing that scholars possessed – academic knowledge – made their contribution unique. Weaponry, logistics and medical advances were the foundations of military success. Optical science at the University of Tasmania worked more than two hundred third-year undergraduate students on two shifts a day to produce gunsight components, competing in scientific speed with the new optical munitions laboratory at the University of Melbourne.²⁵ Psychologists were required to assess those enlisting for combat. Entomologists battled malaria in their laboratories. Statisticians supported more efficient logistics. Flameproof clothing, enabled by the latest chemistry, protected combatants and new food preservation techniques helped to feed them efficiently. Radio technology advanced rapidly as did aeronautics. New gauges, instruments, medical equipment, new alloys and metal production, explosives and weapons components were all enabled by university knowledge, now redirected as much as possible from teaching to research and development.²⁶

The coordination of those research efforts for the purposes of the war was a challenge that required careful consideration. Cooperation between the universities, the

²³ ‘Is Arts Necessary in Wartime? Report of Debate’, *Honi Soit*, 14 May 1942.

²⁴ Geoffrey Blainey, *The University of Melbourne: A Centenary Portrait* (Melbourne: Melbourne University Press, 1956), 30. See also D.P. Mellor, ‘The Role of Science and Industry’, in Gavin Long (ed.), *Australia in the War of 1939–1945. Series 4 – Civil: Second World War Official Histories* (Canberra: Australian War Memorial, 1958), 32, 34, 193–200.

²⁵ Davis, *Open to Talent*, 109.

²⁶ See Eugene M. Emme, ‘Technical Change and Western Military Thought’, *Military Affairs* 24 (1), 1960, 6–19. Eric Ashby and J. Vernon, ‘The Enlistment of Scientific Resources in the War Effort. Report to the Rt Hon. The Prime Minister April 21st 1942’ (Sydney: Fisher Rare Books, 1942). Home, ‘Science on Service, 1939–1945’, 220–49.

government's Munitions Supply Laboratories and the Council for Scientific and Industrial Research, however, was difficult, despite well-meaning scientists and obvious imperatives to rapid action. The Australian National Research Council, established in 1919 to promote scientific research in Australia and to represent Australian science internationally, had around two hundred scientists by 1940, most based in the universities. They hoped to be able to channel university research towards the war effort.²⁷ Government and military scientists, however, doubted the capacity of university experts to work in the applied world the war demanded.²⁸ Eric Ashby, Professor of Botany at Sydney University and chair of the Research Council at the start of the war, disagreed, suggesting that the identification of scientific problems was the domain of academic science. This was, according to Ashby, a 'war of experts' and 'experts', he argued, 'are often (though by no means invariably) academic men'.²⁹

This bid to assure a prominent place for academic scientists in the war was consistent with Ashby's other efforts to strengthen the role of Australian universities in the public sphere. He had arrived in Australia from Britain in 1939 and launched himself into active participation in Australian research and education policy. He made broadcasts, wrote pamphlets and attended meetings, articulating an optimistic vision of the value of university knowledge to society.³⁰ Ashby's repeated criticisms of problems coordinating science for the war led Prime Minister John Curtin to appoint him, along with senior industrial scientist James Vernon, to investigate and report on

²⁷ The Australian National Research Council, Report, in *Science*, 95 (2463), 1942, 279–80.

²⁸ Home, 'Science on Service, 1939-1945', 220–49.

²⁹ Ashby, *Challenge to Education*, 71.

³⁰ See *Ibid.*, 65–131

how science might be oriented to support the war effort.³¹ Importantly, Ashby and Vernon argued that it was not a simple matter of asking scientists to undertake research. Governments and Military authorities had to communicate more effectively with scientists. They pointed out that if the military would communicate how scientific applications were working out in practice, scientists would be better positioned to predict and solve problems. Moreover, with limited communication between the different science bodies, wasteful overlap and irrelevant research resulted.³²

Two of those bodies, the Munitions Supply Laboratories and the Council for Scientific and Industrial Research, were the key organisations responsible for wartime scientific research. Both reported directly to the Federal government. Their work, however, was oriented to working on a few large-scale projects. They lacked flexibility and responsiveness to urgent small-scale problems. According to Ashby and Vernon:

The staffs [*sic*] of the Munitions Supply Laboratories and the CSIR are occupied with important work, and cannot be held in readiness, like scientific taxis, for any day-to-day problems which turn up.³³

The universities were the answer to this problem. Unlike the Council for Scientific and Industrial Research and the Munitions laboratory however, they were not the Commonwealth's to command. Universities belonged to the states – their existence established by an Act of each of the six State parliaments. State funding, student fee income and private endowment paid for their buildings, libraries, salaries and equipment. The Federal government was not permitted to be involved in their

³¹ For example, Eric Ashby, 'Science and War Work', *Sydney Morning Herald*, 27 September 1940.

³² Ashby and Vernon, 'The Enlistment of Scientific Resources in the War Effort.'

³³ *Ibid.*, 6.

financial, administrative or academic affairs.³⁴ Even State government involvement was problematic. While members of State parliament held positions on the governing body of each institution, universities were supposed to be autonomous, their separation from the state in administrative and academic matters a mechanism for ensuring their integrity. The level of autonomy, however, was more ideal than reality. Blainey's short history of the University of Melbourne (1956), for example, shows that the university regularly complied with what it imagined might be the wishes of the Victorian government (its principal funding source).³⁵

Nevertheless, Ashby and Vernon were polite and unassuming when they wrote to each of the six Vice-Chancellors, inviting them to contribute the knowledge and labour of their academic staff to the war. Each vice-chancellor was more than eager to do so.³⁶ Only one minor dissent seems to have been voiced. University of Sydney philosopher John Anderson, famous for his freethinking anti-authoritarian approach, had a profound influence on philosophy in Australia.³⁷ While Anderson was not opposed to the university's participation in activities that supported the war, he did think the universities were taking too 'servile' an approach to the Commonwealth government.³⁸ Later historian Andrew Spauld seems to agree, suggesting that under the conditions of total war, normally autonomous institutions tended to submit to government control without any extrinsic compulsion.³⁹ In hindsight, the war was the moment universities started to lose some of their former independence and Anderson was one of the few to sound a warning.

³⁴ Tannock, 'Role of the Government of Australia in Education', 441.

³⁵ Blainey, *The University of Melbourne*, 28.

³⁶ Ashby and Vernon, 'The Enlistment of Scientific Resources in the War Effort', 125.

³⁷ D.M. Armstrong, 'John Anderson Remembered', <http://www.usyd.edu.au/news/84.html?newsstoryid=597> Retrieved 9 November 2010.

³⁸ *Honi Soit*, 14 May 1942.

³⁹ Spauld, *Australian Education in the Second World War*, 218.

The war enabled the establishment of a new relationship between the Federal government and the universities. From 1941, John Dedman, Minister for War Organisation of Industry kept the universities high on his list of crucial resources. Dedman wanted universities to assume some of the training normally done by technical colleges, to open up enrolment to a wider group of students and shorten courses for urgently needed professions. At the end of 1941 he suggested that Faculties might review their courses in light of their usefulness to the war – a suggestion that may have prompted Elkin's attempted sacrifice of Sydney Arts.⁴⁰ Dedman warned the universities that except for degrees leading to 'reserved' professions (those occupations listed as essential by the government, so that those employed in them were exempt from service) all students were eligible for military conscription.⁴¹

Towards the end of 1942, however, Dedman's priorities shifted. He proposed that: 'outstanding students who have enlisted or been called up should, where possible and desirable, be recalled to continue their university training'.⁴² Good students finishing school that did not apply for university should be actively invited to enrol rather than enlist. This indicates the increasing importance of knowledge and scientific research in the government's thinking on the war effort and on the preparations for a post-war world. Dedman's view of the universities was no longer single-minded, focused as he had been on recruitment and training for the war and he now considered what the universities might look like in peacetime. As well as fostering more egalitarian

⁴⁰ 'Future of Universities', *The Argus*, 6 January 1942. 'University Role in War Effort: Radical Changes', *The Argus*, 20 January 1942. 'New World Order for Australia', *Canberra Times*, 12 December 1941. *Honi Soit*, 14 May 1942. John Dedman Minutes, *Universities Commission*, NAA/A472/W11142 (Canberra: National Archives of Australia, 1941-1944).

⁴¹ *The Argus*, 6 January 1942. Spaul, *Australian Education in the Second World War*, 226.

⁴² 'Cash Aid for Students: Federal Plan for Universities', *Sydney Morning Herald*, 4 November 1942.

institutions, Dedman believed the post-war era would require significantly more university-trained workers, especially in technical fields.⁴³

Technology and the idea of the university

Before the war, many politicians had been optimistic about the role of technology in society. In the ‘hush’ before it started, British political leader Winston Churchill argued that science, rather than violence, created ‘true living space’, improving the living standards of people and enabling peace. ‘Give scientists a chance’, he said, contrasting science’s civilising capacity to war. ‘The barbaric method of forcibly imposing one population upon another and of exterminating or subjugating the vanquished is hopelessly inefficient and out of date.’⁴⁴

The same optimism initially applied to nuclear technology. The United States was one of several countries conducting atomic research, investing US\$2 billion in the code-named ‘Manhattan Project’. A media statement, prepared after the first successful atomic bomb test in New Mexico (but not released until after the bombing of Hiroshima on 6 August 1945), shows that researchers believed that this knowledge, like all ‘true’ science, would further civilisation:

Mankind’s successful transition to a new age, the Atomic Age, was ushered in July 16, 1945 before the eyes of a tense group of renowned scientists ... Mounted on a steel tower, a revolutionary weapon destined to change war as we know it, or which may even be the instrumentality to end all wars, was set off with an impact which signalled man’s most ambitious estimates.⁴⁵

⁴³ John J. Dedman, *Universities Commission. What It Is and What It Does*. Pamphlet. Department of War Organisation of Industry (Sydney: Universities Commission, 1944).

⁴⁴ Winston Churchill, ‘The Hush of Europe: Hitler’s Chance to Ponder: July Lights and Shadows’, *Sydney Morning Herald*, 28 July 1939.

⁴⁵ War Department Washington D.C., ‘Media Release, Atomic Bomb Test July 16’, in *Papers of Sir Philip Baxter* UNSW/CN1053 (Sydney: University of NSW Archives, 1945).

The atomic bomb showed that scientific research could win a war. Newspapers were still expressing jubilation at the imminent end of the war after the initial bomb ('The attack on Hiroshima was successful beyond all expectations' read *The Argus*) as news of its horrible reality trickled through.⁴⁶ 'Japs say all living things Seared to Death', read another *Argus* headline on the 9th August, the day of the follow-up bombing of Nagasaki.⁴⁷ By September the *Sydney Morning Herald's* war correspondent told Australian readers in graphic detail why 'Hiroshima reeks of Death'.⁴⁸ Democratic science may have won the war, and may have, by some forms of moral calculus saved lives by reducing the slaughter that would have ensued from an invasion of Japan, but it also raised moral qualms for some about the function of science – qualms that were to grow in later decades.

The atom bomb was not the only scientific advance that raised doubts about the morality of science. Revelations of scientific experiments in Nazi concentration camps cut to the core of the nature of research. The Auschwitz concentration camp became a symbol for the ways science could be turned to corrupt ends – a corruption, some claimed, to which a substantial contribution had been made by false knowledge and 'impure' science.⁴⁹ At Auschwitz, experiments with mass sterilisation – another 'scientific' way to win a war, hoped Nazi medical leaders – had led to radiation burns, inflammation, infection and death among prisoners. Josef Mengele's famous experiments with twins tortured young children in the name of immunology and genetics. Humans were starved, infected with contagions and injected with toxins as

⁴⁶ 'Ultimatum to Japan Is Expected "Surrender or Be Annihilated"', *The Argus*, 9 August 1945.

⁴⁷ 'Japs Say All Living Things Seared to Death', *The Argus*, 9 August 1945.

⁴⁸ Antony Whitlock, 'Hiroshima Reeks of Death', *Sydney Morning Herald*, 14 September 1945.

⁴⁹ 'It wasn't science it was Murder', *Townsville Daily Bulletin*, 11 September 1946. 'Nazi Horror in Science's Name', *Sydney Morning Herald*, 11 September 1946. Theodor Adorno famously described the consequences of Auschwitz for knowledge as 'to write poetry after Auschwitz is barbaric. And this corrodes even the knowledge of why it has become impossible to write poetry'. Theodor Adorno, *Prisms*, translated by Samuel M. Weber (London: The Garden City Press, 1967), 34.

part of scientific and medical experiments.⁵⁰ For some these tragic events were reason to question the role of science more generally. For others it was a reason to argue for pure science and the pursuit of truth. In that regard it was vital to safeguard science from politics, to foster the independence of science. Closer wartime ties between governments and universities complicated this aspiration.

As ethical implications for science emerged from these wartime stories, politicians' views shifted. After the war, Winston Churchill's position on science contrasted with the trust in it he had expressed beforehand. 'These fearful scientific discoveries cast their shadow on every thoughtful mind', he reflected.⁵¹ Political and civic leaders could not easily resolve the moral uncertainties that were left. In 1957 Kim Beazley (senior), Federal Labor politician with a lasting interest in higher education, warned:

In Nazi Germany, science without conscience had developed. It was wholly disastrous, and it has been interesting to note that it ultimately became completely unscientific...I hope ... emphasis is to be placed on pure science as well as on applied science.⁵²

In the system of knowledge encouraged by the war 'pure' inquiry was civilising but applied research – 'impure' by default – was potentially corrupting. So while science and technology could support economic progress, those who retained some sense that university knowledge was for social ideals were nervous about the emerging technological turn.

The debate was vociferous and international. The phrase 'The Two Cultures', derived from C.P. Snow's Rede Lectures in 1959, encapsulated the divide. Snow sought to

⁵⁰ Arthur L. Caplan, *When Medicine Went Mad: Bioethics and the Holocaust* (Totowa, N.J.: Humana Press, 1992), 3–14.

⁵¹ 'Probabilities of War Pass: Churchill Says Tension Less', *Sydney Morning Herald*, 5 November 1953.

⁵² Commonwealth Parliamentary Debates (House of Representatives), 'Universities Committee Report', 28 November 1957: hereafter CPD (HoR).

moderate moral opposition to technology. Technological development, he said, was in fact the ‘only hope of the poor’ and scientists, identifying the world’s injustices, tended to be impatient to ‘see if something can be done’.⁵³ By contrast, literary intellectuals, Snow argued, tended to be stubbornly anti-industrialist at the expense of society’s poor. They were culturally elitist and intellectually narrow – ‘anxious to restrict both art and thought to the existential moment’.⁵⁴ Likening them to nineteenth-century luddites, Snow earned the ire of twentieth century literary authors by saying, ‘Didn’t the influence of all they [literary intellectuals] represent bring Auschwitz that much nearer?’⁵⁵ The war had disturbed the equilibrium of intellectualism. Knowledge had not succeeded in ensuring peace and prosperity. Old certainties were now unreliable. Civilisation was ‘mortal’.⁵⁶

Eric Ashby, who had by now returned to Britain, sought to resolve this conflict between the ‘two cultures’, hoping to enable universities to engage with a technological society without compromising their intellectual integrity. In *Technology and the Academics* Ashby gave a long historical overview of the problem.⁵⁷ In the gradual adoption of science by the great centres of learning ‘pure’ scientific research, analogous to the humanities tradition, had been integrated into university culture with relative ease. Technology, with its associations of being ‘earthy’ and its susceptibility to pressure from industry and government, tended to be described in university contexts, Ashby argued, using adjectives like ‘crude’ and ‘mere’.⁵⁸ In the nineteenth

⁵³ C.P. Snow, *The Two Cultures* Originally Rede Lectures 1959 (Cambridge: Cambridge University Press, 1998), 7, 25.

⁵⁴ *Ibid.*, 3–8.

⁵⁵ *Ibid.*, 7. David Schusterman, *C.P. Snow* (Boston: Twayne Publishers, 1975), 24–7.

⁵⁶ See B. Latour, ‘War of the Worlds: What About Peace?’, in Simon During (ed.), *The Cultural Studies Reader 3rd Edition* (London: Routledge, 2007), 305.

⁵⁷ Eric Ashby, *Technology and the Academics: An Essay on Universities and the Scientific Revolution* (London: Macmillan, 1958).

⁵⁸ *Ibid.*, 66.

century it had been possible to suggest that the upper class should study literature while the middle classes looked after science, an attitude Ashby described as ‘puzzling’. By the twentieth century such a distinction had collapsed. This change, he suggested, offered hope that contemporary barriers to technological knowledge could be demolished.⁵⁹ Ashby offered a new set of tools to achieve this.

Technology in the university, according to Ashby, could achieve what science could not. Science generally needed to remove the human variable in order to be valid. Technology, on the other hand, was a space in which science and humanity interacted, enabling a unity of knowledge that was inherently humanist.⁶⁰ This ‘technological humanism’, as he defined it, could unite knowledge in a way that would remove past arrogance and give a structure in which the universities could build on the economic relevance they had gained during the war without devaluing their academic principles.⁶¹

On the surface, this contradicted Ashby’s earlier position. In Australia Ashby had argued for the protection of the university from interference from industry. Australia was particularly prone, he had claimed, to pressure from secondary industry to include technical skill training in university education. This was partly a result of the bad press to which Australian universities had been subject prior to the war.⁶² Widely seen as useless, elite, privileged and wealthy, the public commonly assumed that universities were committed to the unnecessary promotion of irrelevant antiquated knowledge.⁶³ The result was pressure to focus on what industry needed. Ashby argued

⁵⁹ *Ibid.*, 32.

⁶⁰ Eric Ashby, ‘Technological Humanism’, *Nature*, 177 (4506), 1956, 443–4.

⁶¹ Ashby, *Technology and the Academics*, 81–6.

⁶² Ashby, *Challenge to Education*, 72.

⁶³ Spaul, *Australian Education in the Second World War*, 221.

that universities had to resist this pressure, or risk becoming an ‘intellectual department store’.⁶⁴

Ashby, however, had not changed his mind. He had always maintained that Australian universities needed to adapt to a changing society and should willingly assume obligations to industry and government. Like Kim Beazley, Ashby thought that university knowledge should be ‘pure’, but he argued that applied knowledge could be pure as well. What made knowledge pure was not that it was never applied to anything; rather it was that the university remained autonomous and academic inquiry was free and curiosity-driven:

It is a matter of cold fact that most of the discoveries and ideas which have shaped history began as speculations, as disinterested curiosity, as thinking for the sheer delight of thinking.⁶⁵

It was this *motive* that Ashby saw as central to the unique responsibility of universities. He argued that university knowledge was not evaluated on whether or not it was useful, but rather on its potential to further knowledge itself: ‘Does the subject breed ideas?’⁶⁶ Universities had a wide range of useful functions but the business of the university, he argued, was to focus on the substance, rather than the benefits, of knowledge.

Academics must be free to pursue knowledge as they see fit, Ashby argued, as it was this freedom that would allow universities to fulfil their true function:

Today our universities, criticize them as you will, are the trustees of Australian intellectual life; despite their weakness, despite their unworthiness for this high office.⁶⁷

⁶⁴ Ashby, *Challenge to Education*, 82.

⁶⁵ *Ibid.*, 77.

⁶⁶ *Ibid.*, 82.

⁶⁷ *Ibid.*, 74.

‘High office’ denotes the sacred duty that Ashby intended to convey, a sanctity related to the role of knowledge in upholding and promoting a civil society. Economic success was all very well but, to Ashby, more was at stake. ‘Upon the universities depends in large degree Australia’s future’, said Ashby, since:

Universities are the defenders of the intellectual life, and if the intellectual life is crushed by prejudice and stupidity and selfishness, then it will profit us nothing to win the war against the Axis, for we shall still be dragged to defeat by our own ignorance.⁶⁸

For knowledge to continue to perform its social function, even ‘useful’ knowledge must be pursued for its own sake.

This concern was shared by Ashby’s friend and colleague Ian Clunies Ross, chair of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and former Professor of Veterinary Science at the University of Sydney (where he met Ashby).⁶⁹ Clunies Ross led Australia’s post-war science boom, earning a place on Australia’s fifty-dollar note from 1972 until the introduction of a polymer banknote in 1995. Menzies called him ‘the greatest public relations man for science Australia had ever seen’.⁷⁰ Despite that, Clunies Ross maintained a fundamental concern for humane democracy and civilisation, which he felt was threatened by science. With regret, he said, ‘Society...recognizes that it must live by science even at the risk of dying painfully by it.’⁷¹

In public orations, as well as in his letters to Ashby, Ian Clunies Ross gave his perspective on the changes science, the war and its aftermath had made to knowledge.

⁶⁸ Ibid., 73.

⁶⁹ Marjory Collard O’Dea, *Ian Clunies Ross: A Biography* (Melbourne: Hyland House Publishing, 1997), 226–42.

⁷⁰ Ibid., 1.

⁷¹ Ian Clunies Ross, *The Responsibility of Science and the University in the Modern World: An Oration Delivered on the Occasion of the Centenary of the University of Sydney, August 26, 1952* (Melbourne: CSIRO, 1952), 177.

He argued, ‘the universities have fallen from that traditional high estate in which they exerted a commanding influence on the ideas and ideals of their times.’ This was primarily a result of science’s tendency to specialise, rather than encompass universal knowledge:

Science poses the major problem of education because of the very magnitude of its success, so that the ceaseless and bewilderingly rapid proliferation of knowledge forces its votaries into ever-narrowing specialisms ... what is more, they not only suffer this fate but glory in it: for are not specialists the new elect, the high priests of the cult whose mysteries none may share? Not for them

‘To see a world in a grain of sand,
And a heaven in a wild flower’

The grain of sand has become all the world and the heaven they know or seek to know.⁷²

Clunies Ross saw university knowledge as a singular, coherent whole, a ‘vital system of ideas which unites the past and present in an intelligible whole’.⁷³ Anthony, his son, confirmed that his father was a romantic, a scientist of ‘quest and achievement’.⁷⁴ In that spirit, Clunies Ross idealised the university as a place for immersion in the vast greatness of sublime knowledge. For him, a narrowly instrumental, applied and simply technological approach to science actually threatened civilisation, due to its focus on facts rather than society, or immediate utility rather than its social or scientific implications.

The dominance of science in universities was, even after the war, still relatively new. At the founding of the University of Sydney in the mid-nineteenth century, William Charles Wentworth had imagined the ‘statesmen and patriots’, ‘philanthropists and philosophers’, and ‘poets and heroes’ that would graduate from that institution. ‘It is

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Anthony Clunies Ross, ‘My Father’, in Janet Clunies Ross (ed.), *Ian Clunies Ross Memoirs and Papers with Some Fragments of Autobiography* (Melbourne: Oxford University Press, 1961), 117.

noteworthy', Ian Clunies Ross pointed out, 'that Wentworth made no mention of scientists ... indicative not only of the lesser place of science ... but of the appreciation which we have now lost that there was then a unity of knowledge.'⁷⁵ A coherent knowledge as an underpinning to civil society had the advantage of suggesting a similarly integrated and unified civilisation. If knowledge was fragmented, as science's 'ever-narrowing specialisms' encouraged, what would the society it underpinned look like?

Always less optimistic about universities than Ashby, Clunies Ross believed that in the post-war period universities were now training scientists and engineers in such a way that they were poorly equipped for the workplace. This was not because their training was insufficiently practical. On the contrary, emphasising specialised technological skill meant that a university education now left its graduates 'so permanently mutilated that it is idle to expect anything of them'.⁷⁶ In a letter to Eric Ashby in 1956 he expressed apprehension about the way these changing knowledge priorities would impact society:

My fear is that as science and technology draw from an increasingly large proportion of those best endowed intellectually, we will have fewer and fewer men capable of contemplating in any adequate way the problems of national or international society.⁷⁷

It seems an odd conversation for two scientists to have had. But their belief in the unity of knowledge prompted them to assert an intellectual leadership that went beyond their disciplinary expertise.

⁷⁵ Clunies Ross, *The Responsibility of Science*, 171–2.

⁷⁶ Ibid.

⁷⁷ Ian Clunies Ross, 'Letter to Eric Ashby 4 May 1956' *Papers of Sir Ian Clunies Ross*, NAA/A10651/ICR20/5 (Canberra: National Archives of Australia, 1956).

Ian Clunies Ross and Eric Ashby were both examples of the new type of scientific leader required during and after the war. Thinking carefully about technological development and humane civilisation, both sought to connect new technological knowledge to pre-war intellectual values. Ashby's focus on the substance (rather than the benefits) of university knowledge and Clunies Ross's demand for a unified, universal knowledge amounted to the same thing – a desire to keep the pursuit of knowledge in its highest forms safe in the university, protecting its singularity from the impurities that resulted from fragmentation, outside influences, the vested interests of business or the political exigencies of governments. Knowledge (as Ashby claimed) benefited civilisation but belonged in the university. Both men suggested that this ideal was already under siege: universities were increasingly being compelled to prove their relevance to the society that financed them.

The rise of the technological university

Despite the warnings of Ashby and Clunies Ross, post-war Australian governments actively pursued the idea of technological universities, uniting utility, research and the tradition of university knowledge for its own sake. In doing so, advocates sought to bridge the traditional divide between technological and university knowledge. The longstanding network of mechanics' institutes, technical colleges and universities denoted the widely held belief that technology did not belong in the universities.⁷⁸ In Australia, nineteenth-century mechanics' institutes, along with local schools of arts, were clubs offering lectures aimed at improving minds and cultivating taste.⁷⁹ In some of these local businesses and employers, anxious to increase the pool of skilled workers, oriented the curriculum to training in specific trades. These technical

⁷⁸ Ashby, *Technology and the Academics*, 52.

⁷⁹ Philip C. Candy and John Laurent, *Pioneering Culture: Mechanics' Institutes and Schools of Arts in Australia* (Adelaide: Auslib Press: 1994), 2–10.

colleges were an integral organisation in many towns and regions by the early twentieth century. Civic leaders hoped to promote local economic growth and prosperity through investment in technical education. Boosters of Footscray, for example, hoped technical education might transform this poor, working-class suburb into the 'Birmingham of Australia'.⁸⁰

Technical colleges, like the universities, were transformed by the war. They now had to meet national, not just local, needs. The Melbourne Technical College had already been building relationships with government by training unemployed youth during the 1930s Great Depression. When the war started the College offered its facilities to the Federal government. Within a month two hundred defence personnel began their training as wireless-operator mechanics. Signal operators, electrical fitters, aircraft electricians and instrument makers were all trained as rapidly as possible. Factories producing munitions did not exist before the war. Now, they required hundreds of skilled precision-gauge and tool-and-jig workers, all trained by technical colleges.⁸¹ The end of hostilities did not slow this development. After the war new inventions and infrastructure had industrial, commercial and domestic uses, but people had to be trained in installing, using and repairing them. The manufacturing industry expanded, fuelled by growing consumer expenditure, improved living standards, demand for new household appliances and increased use of motor cars. While skilled immigrants constituted around half of the extra labour needed to support this 'long boom', the other half were supplied through domestic education and training.⁸² This increased the

⁸⁰ Carolyn Rasmussen, *Poor Man's University: 75 Years of Technical Education in Footscray* (Melbourne: The Press of the Footscray Institute of Technology, 1989), 2.

⁸¹ Stephen Murray-Smith and Anthony John Dare, *The Tech: A Centenary History of the Royal Melbourne Institute of Technology* (Melbourne: Hyland House, 1987), 253–77.

⁸² Jock Collins, 'Globalisation, Immigration and the Second Long Post-War Boom in Australia', *Journal of Australian Political Economy* 61, 2008, 249.

demands on technical colleges: they were now required to provide more specialised and complex training than leaders of their pre-war entities could have imagined.⁸³

In the context of this post-war economic boom, politicians and educators became interested in considering ways technical training could be connected to research. The scientific departments and laboratories that had been enlarged and built as part of the war effort were seen to have a role in post-war reconstruction. Furthermore, linking training and practical reality to research and discovery had benefits: seeing what went wrong (or right) would feed research, improve technologies and inform training. But there was a widespread view that the existing universities were too few to stimulate the required increase in technological education and research. In the 1940s, inspired by the success of Massachusetts Institute of Technology in the United States, Australian state governments began to contemplate higher education institutions with a focus on technological knowledge.⁸⁴

One response was to transform some of the old technical colleges into larger degree-awarding organisations. Each state began to consider this opportunity after the war, but it was not until the 1960s that the capital cities converted their central technical colleges into Institutes of Technology. Melbourne Technical College became the Royal Melbourne Institute of Technology.⁸⁵ Perth Technical School became the

⁸³ Murray-Smith and Dare, *The Tech*, 258–9.

⁸⁴ 'University of Technology', *Sydney Morning Herald*, 14 April 1949. Patrick O'Farrell, *UNSW: A Portrait. The University of New South Wales 1949-1999* (Sydney: UNSW Press, 1999), 21–2.

⁸⁵ Murray-Smith and Dare, *The Tech*. 338–40.

Western Australian Institute of Technology and Central Technical College was reconstituted as Queensland Institute of Technology.⁸⁶

The New South Wales government moved more quickly and went further, establishing a full university of technology in 1949, focusing on technological research as well as teaching. The Victorian government followed around a decade later with a similar style institution, establishing Monash University in 1958. The New South Wales University of Technology (renamed the University of New South Wales in 1958 and referred to as such hereafter) had a substantial impact on the development of university-level technological training in Australia. Demonstrating that a technological university could grow out of a technical college, the University of New South Wales was oriented towards research, reinforcing the connections between innovation and training. Despite being called a ‘university’, the new institution’s operations were unlike any other university then in existence in Australia. Much of that character can be attributed to its second Director (and first Vice-Chancellor), Sir Philip Baxter.

Baxter embodied a new type of academic. A British scientist, Baxter had a PhD in chemical engineering, a field so new that, when he graduated, no university anywhere in the world yet offered an undergraduate course in it. Working for Imperial Chemical Industries, Baxter had managed large teams of industrial scientists and invented and patented several new inventions, including the neurotoxin Lindane, used as an insecticide (later banned as harmful to humans). During the war he worked on ‘Tube

⁸⁶ Michael White, *WAIT to Curtin: A History of the Western Australian Institute of Technology* (Bentley WA: Paradigm Books Curtin University, 1996). Noeline Kyle, Catherine Manathunga and Joanne Scott, *A Class of Its Own: A History of the Queensland University of Technology* (Alexandria NSW: Hale & Iremonger, 1999). By this time Menzies had established the binary system of education. So while the new Institutes of Technology were not all called ‘universities’ they were degree-granting institutions. The binary system will be discussed in the next chapter.

Alloys', which was the code name for the British atomic research program. After a secondment to Texas to help extract uranium for the first atomic bomb, Baxter's interest remained focused on nuclear research. Baxter's science was industrial, but his vision political: he was persuaded that academic science, industrial development and defence technologies were the 'same problem'.⁸⁷ Through collaboration between universities, industry and government, Baxter argued, the West would assert military and economic dominance over the Soviet Union. 'Technological and industrial progress', he declared, discussing scientific research and training, 'is today the way to world supremacy'.⁸⁸

In Baxter's view, universities would need to re-orient themselves, developing new research and teaching capacities, to support the development of this advanced technological society. With the aid of technology, Australia would be equipped to properly exploit its extensive natural resources. The only source of funding at the levels required, argued Baxter, was the Federal government. The investment would need to be substantial but government should think of it as a mechanism to assure national economic development. For Australia in the Cold War this was also an explicitly defensive act:

The full development of Australia's natural resources is essential if we are not to present to other and more powerful nations the tempting sight of rich uncultivated lands and mineral wealth lying idle.⁸⁹

The technological universities in this framework represented a vision where scientific discovery contributed to the ongoing improvement in human standards of living. The

⁸⁷ Philip Gissing, 'Sir Philip Baxter, Engineer: The Fabric of a Conservative Style of Thought' (PhD Thesis, University of NSW, 1999), 82–94. J.P. Baxter, 'Oral History Interview with J.P. Baxter Conducted by Laurie Dillon, Edited by Linda Bowman. Transcript', in *Papers of Sir Philip Baxter UNSW/CN1053* (Sydney: University of NSW Archives, 1987).

⁸⁸ J.P. Baxter, 'Education for the Nuclear Age', in *Papers of Sir Philip Baxter UNSW/CN1053* (Sydney: UNSW Archives, 1957), 2.

⁸⁹ *Ibid.*, 8.

‘struggle against nature itself’ was a nation-building project, resulting in cheaper, larger-scale food supply, new types of manufacturing and industrial processes and important new medical technologies:

The outstanding characteristic of the civilisation of the twentieth century is that it is derived from and is almost wholly dependent upon the application of scientific knowledge to the affairs of man.⁹⁰

For Baxter, universities should be willing to relinquish some of their traditional autonomy in order to secure increased government endowment. Purposeful, strategic investment in the technological development of the nation, he maintained, would require those institutions to demonstrate efficient progress in applied research and technical training.⁹¹ This was more than an alignment of university activity with government goals; it was a shift in the direction of knowledge production. Where research had led to technologies that produced economic growth, under Baxter’s scheme this causality would be reversed: economic growth would drive research.

This sense of purpose infused Baxter’s management style while he led the University of New South Wales from 1953 to 1969.⁹² Its origin as an offshoot of the Sydney Technical College in Ultimo (then an industrial area full of factories and warehouses) shaped the university’s administration in ways fundamentally different from other Australian universities of the period. For a start, the university, in its early years, fell under the authority of the New South Wales Public Service Board, not an independent government body, and academic staff worked under the same conditions as Technical College teachers. They rankled against the set hours and closely managed conditions,

⁹⁰ J.P. Baxter, ‘The Use of Scientific Knowledge by Governments and Industry. Tenth Congress of the Universities of the Commonwealth. Report of Proceedings. Sydney August 17–23’, in *Papers of Sir Philip Baxter* UNSW/CN1053 (Sydney: UNSW Archives, 1968), 259.

⁹¹ J.P. Baxter, ‘Problems in the Administration of Modern Universities’, *Vestes* 6, 1968, 107.

⁹² A.H. Willis, *The University of New South Wales: The Baxter Years* (Sydney: UNSW Press, 1983), 36–47.

having expected the autonomy traditional at other universities.⁹³ Nevertheless, Baxter never allowed this new kind of university to be like the older institutions. He argued:

The lot of those who choose to work in a new university is not a comfortable one. We cannot be like the professor described in Mr Rowe's *If the Gown Fits*, who wanted, not an efficient university, but a more comfortable one. We have, we believe, achieved an efficient university.⁹⁴

Baxter consciously contrasted himself and his university to the more stately and aristocratic image of Adelaide University presented by the then recent autobiographical account of its Vice-Chancellor A.P. Rowe, who had retired two years earlier.⁹⁵ Baxter did not want the University of New South Wales to be like other universities. Reflecting on his tenure as Vice-Chancellor in the 1980s, Baxter spoke of the influence of the 'procedures of industry' on his leadership style, claiming he understood but did 'not identify' with academic work practices, which he found inefficient.⁹⁶ This was not just about his preferred work style. Baxter considered university research to be better when it was paired with industrial activity.

Baxter thus brought the processes of discovery used in Imperial Chemical Industries to the University of New South Wales. 'Discovery and application are not really two separate processes', he argued:

There are, of course, cases of people who, simply searching for knowledge for its own sake, have made discoveries of great importance but not without any thought or instruction in possible application ... But a vast amount of scientific knowledge comes from situations where the two processes are completely mixed together as a single operation.⁹⁷

⁹³ Ibid.

⁹⁴ J.P. Baxter, 'The University of New South Wales', *Vestes* 3 (4), 1960, 18.

⁹⁵ A.P. Rowe, *If the Gown Fits* (Melbourne: Melbourne University Press, 1960).

⁹⁶ Baxter, *Interview*.

⁹⁷ J.P. Baxter, 'The Use of Scientific Knowledge by Governments and Industry. *Tenth Congress of the Universities of the Commonwealth. Report of Proceedings*. Sydney August 17-23.' in *Papers of Sir Philip Baxter* UNSW/CN1053 (Sydney: University of NSW Archives, 1945).

To Baxter ‘important’ knowledge was that which had significant application. For universities to advance important knowledge in this sense connection to industry was essential. This had been in place for the University of New South Wales from its beginnings, since the Council contained members of industry – BHP, for instance – but Baxter was keen for the interaction with industry to occur at the level of research, not just governance.

Research was a growing concern for all the universities. It is no coincidence that university links to industry strengthened as research became a scholarly priority. The University of New South Wales’ research mission marked a shift in the idea of university work, an adjustment that caused uncertainty about the relationship between mastery and discovery. There were those in Australian universities, especially in the humanities where the tradition of scholarship was ingrained, who saw mastery as the longer, slower and more important task. They tended to resist the PhD. In 1947 at Sydney University, for example, when the PhD was first proposed, the Faculty of Arts opposed it. Partly informed by anti-American sentiments (for some humanities scholars, the PhD was an inferior American credential compared to the British Master of Arts), theirs was primarily a concern with the nature of the academic vocation. These critics saw discovery, rather than mastery, as a lesser, easier and largely serendipitous act, compared to the detailed, critical and thorough grasp that characterised good scholarship.⁹⁸ But the value of the university to society was shifting. The old guardianship of existing knowledge was giving way to the discovery of the new.

⁹⁸ Connell et al., *Australia’s First*, 48–9. University of Sydney, *Minutes of the Faculty of Arts*, 21 November 1946, 204–8.

This started to break down the university's longstanding distinction from the world of profit. It was a multi-faceted division that had elevated the university's authority in two ways. Firstly, the tradition of disinterested scholarship had separated the university from political, sectarian and financial gain, imbuing university knowledge with a special reliability unavailable to other knowledge producers.⁹⁹ This resulted in a second source of authority. In the area of science especially, the university's separation from commercial interests imbued university research with an aura of objective discovery.¹⁰⁰ If it was to be deemed objective, those discoveries were not 'ownable', Mario Biagioli argues, they were necessarily public.¹⁰¹ Academic research norms helped to reinforce that supposed objectivity by imposing a 'gentlemen's agreement' not to patent or derive profit from their discoveries.¹⁰² Ironically, as Biagioli, Corynne McSherry and Bill Readings claim, public knowledge helped to enable private intellectual property: if some research was public, this meant that other findings could also be privately owned and traded.¹⁰³

Concerns about potential links to the commercial world fuelled controversies over the University of New South Wales. Some members of parliament and the public believed that 'university' referred to the kind of universal, unified education that preoccupied Ashby and Clunies Ross. Technology, they believed, was too narrow and

⁹⁹ Ashby, *Challenge to Education*, 77.

¹⁰⁰ Corynne, McSherry, *Who Owns Academic Work? Battling for Control of Intellectual Property* (Cambridge M.A.: Harvard University Press, 2001), 49–50. Cf. Mario Biagioli, 'The Instability of Authorship: Credit and Responsibility in Contemporary Biomedicine', *FASEB* 12, 1998, 12. See also Mark Gibson, *Culture and Power: A History of Cultural Studies* (Sydney: UNSW Press, 2007), 23.

¹⁰¹ McSherry, *Who Owns Academic Work?*, 46–50. Biagioli, 'The Instability of Authorship', 12–3. Bill Readings, *The University in Ruins* (Cambridge Massachusetts: Harvard University Press, 1996), 111.

¹⁰² McSherry, *Who Owns Academic Work?*, 49–50. Examples can be found in Frank Fenner, 'Florey, Howard Walter (1898–1968)', in *Australian Dictionary of Biography* (Melbourne: Melbourne University Press, 1996). Anne Sayre, *Rosalind Franklin and DNA* (New York: W.W. Norton, 1975), 108–19.

¹⁰³ McSherry, *Who Owns Academic Work?*, 54. Biagioli, 'The Instability of Authorship', 12–3. Readings, *The University in Ruins*, 111.

specialised to warrant the title.¹⁰⁴ In the Federal parliament Kim Beazley later asserted, ‘There is no such thing as a “university of technology”. The term is a complete misnomer.’¹⁰⁵ In the late 1940s, however, the New South Wales Labor government was determined to claim the title ‘university’ for industrial knowledge, leading Country Party member David Drummond to accuse them of ‘inverted snobbery’.¹⁰⁶

Class-based sentiment was often at work on all sides – this was the third source of university distinction from profit. John Anderson – philosopher at Sydney University, where the threat of a competing university was felt keenly – published a poem about the new university, when it opened in Ultimo:

From the Railway end of Broadway
Came a burst of mournful song
Throbbing through the aspirations
Of the proletarian throng
Was a pioneer of Western Culture
But swapped it for a mechanical sepulture.¹⁰⁷

The phrasing is telling: ‘proletarian’ and ‘mechanical’ undermined, according to Anderson, the cultural superiority of the ideal university, thus reducing some of its authority.

In Australia, uncertainty about connecting the university to industrial profit was also informed by the sense of responsibility attached to the idea of the public university:

¹⁰⁴ ‘Differing opinions about the new University’, *Sydney Morning Herald*, 2 May 1949. Liberals twice Walk out of Assembly’, *Sydney Morning Herald*, 9 April 1949.

¹⁰⁵ CPD (HoR), ‘Universities Committee Report’, 28 November 1957.

¹⁰⁶ ‘Govt Charged with Snobbery’, *Sydney Morning Herald*, 8 April 1949.

¹⁰⁷ John Anderson, 1961 song ‘Philosophical Blues’, cited in O’Farrell, *UNSW: A Portrait*, 25.

Some universities have held to the position that a public institution cannot assist in creating a private monopoly and have discouraged any projects whose sponsors desired patent protection.¹⁰⁸

Baxter had no such qualms. In 1959 he established Australia's first university research commercialisation company, Unisearch. Unisearch produced revenue from industry-funded research projects, educational testing, academic consulting and from leasing laboratory equipment.¹⁰⁹ Within its first three months, Unisearch showed receipts from Taubman's paints, Ampol Petroleum and Besser Vibrapac Masonry.¹¹⁰ For the New South Wales government, this was proof of the viability and relevance of their preferred model. They had asked Baxter to 'actively seek industrial work', the income from which would alleviate some of the State's responsibility in now funding two universities.¹¹¹

While Baxter was happy to comply, his key interest was not profit. Unisearch was there, in his view, to facilitate the interaction between for-profit companies and the university, whose focus was knowledge. When it came to patents, some sort of compromise, the executive were told, could be made, as long as they had a 'realistic attitude'. Indeed, the Unisearch minutes suggested that he believed patenting might even be the university's responsibility:

It is becoming increasingly recognised in the higher technological institutions that it is their duty to assist in accelerating the translation of scientific and technical knowledge into new processes, products and techniques.¹¹²

¹⁰⁸ Unisearch, 'Attachment 10 of Minutes of Meeting of Board of Directors 7 July 1959 General Patents Policy of Company', in *Unisearch Records* (Sydney: UNSW Archives, 1959).

¹⁰⁹ Unisearch, 'Statement of Receipts and Balances 1st April to 30th June 1959', in *Unisearch Records* (Sydney: UNSW Archives, 1963).

¹¹⁰ *Ibid.*

¹¹¹ Referred to in NSW University of Technology, 'Minutes of the Council Meeting 11 March 1957', in *Unisearch Records* (Sydney: UNSW Archives, 1957).

¹¹² Unisearch, 'Attachment 10 of Minutes of Meeting of Board of Directors 7 July 1959 General Patents Policy of Company', in *Unisearch Records* (Sydney: UNSW Archives, 1963).

Baxter, however, was more interested in the benefits of collaborative research for the university than long-term ownership of patents. The university regulated the scheme with simple policies requiring the university to negotiate with inventors and sponsors. ‘The University obviously has little to gain by being mercenary’, Baxter argued.¹¹³

In its own small way, Unisearch demonstrates the tangible change the war had rendered. It was now possible, and for some highly desirable, to connect university knowledge to new products, techniques and industries. Universities had supported economic efficiency and technological innovation during the war. After it relationships forged between university knowledge, practical application and innovation were translated into industrial and commercial contexts.

The new engagement with industry went beyond the University of New South Wales to include, to a lesser, but still significant degree, all of the universities. The ‘long boom’ had arrived and, in all fields of study, universities had a significant role to play. Later reflecting on science and technology, H.C. (Nugget) Coombs, economist and Director-General of the Department of Post-War Reconstruction, argued that this implied a shift in the ownership of knowledge. Technology behaved differently, when released into society, to other kinds of knowledge. Applied technologies did not necessarily convert into public good and Coombs feared that universities’ moral refusal – Baxter’s University of New South Wales aside – to profit from research would do them harm. He predicted that commercial organisations would acquire innovations, patent them where they could, exploiting knowledge as extensively as possible. Sometimes the university would even need to buy back the products of their

¹¹³ Unisearch, ‘Proposed University by-Law Relating to Inventions’, in *Unisearch Records* (Sydney: UNSW Archives, 1963).

own research. As the proportion of technological knowledge increased Coombs feared that the ownership of knowledge – the drivers of knowledge production – would shift from universities to the market.¹¹⁴

Universities and economic development

As the relationship between universities and industry grew, applied university research became one part of the public compact of the new technology university. The other part, a requirement of all universities, was to multiply the supply of skilled labour. The booming post-war industrial economy required ever more trained graduates from universities and technical colleges.¹¹⁵ To ensure adequate supply of skilled labour and skill development for returned service men and women, the Federal government began to make inroads in higher education. The Universities Commission was the first instrument through which the Federal government began to undermine State control and assert a measure of national coordination of higher education. Established in 1942, Sir Richard Charles Mills chaired the Commission, deciding on disciplines and student numbers for reserving students from military service.¹¹⁶ Minister for War Organisation of Industry, John Dedman, sought to influence universities, especially the numbers of students they taught, by awarding

¹¹⁴ H.C. Coombs, 'Science and Technology – for What Purpose?', in A.T.A. Healy (ed.), *Science and Technology – for what purpose?* (Canberra: Australian Academy of Science, 1979), 33–7.

¹¹⁵ Raewyn Connell and Terry Irving, *Class Structure in Australian History: Documents, Narrative and Argument* (Melbourne: Longman Cheshire, 1980), 293.

¹¹⁶ 'Cash Aid for Students: Federal Plan for Universities', *Sydney Morning Herald*, 4 November 1942. R.C. Mills was a former professor at Sydney University and was at the time of his appointment to the Universities Commission also chair of the Commonwealth Grants Commission, which considered applications for financial assistance from the states. P. D. Groenewegen, 'Mills, Richard Charles (1886 - 1952)', in *Australian Dictionary of Biography* (Melbourne: Melbourne University Press, 1986).

Commonwealth scholarships, in particular targeting those who might, for lack of funds, otherwise be unable to attend university.¹¹⁷

Student numbers did increase rapidly. The student body also became more demographically diverse once financial impediments were reduced. In 1944 Dedman expanded wartime financial assistance for students into a formal Commonwealth Reconstruction Training Scheme, which provided support for education and training of ex-servicewomen and men. Over the next seven years, 300,000 people were accepted into that scheme, more than half entering the universities (the scheme covered vocational training as well).¹¹⁸ In the years after the war Commonwealth Reconstruction Training Scheme students made up more than thirty percent of the total enrolment in Australian universities.¹¹⁹ Between university and technical education, educational opportunities for Australians grew substantially.¹²⁰

The desire to grow the higher education sector continued long after returned service personnel had been absorbed into the workforce. Employers, responding to the boom in the economy, needed skilled workers. A substantial number of skilled and unskilled employees were available as a result of large-scale immigration, but it was also necessary to train more. The universities and technical colleges provided the necessary growth.¹²¹ ‘The education standards of the community are high’, the Australia New Zealand Bank was able to tell overseas business interests by the 1950s.

¹¹⁷ Dedman, *Universities Commission*.

¹¹⁸ Hector Gallagher, *We got a fair go: History of the Commonwealth Reconstruction Training Scheme 1942-1952* (Melbourne: Hector Gallagher, 2003).

¹¹⁹ Universities Commission, ‘CRTS Statistical Survey’, in *Commonwealth Reconstruction Training Scheme 1947-1951* USYD/G3/13 (Sydney: University of Sydney Archives, 1948).

¹²⁰ Connell et al., *Australia's First*, 46.

¹²¹ Australia and New Zealand Bank Limited (ANZ), *Establishment of Industry in Australia: For Businessmen Considering Establishing or Extending Business in Australia* (Melbourne: Australia and New Zealand Bank Limited, 1958). See Connell and Irving, *Class Structure in Australian History*, 293.

University education, the bank informed the international community, was available in a wide range of fields, with part-time courses for ‘students engaged in such occupations as engineering or commerce’.¹²²

Most political and academic leaders supported this expansion, as did Nugget Coombs, through the Department of Post-War Reconstruction. Only later did Coombs question the implications of the decision to educate students for primarily economic reasons, producing what he called ‘capitalist fodder’ in the universities.¹²³ Despite those subsequent doubts, the demands of industry at a time of substantial growth were considerable. From the perspective of capitalist progress, the change seemed inevitable. Technological innovation seemed a natural progression in Australia’s economic development. The evolution from an industrial to a technological society was a consequence, Coombs argued, of humans adjusting the tools they required to the economic and social pressures of the world in which they lived.¹²⁴

Even Clunies Ross, despite his ambivalence about the technological emphasis in the universities, saw that all this needed to happen. He later became a much-respected head of the CSIRO. ‘We want’, he argued, ‘not only to get through the immediate post-war years ... but at the same time to go steadily forward to an expanding economy.’¹²⁵ In 1939 a committee had reported an urgent need for something to be done to develop science in Australia that would better sustain secondary industry, outlining a set of changes that were mostly achieved during the war. Now what was needed was a refocus of technologies and their associated infrastructure to the needs

¹²² Australia and New Zealand Bank Limited, *Establishment of Industry in Australia*.

¹²³ Coombs, ‘Science and Technology – for What Purpose?’, 21–37.

¹²⁴ *Ibid.*

¹²⁵ Ian Clunies Ross, *Should We Plan for Peace?* Pamphlet. Look Ahead Australia Series (Sydney: Consolidated Press Ltd, 1941).

of peace. The requirement for consolidation and growth meant that universities could no longer afford to lose the labour of too many graduate students overseas (where up until the war postgraduate training normally occurred). This was a key reason for introducing and expanding the PhD in Australian universities at this stage.

Research and research training was essential for Australian science to thrive and it required additional support.¹²⁶ New funding was allocated to existing bodies, such as the Australian National Research Council, the Council for Scientific and Industrial Research and the Australian Council for Education Research. But that older cluster of organisations was found to be inadequate for the strategic task of driving a national research agenda. Leading scientists and public servants facilitated structural shifts to assure new research was pushed forward.¹²⁷ The National Health and Medical Research Council was transformed into a research funding body in 1939. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) was established in 1949, a vastly expanded body from the old Council for Scientific and Industrial Research. In 1952 the Atomic Energy Commission was formed.¹²⁸ In the early 1950s the Australian National Research Council was dissolved, replaced by bodies that research leaders believed would better support research standards: the Academies of Science and Social Science.¹²⁹ For higher education, the Universities Commission, established in 1943 (becoming the Australian Universities Commission

¹²⁶ Home, 'Science on Service, 1939-1945.', 245-9.

¹²⁷ Stuart Macintyre, *The Poor Relation: A History of the Social Sciences in Australia* (Melbourne: Melbourne University Press, 2010), 77-85.

¹²⁸ Ron Johnston and Jean Buckley, 'The Shaping of Contemporary Scientific Institutions', in R.W. Home (ed.), *Australian Science in the Making* (Cambridge: Cambridge University Press, 1988), 374-98.

¹²⁹ Macintyre, *The Poor Relation*, 80.

in 1958), began distributing research grants, a task it retained until the establishment of the Australian Research Grants Committee in 1965.¹³⁰

This expansion of the nation's research and training capacity was a source of national pride. The Australia New Zealand Bank boasted that the level of education in Australia was now such that 'in fact there is a flow of Australian scientists and technicians to well-paid positions in Europe and America'.¹³¹ They overstated the transformation, but Australia's ability to turn for advice to its own experts prompted some intellectual leaders to declare that Australia had 'come of age'.¹³² It was not only in the commercial sector that the growing influence of university-educated employees was felt. Public intellectuals emerged in new and influential ways as media gave them a new prominence.¹³³ The Commonwealth public service, now better resourced as a result of the Federal government's income tax revenue, began recruiting from university graduates for its enlarged and more specialised workforce.¹³⁴ The result was that across the spectrum of Australian professional life, university education and research was having a significant observable impact.¹³⁵

Conclusion

When the war started, universities were small, elite and introspective. After it, they became large, more diverse and increasingly focused outwards towards their obligations to society. The universities' new commitment to the public good shifted

¹³⁰ Macintyre, *The Poor Relation*, 95.

¹³¹ ANZ, *Establishment of Industry in Australia*.

¹³² Richard White, *Inventing Australia: Images and Identity 1688-1980* (Sydney: Allen & Unwin, 1981), 150–1.

¹³³ Albert Moran, 'Media Intellectuals', in Brian Head and James Walter (eds), *Intellectual Movements and Australian Society* (Oxford: Oxford University Press), 109–24.

¹³⁴ Stephen Alomes, 'Intellectuals as Publicists 1920s to 1940s', in Brian Head and James Walter (eds), *Intellectual Movements and Australian Society* (Oxford: Oxford University Press), 84.

¹³⁵ White, *Inventing Australia*, 150–1.

their priorities away from 'pure' knowledge towards issues that would benefit the population. This was not just a matter of prioritising utility over pure ideas, however, it was also a move away from imagining knowledge to be singular and universal. Directed towards more diverse social goals, knowledge seemed increasingly fragmented, making it more difficult for the university to claim an authority over the whole. This outward focus also assured that government, industry and a growing intellectual class had an increased stake in segments of the university's activity that related to their work. Higher education's obligations to those groups led to a shift in its role. Universities after the Second World War would be less concerned with the protection of culture and the guardianship of existing knowledge and increasingly concerned with deriving their authority from the production of new knowledge through research.

As technological research expanded, the objections were considerable. Some believed that equating the university's purpose to the grubby world of industry and commerce contradicted the university's aspirations to cultivate taste. Seeking to protect intellectual purity from crass pragmatism, leaders like Kim Beazley, Ian Clunies Ross and Nugget Coombs were an influential elite, but they were working against the tide. While they could hope, plead and embarrass universities and governments to try to persuade them of the importance of pure and humanistic knowledge, the movement towards applied, industrial and technological knowledge in the universities had momentum.

The impetus for change was largely a result of the war and post-war reconstruction. University knowledge gained purchase in the public sphere as a result of its application beyond the university walls. Real-world problems highlighted the need for

new academic questions, which in turn revealed possibilities for new discoveries and new technologies. The war had been fought and won on the strength of scientific and technological development. A new economy was being built, industries grew and improved levels of education were needed.

The direction of change and the focus of government policy encouraged academics to pursue increasingly specialised research. Specialisation supported innovation by aligning more directly with real-world problems, complicating the sense of what the university was for. ‘Universal’ knowledge, which some post-war politicians and academics believed was intrinsic to the idea of the university, had the singular purpose of maintaining the nation’s ‘intellectual health’. But as the post-war era unfolded, the task became more diverse. Universities now supported civil society, industrial and agricultural economic development and human health and welfare. They were multiple and divergent goals, so different from the unity of purpose scholars like Clunies Ross recalled from before the war.

These changing structures encouraged university staff and national leaders to think about knowledge in a more atomised way. Disciplines, applications and ideas could be compartmentalised and streamed through research organisations, government bureaucracies and industry structures. Indeed, they would need to be: growing complexity and increased specialisation made administration of a single body of ‘universal’ knowledge too cumbersome. This fragmentation, however, also encouraged members of society to claim knowledge as the right of the interests they represented, so that medical knowledge might belong to the profession, for instance, and agricultural innovation to primary industry. Fragmented knowledge could thus be *owned*: each fragment, as Nugget Coombs feared, collected for personal or

commercial use. When, as Lyotard has argued, ‘the relationship between science and technology [was] reversed’, economic requirements began to be the driver, rather than the beneficiary, of knowledge production.¹³⁶

¹³⁶ Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), 47.

Chapter Two: Knowledge and the Nation 1945-1967

Post-war reconstruction offered an opportunity for political and civic leaders to reconsider Australian society and its economic underpinnings. New knowledge in science, technology and the social sciences promoted the idea that Australian intellectuals might offer innovative solutions to the economic, political, diplomatic and even medical problems confronting the world. H.C. (Nugget) Coombs later reflected:

We had ideas about the need for research in medicine, ideas about research in the social sciences so that they could be applied to the conduct of our collective affairs. There was an opportunity from Australia to get a view of the universe and to come to understand it which was unique ... it came out of work that Post-War Reconstruction was doing.¹

A key priority was the effective management of employment, involving the transfer of sixty-eight percent of the population from war work to useful peacetime activities.

Facilities and equipment built for war also needed to be redeployed. This involved the evaluation of the ongoing usefulness of material, occupations and skills. Re-orienting the economy 'back to the purposes of peace' gave focus, as the last chapter showed, to the growth of technological education and research in the universities.²

Restructuring the nation's economic priorities was just one task. As Coombs saw it, the other half of post-war reconstruction was to 'give effect to those aspirations for which this war has been fought'.³ For intellectuals like Coombs post-war reconstruction offered the opportunity to put in place the infrastructure to support communities and bolster democracy. Coombs and other bureaucrats in the post-war

¹ H.C. Coombs, *Interview with H.C. 'Nugget' Coombs*, Director/Producer: Frank Heimans, Executive Producer: Ron Saunders, Interviewer: Robin Hughes (Canberra: Film Australia Australian Biography Series: <http://www.australianbiography.gov.au/subjects/coombs/>, 1992, Retrieved 21 December 2011).

² H.C. Coombs, 'Australia in the Post-War World: Clear the Sky So We May Set Our Course', *Vital Speeches of the Day* 9 (19), 1943, 600–3.

³ *Ibid.*, 600.

period assumed the task of addressing the problems society had recently faced and planning for a better future. To ensure they did this properly they believed they needed more information, which they hoped would be supplied by the nation's scholarly researchers. Where the government had no prior experience or where their ideas were untested, new research should be funded. Economists in particular were needed to investigate and recommend ways of managing the national economy, avoiding in future the economic depression that had done so much damage in the 1930s.⁴ The nation needed medical research to support population health.

International relations would be underpinned by new studies of the Pacific region and social scientific research would provide for robust social policy.⁵ In addition, the nation's energy and defence capabilities would be founded on the basis of research into new energy sources, particularly atomic power.⁶

Social scientists such as Sol Encel, Tim Rowse, James Walter and Ann Firth have documented the growth of an intellectual class advising government in the post-war period. They focused on the growing importance of expertise to post-war democracy. Rowse, extending Encel's initial observations, was concerned that these experts were unelected. He interrogated the implications of governing based on the particular idea of 'collective good', concocted by an elite group of intellectuals. Their influence, he argued, effectively undermined parliamentary representation.⁷ Walter questioned how elite those experts were, insisting that many – including Coombs – were 'organic'

⁴ Tim Rowse, 'The People and Their Experts: A War-Inspired Civics for H.C. Coombs', *Labour History* 74, 1998, 71–2.

⁵ Stuart Macintyre, *The Poor Relation: A History of the Social Sciences in Australia* (Melbourne: Melbourne University Press, 2010), 130–1.

⁶ Wayne Reynolds, *Australia's Bid for the Atomic Bomb* (Melbourne: Melbourne University Press, 2000).

⁷ Rowse, 'The People and Their Experts', 70–88.

intellectuals, since their advice served the interests of their class.⁸ Antonio Gramsci defined the ‘organic intellectual’ as the product of their social environment, their thinking informed by culture and experience that they in turn used to help address the financial and welfare concerns they observed.⁹ Deployed more commonly to differentiate a working-class way of knowing from a traditional elite intelligentsia, Walter’s use of the term to demonstrate Coombs’s promotion of middle class interests conceals the reality that most bureaucratic intellectuals, regardless of their social origins, were members of a university-trained elite: Coombs for example, had postgraduate qualifications earned in Great Britain.¹⁰ Their high levels of education were prized. Ann Firth argues that both the population and parliamentarians sought and valued expert opinion on the issues that would impact the collective national good.¹¹

The government’s new reliance on research and expertise offered opportunities for higher education. The universities now needed to negotiate their place in the government agenda. Opinion on this was divided. Some academics were pleased to put their work towards such important national goals. Others believed the universities should stay out of it, that their job was to pursue knowledge, not provide the tools of government. The government, on the other hand, was persuaded that it needed to ensure the universities would perform the role the nation needed and sought ways to compel them to do so. Their wish to put higher education to national purposes was

⁸ Antonio Gramsci, ‘Intellectuals and Education’, in *A Gramsci Reader: Selected Writings 1916-1935* (London: Lawrence and Wishart, 1988).

⁹ Antonio Gramsci, *Selections from the Prison Notebooks* (London: Lawrence and Wishart, 1971), 5-23.

¹⁰ James Walter, ‘Intellectuals and Political Culture’, in Brian Head and James Walter (eds) *Intellectual Movements and Australian Society* (Oxford: Oxford University Press), 237–73.

¹¹ Ann Firth, ‘The Breadwinner, His Wife and Their Welfare: Identity, Expertise and Economic Security in Australian Post-War Reconstruction’, *Australian Journal of Politics and History* 50 (4), 2004, 491–508.

amplified by Cold War politics. An international alliance of democratic, capitalist nations wanted dominance in Europe against the Soviet-controlled communist Eastern Bloc. Their ambition translated, by the early 1950s, into fears that widespread domestic complicity with communist aims would destabilise their efforts.¹² Academics, influential through teaching and in the public sphere, were key subjects of concern: would they support or undermine the emerging post-war social order? Institutional and political histories recount myriad incidents where agents of the Australian Security Intelligence Organisation (ASIO), which had been established in 1949, were sent to watch and influence academic political and ideological behaviour.¹³ University administrators responded to the government's intervention in their appointments and promotions, so that academic careers often depended on alignment with an official government position.¹⁴

The fact that the university administrators were drawing on ASIO advice in managing their personnel represented an important development with consequences for institutional autonomy, but was not the only issue at stake. As the tensions in universities heightened, the growing importance of the emerging staff trade union, the Federation of Australian University Staff Association (FAUSA) raises additional questions. Was academic freedom itself politicised? How did tensions impact the place of academics in setting the university's priorities? The decision by staff to comply with government values or to assert their own, had lasting implications for the regulation of knowledge in the universities.

¹² Frank Cain, *Terrorism & Intelligence in Australia: a History of ASIO and National Surveillance* (Melbourne: Australian Scholarly Publishing, 2008), 103–4.

¹³ For example, see Fay Anderson, *A Historian's Life: Max Crawford and the Politics of Academic Freedom* (Melbourne: Melbourne University Press, 2005). S.G. Foster and Margaret M. Varghese, *The Making of the Australian National University* (Sydney: Allen & Unwin, 1996), 121. David McKnight, *Australian Spies and their Secrets* (Sydney: Allen & Unwin, 1994), 145–55.

¹⁴ For example, Anderson, *A Historian's Life*.

Despite government suspicion of academic ideologies, in the 1940s and 1950s, the Federal government also provided unprecedented levels of financial and rhetorical support for higher education. Universities were presented with the opportunity, if they supported national goals, to enhance their importance to society and their income along with it. Funding was a key concern for them. After the war, despite ongoing Federal funding under post-war reconstruction schemes, State funding was so constrained that the Vice-Chancellors declared a crisis in the universities.¹⁵ The 1930s economic depression had left the universities weakened. They now looked to the Commonwealth government, whose control of income tax made it the most likely source of ongoing backing. University administrators hoped that the funding universities had received from the Federal government as a result of the war would continue and expand.

Universities and the Australian Federal Government

Federal funding was not without strings and well before government began to send ASIO to observe them, university staff and students feared for their autonomy. As early as 1943, in a conference between the Chair of the Universities Commission, Richard Charles Mills, and National Union of Australian University Students representatives, a University of Melbourne student asked the question directly:

It seems to be certain that the Commonwealth interest in education is going to be permanent...

The most important question seems to me to be whether the Commonwealth is going to carry conditions with the money it gives ... The Commonwealth's position appears to be very strong because of its money.¹⁶

¹⁵ AVCC, *A Crisis in the Finances and Development of the Australian Universities* (Canberra: AVCC, 1952).

¹⁶ Universities Commission, 'Minutes of the Conference of National Union of Australian University Students and the Universities Commission, 20 August', in *Universities Commission NAA/SP36/21* (Canberra: National Archives of Australia, 1943).

At that time, Richard Mills explained that he did not know what the Commonwealth's intentions were or whether ongoing funding would carry conditions.

One year later Mills had the following exchange with the Vice-Chancellor of the University of Sydney, Sir Robert Wallace:

Sir Robert Wallace: They [the 'Federal people'] don't understand the problem. There should be no difficulty at all. Sydney has put in for nothing it has not absolutely needed ... if you can get us some freedom from this long round about way, and expensive and stupid way of doing things, we can get ahead. What has the State to do with it?

Chair [Professor RC Mills, Chair of the Universities Commission]: I don't think the universities have been held up because of any requirements.

Wallace: Could you use your influence with the State government?

Mr. Hook [Secretary of the Universities Commission]: Are you in a position to tell us what you want the Premier to agree to?

Wallace: To leave us alone.

RC Mills: The delay at the moment is that you must have some plans and you won't tell us about them ... We have to certify for the Prime Minister that it is essential.'

Wallace: What I am asking is that you give us the money and be done with it.

RC Mills: It is a large sum of money and when the Government says 'we gave this subsidy, did the universities find it all right?' we must be able to say something more than just 'Trust the Universities'.

Wallace: I think that is the wrong attitude.¹⁷

Wallace knew Mills well. They had for some years been colleagues at the University of Sydney, so such frankness may have been license derived from familiarity. But it also reflected a tension inherent in their positions. Government funded higher education to secure tangible benefits for the nation – democracy demanded an account

¹⁷ 'Minutes of the Conference of the Universities Commission with Vice-Chancellors of Australia Held at 119 Phillip Street Sydney 4-6 September 1946' in *Universities Commission NAA/SP36/21* (Canberra: National Archives of Australia, 1943).

of what those tangible benefits were.¹⁸ Universities, on the other hand, negotiated receipt of the government's money with one eye firmly on their simultaneous need to secure institutional autonomy and academic freedom. Eric Ashby had warned them:

In Australia it is extremely important that the tradition of academic freedom should be preserved, and that advantage should be taken of it: for the opportunities for political and sectarian interference in education are greater here than in other British countries.¹⁹

Since Ashby had argued this the situation had changed, for government interest in higher education was now more acute, directed towards specific outcomes.

The government's approach to research during the war evolved into a longstanding policy framework based on national priorities. It began with pragmatic problems to solve. Their support of war-time science had left them with substantial research infrastructure that now needed to be re-deployed. As Canberra's post-war reconstruction bureaucrats considered the best post-war functions for facilities and equipment, they were persuaded that those laboratories should be used for national development. Coombs and his colleagues began to consider the nation's emerging research needs. On reflection, government laboratories seemed insufficient for post-war plans; broader, more encompassing research was needed. When public servants considered the issues at stake, they found that instead of just maintaining the network of government laboratories that had been used for munitions research, national development required consideration of the research capacity of the universities.²⁰

In seeking university research for nation building several influential academics, politicians and bureaucrats – Nugget Coombs, R.D. (Pansy) Wright, Douglas

¹⁸ Conrad Russell, *Academic Freedom* (London: Routledge, 1993), 11.

¹⁹ Eric Ashby, *The Challenge to Education* (Sydney: Angus & Robertson, 1946), vi.

²⁰ R.W. Home, 'Science on Service, 1939-1945', in R.W. Home (ed.), *Australian Science in the Making* (Cambridge: Cambridge University Press, 1988), 248.

Copland, also John Dedman and the Prime Minister, Ben Chifley – were convinced that the national capital needed a university, not just government-directed scientific projects like those run through the Council for Scientific and Industrial Research.²¹ Many members of the growing cohort of public servants in Canberra also sought opportunities for further education for themselves and their children.²² Canberra University College, a college of the University of Melbourne, had been in place since 1929. Attended by a very small number of students (the 1948 statistical report recorded only twenty-one full-course enrolments), it was staffed by part-time, though often distinguished, tertiary teachers.²³ The loftier ambitions held by planners of the Australian National University, however, were not situated in the need to educate more students, but in establishing an elite research university in the nation's capital.

For this reason, the Australian National University was founded as a research-only institution in 1946.²⁴ Immediate tensions with the university tradition of maintaining a separateness from government direction were augmented by jealousy over the new university's unique access to the Federal treasury. Some members of the older, State-funded universities mocked its research focus, describing it as the nation's 'PhD factory', invoking the preference in the humanities for scholarship rather than research (discussed in the last chapter).²⁵ Further evidence that the new institution was not autonomous in accordance with the university tradition was that politicians, not the university's scholarly founders, selected the name. Academics hated it, saying it

²¹ Foster and Varghese, *The Making of the Australian National University*, 14.

²² Lionel Wigmore, *Canberra: History of Australia's National Capital* (Canberra: Dalton Publishing Company, 1971).

²³ Foster and Varghese, *The Making of the Australian National University*, 8, 144. Universities Commission, 'CRTS Statistical Survey', in *Commonwealth Reconstruction Training Scheme 1947-1951* USYD/G3/13 (Sydney: University of Sydney Archives, 1948).

²⁴ Foster and Varghese, *The Making of the Australian National University*, 3.

²⁵ Nicholas Brown, *Governing Prosperity: Social Change and Social Analysis in Australia in the 1950s* (Cambridge: Cambridge University Press, 1995), 237–41.

‘smacked of nationalised knowledge, a nexus between state and university’.²⁶ David Rivett, despite his own connection to industrial research as head of the Council for Scientific and Industrial Research, was a defender of traditional university science.²⁷ He believed the Federal government was treating the prospect of a research university as a kind of government knowledge factory. Whenever he heard ‘The Australian National University’ Rivett said he wanted to add ‘Pty Ltd’.²⁸ But despite academic sentiments, in Canberra research was now strategically linked, in real, tangible ways, with the development and reconstruction of the nation.

National development through strengthening higher education was a central concern of Ian Clunies Ross who, since the early 1950s, sought to persuade the Federal government of the need for coordinated support of the universities.²⁹ By 1957 Prime Minister Robert Menzies agreed to support Commonwealth funding and organisation of higher education. Menzies – at that point and in later autobiographical reflections – described higher education as his longstanding passion and listed its re-organisation as amongst his greatest Prime Ministerial achievements. Historical accounts generally echo this acclaim. While critical of the ways Menzies sought cultural homogeneity in education, Bob Bessant, for example, in an important article on Menzies, gives his familial and educational background, revealing the influences that informed Menzies’ appreciation of education generally and universities in particular, a background that ultimately shaped Australia’s higher education system.³⁰

²⁶ Foster and Varghese, *The Making of the Australian National University*, 14.

²⁷ Foster and Varghese, *The Making of the Australian National University*, 115–6.

²⁸ *Ibid.*, 14.

²⁹ A.W. Martin and Patsy Hardy, *Robert Menzies: a life*, Volume 2 (Melbourne: Melbourne University Press, 1993-1999), 394–6.

³⁰ Bob Bessant, ‘Robert Gordon Menzies and Education in Australia’, *Melbourne Studies in Education*, 1977, 163–87.

When Menzies became Prime Minister in 1949, a review of the ongoing financial requirements of the universities, chaired by Richard Mills, was underway. In later accounts, Menzies claimed that he saw this review as just a precursor to the one that was needed. His statement in parliament suggests that he was considering what such a later body would achieve:

If we were shaping a Universities Committee to determine the scope of the universities, the subjects they should teach, and how they should teach them, a somewhat more widely constituted body... would be appropriate.³¹

This intention for government to consider academic elements of the university contradicted Menzies' statement when he presented the Mills report to parliament:

It is not the desire of the government to interfere in the internal management of the universities nor to attach conditions to the use of those moneys which would interfere with the traditional liberty of the universities to determine the courses of instruction that they wish to pursue or the character of the research that they wish to undertake. The Government has acknowledged the principle of academic freedom.³²

While on the one hand the nation needed specific and targeted education and research, Menzies also often articulated the view that autonomous universities were required to promote and protect western culture.³³ Menzies later argued that he sought, for the nation, the 'immeasurable and civilizing benefits which flow or should flow from the study of, or association with the students of, humane letters'.³⁴

Allan Martin and Patsy Hardy demonstrate that Menzies tended to retrospectively overstate his own importance in the revolutionary review that followed. In the early 1950s Ian Clunies Ross had been unable to persuade Menzies that the Federal

³¹ Commonwealth Parliamentary Debates (HoR), 'Universities', 9 March 1950: hereafter CPD (HoR).

³² CPD (HoR), 'States Grants (Universities) Bill', 27 November 1951.

³³ Robert Gordon Menzies, *The Measure of the Years* (London: Coronet, 1970), 87. Bessant, 'Robert Gordon Menzies and Education in Australia'.

³⁴ CPD (HoR), 'Universities Committee Report', 28 November 1957.

government should permanently take a greater role in the universities. In 1954 Menzies also rejected an appeal from the Australian Vice-Chancellors, who renewed their request two years later.³⁵ In fact the Australian Vice Chancellors, through their chair, A.P. Rowe, were acting on the advice of Ian Clunies Ross, who worked behind the scenes to promote the idea of a review among politicians, bureaucrats and academics. This was a difficult task, for politicians tended to be unconvinced that Federal funding of State universities was appropriate and many academics feared Federal meddling would be result from a permanent scheme.³⁶ Those misgivings notwithstanding, senior academics responded to Clunies Ross's requests for names of potential review leaders – both Australian and British – whose views they believed the academic community would accept.³⁷ Clunies Ross hoped that Eric Ashby would take the role.³⁸ But once persuaded of the need for a review, it was Sir Keith Murray, from the British University Grants Committee, who Menzies selected.

Martin and Hardy argue that once convinced that the Federal government should be involved in higher education Menzies became a 'true believer', seeking a political legacy in the Australian university system.³⁹ His accounts of his personal role in the Murray review seem to affirm this. He described the shift to Federal funding of higher education, for example, as a personal favour by the national Treasurer:

I spoke to the Treasurer, my colleague Arthur Fadden, and warned him that I was initiating an enterprise which could not fail, in the result, to be vastly expensive. Now Arthur (or 'Artie') Fadden was not a graduate of any university, nor would anybody (as he would be the first to concede) have taken him for an academic type. But he had a good Australian outlook; he knew

³⁵ Martin and Hardy, *Robert Menzies: A Life*, Volume 2, 395.

³⁶ Letter from A.P. Rowe to Ian Clunies Ross 13 August 1954, Universities Commission Personal File, *Ian Clunies Ross Papers* NAA/A10651/ICR23/41 (Canberra: National Archives of Australia).

³⁷ Universities Commission Personal File, *Ian Clunies Ross Papers* NAA/A10651/ICR23/41 (Canberra: National Archives of Australia).

³⁸ *Ibid.*

³⁹ Martin and Hardy, *Robert Menzies: A Life*, Volume 2, 398–9.

that this matter was almost an obsession with me; and he was my friend. So he gave me the all clear.⁴⁰

This was just one of many opportunities Menzies took to stress his personal passion for university reform.⁴¹

Menzies' passion was a rhetorical device that he used to manage the competing interests of his fellow Liberal politicians and of university leaders who sought to retain freedom from government control. A plan to fund higher education at Federal level was a significant cost and not necessarily of importance to the majority of Menzies' party. At that time only a limited number of politicians held university degrees. Even those who did could not necessarily be counted on to restrain their wish to exert the power that funding might hold over university activity. In particular, Francis Bland, a member of Menzies' own government, expressed the belief that, through funding, government earned the right to a say in the universities.⁴²

At the same time, for the scheme to work, university leaders needed to be reassured. The success of Federal involvement in the universities, as Ian Clunies Ross had recognised as he sought a committee leader who academics would accept, depended on the co-operation of the university community. Keith Murray – an outsider, unaffected by the competing interests between the institutions and sectors – conducted a heartening series of consultative visits with the universities. In three months Murray's committee (whose members included Ian Clunies Ross) visited all of the

⁴⁰ Menzies, *The Measure of the Years*, 87.

⁴¹ Ibid. CPD (HoR), 'Universities Committee Report', 28 November 1957. Robert Gordon Menzies, 'The Place of a University in the Modern Community', *An Address Delivered at the Annual Commencement of the Canberra University College* (Melbourne: Melbourne University Press, 1939). Robert Gordon Menzies. 'The Universities – Some Queries'. *Wallace Wurth Memorial Lecture*: Transcript of the lecture, gift of David Wood to Fisher library, 1964.

⁴² CPD (HoR), 'Universities Committee Report', 28 November 1957.

Australian universities, meeting with staff, vice-chancellors and registrars, collecting submissions from all interested parties. By now there were nine universities. The Australian National University and the University of New South Wales had joined the Universities of Melbourne, Sydney, Queensland, Adelaide, Tasmania and Western Australia. Formerly a college of the University of Sydney, the University of New England was also now an independent institution.

These institutions, along with a wide range of community organisations, made submissions to the Murray Committee. All of the institutional submissions (except Baxter's University of New South Wales) acknowledged the difficulty in resolving a debate that academics had for some time characterised as a division between 'service station' and 'ivory tower' universities.⁴³ In tea rooms across Australian campuses, these two phrases captured a tension that was occasionally articulated in more scholarly debate. In 1954 for example, at a conference to consider the future of the New South Wales universities, philosopher John Anderson argued for the 'ivory tower' side, fearing that otherwise 'university teaching [would become] an industry that has a certain product'.⁴⁴ On the other hand, other scholars argued that if they accepted that universities were public instrumentalities their voice might have more weight.⁴⁵ Moral philosophers Perce Partridge and Alan Stout felt there was a larger question about the social functions of the university, which went beyond providing

⁴³ Committee on Australian Universities, 'Submissions to the Murray Review' in *Committee on Australian Universities* NAA/CAU/A7691 (Canberra: National Archives of Australia 1957). Note that the University of New South Wales was, prior to the Murray review, the New South Wales University of Technology. As indicated in Chapter One, for simplicity it has been referred to as the University of New South Wales throughout.

⁴⁴ W.H.C. Eddy, *Universities of New South Wales: Proceedings of a Convention on the Present Pattern and Future Trends* (Sydney: Worker's Educational Association of NSW, 1954), 29.

⁴⁵ *Ibid.*

sufficient graduates, as they had during the war, to a philosophical question about the relationship of university scholarship to society.⁴⁶

Scholarly debates notwithstanding, Federal politicians expected to fund university teaching and research that had economic and social purposes that would benefit the nation. The final report of the Murray committee reflected this view, but also offered solace to the academic community. The report reaffirmed the importance of academic freedom, attempting to make it more palatable to politicians by styling academic inquiry in heroic terms:

These men have no immediate practical aim or profit in view: they are simply ‘knowledge-intoxicated’ men who love the life of intellectual effort and inquiry for its own sake, and will devote their lives to it if they possibly can. Though this pure pursuit of truth seems to many to be a rather inhuman, and to some a rather super-human, kind of life, there are fortunately far more of them than most people would have thought possible.⁴⁷

This impressive description, taking up precious space in Murray’s short report, served two purposes. One was to reassure parliament that, in granting substantial sums of money, the government was not feeding aristocratic greed, but intellectual vocation. Menzies was evidently concerned to address the widespread belief that university funding would give additional support to already-wealthy members of society. In Menzies’ presentation of the Murray report to parliament, he suggested that, contrary to public perceptions, wealthy citizens had long been a minority among undergraduate students. With increased Commonwealth funding, particularly of merit-based scholarships, he argued that equity would be still further improved.⁴⁸

⁴⁶ Ibid.

⁴⁷ Keith A.H. Murray et al., *Report of the Committee on Australian Universities* (Melbourne: Committee on Australian Universities, Commonwealth Offices, Treasury Place, 1957), 9–10.

⁴⁸ CPD (HoR), ‘Universities Committee Report’, 28 November 1957.

The Murray report's second purpose in emphasising a heroic form of academia was a technique Eric Ashby also employed: an attempt to prevent government interference by reminding them that money could not influence academics who, according to Murray, had no interest in profit.⁴⁹ It was to offset the fact that a pay rise for academics was a part of the package of government investment. The report, adopted by parliament, recommended a pay rise of £500 per year for professors with increases for all other academics too. Universities were given a ten percent increase in annual grants, immediate capital assistance in excess of £12 million and 'emergency' funding of more than £4.5 million, to assist them in recovering from the economic depression and the war.⁵⁰ It was a substantial injection of funds and universities felt its impact immediately.

Historians often depict the Murray review as launching a 'golden age' for higher education. Histories of universities joyfully recount the expansion of student numbers, the increase in staff, the building programs and the general ambience of relative prosperity that followed the review.⁵¹ Positive responses by the university community to the Murray report in 1957 were the expression of academics who looked forward not only to an increase in salaries and resources but also a sense that they were appreciated.⁵²

It was in part Menzies' evident passion for higher education that fuelled the new sense, in the universities, of being valued. Menzies utilised his role as a 'university

⁴⁹ Murray et al., *Report of the Committee on Australian Universities*, 9–10. Ashby, *Challenge to Education*, 77.

⁵⁰ Murray et al., *Report of the Committee on Australian Universities*, 108–19.

⁵¹ Patrick O'Farrell, *UNSW: A Portrait. The University of New South Wales 1949-1999* (Sydney: UNSW Press, 1999), 75. Brown, *Governing Prosperity*, 236.

⁵² For example K. Buckley and E.L. Wheelwright, 'Commentary on the Murray Report', *Vestes* 1 (1), 1958, 2–5. Pauline Tompkins, 'Australian Higher Education and the Murray Report', *Journal of Higher Education* 29 (7), 1958, 361–8.

man' and his relationship with the universities to good effect. University histories stress the occasions on which Menzies protected them, deflecting attempts by other politicians to involve themselves in university affairs. The system of favours was mutual. Universities – particularly the Australian National University in Canberra – tended to respond favourably to Menzies' requests, removing much of the requirement among other members of the government to use Federal control of funding to overtly influence higher education.⁵³

In the Murray reforms Menzies sought to systematise the obligations that the universities increasingly owed to Menzies personally, investing the same allegiance in the Commonwealth as the primary funding agency (though in a legislative sense they were still State institutions). Efficiency as a result of national unification of the sector was their key obligation:

Sound university planning for expansion to meet Australian needs also requires some degree of co-ordination of the ideas and programmes among the ten universities.⁵⁴

Centralised government funding across all universities, Murray argued, must result in centrally negotiated control. The same trend was reflected internationally:

There is no doubt that the university systems necessary to meet the future are going to make very exacting demands on the national economies. No country is going to be able to afford to be unnecessarily extravagant in duplicating expensive establishments and departments.⁵⁵

To manage those negotiations an Australian equivalent to the British Universities Grants Commission was to be established. Murray recommended a body that, like the British version, provided a buffer between government and the universities,

⁵³ Foster and Varghese, *The Making of the Australian National University*, 114–5,

⁵⁴ Murray et al., *Report of the Committee on Australian Universities*, 84.

⁵⁵ *Ibid.*, 85.

preventing a pairing of political aims with government research funding.⁵⁶ The Menzies government was not persuaded:

The government agreed that it [the Australian Universities Commission] should not be called a Grants Commission, for this might narrow its significance.⁵⁷

Australia already had a Universities Commission, established by John Dedman to facilitate government strategy during the war and to implement some of the Commonwealth's post-war reconstruction policies.⁵⁸ If the new Universities Commission had been created along the lines of its British counterpart, it would have less power than it did already. Menzies instead elected to retain the Commission's wider role. The slightly-altered Australian Universities Commission was nominally similar to the British Grants body, but retained the possibility for government to ask universities to fulfil national needs.⁵⁹

Although the Murray review did not recommend this expansive role for the Australian Universities Commission, segments of the report helped the government obtain it. The report sought to appease both political and academic readers, balancing the tension between university autonomy and accountability to government, so that each could be satisfied their interests were assured:

Each university naturally and rightly prizes its independence and every government in Australia will rightly desire to safeguard the independence of its own universities. In the western tradition it is entirely accepted that a university cannot perform its function without such independence. But from the point of view of government and people the national interest must be served, and universities must find some means, however informal, to enable a policy to be formed.⁶⁰

⁵⁶ A.P. Gallagher, *Coordinating Australian University Development: A Study of Australian Universities Commission 1959-1970* (St Lucia: University of Queensland Press, 1982), 2.

⁵⁷ Menzies, *The Measure of the Years*, 90.

⁵⁸ P.D. Tannock and I.K. Birch, 'Constitutional Responsibility for Education in Australia: The Federal Government's Latent Power', *Australian Journal of Education* 16 (2), 1972, 116-24.

⁵⁹ Gallagher, *Coordinating Australian University Development*, 47-70.

⁶⁰ Murray et al., *Report of the Committee on Australian Universities*, 93.

It was national need that drove government investment, so universities, Murray argued, should be prepared to meet that need:

The universities and individual members within them will have to give the Committee a full measure of trust, goodwill and patience, if, in the end, they are to gain for themselves the facilities which they feel that they need, and to play the part which the country expects of them.⁶¹

Commonwealth funding was thus contingent on the provision of knowledge for the nation.

Despite his many orations on the significance of academic freedom and his longstanding reputation among scholars for respecting university autonomy, Menzies ultimately sought a national university system that would be directly responsive to the demands of the Federal government. There were hints of this in the Murray report but it manifest in tangible ways with the establishment of the Australian Universities Commission. A.P. Gallagher argued that the Universities Commission mediated gradual but steady increases in government interference in university business.⁶² This was Menzies' intention. His confidential Cabinet notes explaining the Universities Commission legislation to ministerial colleagues affirm it :

Money is the weapon by which oversight of universities will be secured, but the intention is more than monetary. It is hoped that the Commission will devote itself to thought about the development of universities in the widest sense. It will advise precisely on the buildings which the Commonwealth should support at each university...as well as expenditure on other matters such as laboratory equipment or libraries.⁶³

Murray it seems had not succeeded in persuading parliamentarians that academics were immune to the lure of money. Menzies further acknowledged that the immediate

⁶¹ Ibid., 107.

⁶² Gallagher, *Coordinating Australian University Development*, 1–23.

⁶³ Robert Gordon Menzies, Confidential Cabinet Notes, *Australian Universities Commission – Legislation NAA/A463/1959/4214* (Canberra: National Archives of Australia).

concern of the Universities Commission legislation was to avoid unnecessary replication of courses across the system. It was, however, also more than that: he was looking to the future:

The intention of the clause is to make sure that unsuitable overlapping between universities does not occur; but the intent of the clause goes much beyond this. The Commission may find it necessary to encourage the development of new university institutions...it may wish to encourage the teaching of Science or the establishment of further Chairs in Government. It may find it necessary to encourage more money to be spent on medical care for students or to put pressure against undue expenditure on playing fields. The clause is designed to allow it full freedom to move in any direction if it feels it necessary.⁶⁴

It is difficult to comprehend how Menzies internally reconciled the tension between university ideals and this bid for government control. It is nevertheless evident that his priority lay in assuring that on the basis of legislation, future Federal governments would be able to compel the universities to meet government aims.

Martin Review of Tertiary Education

As a result of the Murray review the universities underwent a wave of expansion, the second since the Second World War. A changing economy had led to an increase in the proportion of 'white collar' work and a growing middle class, which underpinned changing community expectations of higher education. More parents aspired to the opportunities a university education offered for their children. A meritocratic discourse paralleled the widening of university education, so that in Menzies' speeches and, increasingly, in reality, the 'poor but talented student' found their way to university.⁶⁵ By the 1960s, however, the universities faced still further growth,

⁶⁴ Ibid.

⁶⁵ Ibid. Bessant, 'Robert Gordon Menzies and Education in Australia', 176. CPD (HoR), 'Report of the Committee on the Future of Tertiary Education in Australia (Martin Committee) Statement by Rt Hon Sir Robert Menzies', 24 March 1965. L.H. Martin, *Tertiary Education in Australia: Report of the*

which they feared would strain even their newly expanded resources. In primary and secondary schools, the States were struggling to find sufficient teachers to educate the population bubble that had resulted from post-war economic optimism. Those ‘baby boomers’ were now about to start university.⁶⁶

University growth, however, was not just physical: with more funding and fuelled by connections to industry and politics, disciplines expanded rapidly. Such expansion had not been anticipated. By the mid-1960s, Menzies commissioned a second review of higher education, chaired by leading physicist, Leslie Martin. The Martin review noted a ‘marked increase in basic knowledge’, so that progressively more congested curricula were being taught.⁶⁷ To cope with the student demand and disciplinary specialisation, new academic appointments were made regularly, from necessity sourced from increasingly youthful scholars. This pattern intensified the growth of knowledge. With each new appointment, potentially more research and new ideas entered departments that themselves grew and diversified. New topics were taught, often in electives, so that the formal and structured curricula of the past were becoming unrecognisable – fractured, Leslie Martin thought – and often unpredictable.⁶⁸ Only five years after government accepted the Murray recommendations Menzies realised the problem. In an era of research, as universities grew, so did knowledge; as research expanded, so did the amount of material that needed to be taught. Higher education, it seemed, would keep growing, colonising the obligations of the Federal treasury, redirecting the flow of public money to ever-expanding disciplines. It needed to be contained. The new review sought a

Committee on the Future of Tertiary Education in Australia, Australian Universities Commission (Canberra: AGPS, 1964), 28, 36–9.

⁶⁶ Martin, *Tertiary Education in Australia*, 28, 36–9.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*, 52.

mechanism that would enable increased numbers of students to earn degrees and enter the professions, but which would restrict the pursuit of research to affordable levels.⁶⁹

The Martin review took three years to complete. After it, several more universities were established to cater for the increased demand. But the government also created a new kind of higher education institution, the Colleges of Advanced Education. In a system Martin described using the broader term ‘tertiary’ (rather than the qualitative descriptor, ‘higher’) education, the Colleges of Advanced Education were teaching-only institutions, intended to prepare large numbers of students for pre-defined professional and intellectual work.⁷⁰ This binary structure enabled Menzies to achieve growth in the education of Australian school-leavers for vocational purposes, while preserving the universities’ civilising role. Both the aspirations of the middle classes and the educated labour to support economic growth would be achieved in the colleges. The universities would be reserved to uphold culture.⁷¹

The universities were to preserve a specific, government-sanctioned type of culture, however, and academics were noticing that the alliance with the government in the maintenance of the state’s social and economic goals was strengthening. By 1965 when Ted Wheelwright convened a symposium on higher education the debate between ‘ivory tower’ and ‘service station’ that had dominated the 1940s and 1950s was declared obsolete. Perce Partridge said:

⁶⁹ Susan Davies, *The Martin Committee and the Binary Policy of Higher Education in Australia* (Melbourne: Ashwood House, 1989), 23–4.

⁷⁰ *Ibid.*

⁷¹ E.R. Treyvaud and John McLaren, *Equal but Cheaper* (Melbourne: Melbourne University Press, 1976), 1–24. Davies, *The Martin Committee*, 16–8.

It is no longer a wry jest: universities *are* now, in considerable part, public utilities or instrumentalities. They are being increasingly supported by governments from public funds because they carry out public functions, as hospitals and public transport systems do.⁷²

The ‘social role of higher education in Australia’, all now admitted, was an obligation tied in a transactional way to the Federal funding that the universities now received.⁷³

National knowledge in the Atomic Age

One key government research goal in particular connected the universities directly to national political goals. The pervading consciousness that Australians now lived in an atomic age infused the consolidation of the universities. This was an issue that preoccupied the government, because many political, scientific and civic leaders believed that, like the discoveries of steam power and electricity, atomic energy heralded a new epoch of technological and economic development. Australia could ill afford to fall behind in the research and development of a new power source. The efficiency and security of the power supply, proponents of nuclear energy like Philip Baxter argued, could be combined with a defence strategy that would support the allied democratic nations’ pursuit of global dominance.⁷⁴

For this reason when Nugget Coombs went to England in 1946 to recruit researchers for the Australian National University, among them was a leading nuclear scientist, Marcus Oliphant.⁷⁵ Between Oliphant in Canberra, Harry Messel at the University of Sydney and Philip Baxter at the University of New South Wales, Australian capacity for atomic energy was gaining momentum. To regulate its research and development

⁷² P.H. Partridge, ‘Comment on the Social Role of Higher Education by S. Encel’, in E.L. Wheelwright (ed.), *Higher Education in Australia* (Melbourne: F.W Cheshire, 1965), 34.

⁷³ S. Encel, ‘The Social Role of Higher Education’, in E.L. Wheelwright (ed.), *Higher Education in Australia* (Melbourne: F.W Cheshire, 1965), 1–32.

⁷⁴ Reynolds, *Australia's Bid for the Atomic Bomb*, 48–69.

⁷⁵ Foster and Varghese, *The Making of the Australian National University*, 20–7.

Prime Minister Robert Menzies formed the Australian Atomic Energy Commission in 1952.⁷⁶ Philip Baxter was a member, becoming its Chair in 1956.⁷⁷ In atomic energy, the tie between knowledge and national strategy was strengthened. The control of that knowledge, however, and the approaches surrounding the expensive research it entailed, remained controversial.

Atomic energy research was inextricably linked to the potential for nuclear war. The bombing of Hiroshima and Nagasaki in 1945 had demonstrated the extraordinary and frightening power of atomic warfare. But the successful testing of a nuclear bomb by the Soviet Union in August 1949 brought home with terrible force that underpinning the Cold War would be a nuclear arms race and that atomic research was going to be the key to military superiority, even the survival of democracy. In this way research was linked not just to economic prosperity but to the health and well being of capitalism, a key part of the struggle between democracy and totalitarianism. Superiority in the nuclear arms race was vital.⁷⁸

Some scientists, however, feared the potential of a nuclear arms race. Superiority might result in mutual annihilation. Marcus Oliphant argued that research should be for peaceful purposes and that Hiroshima and Nagasaki never be repeated. He was persuaded that the potential in atomic energy should be directed towards economic development – though he later argued that even nuclear power was too dangerous.

⁷⁶ J.P. Baxter, 'The Australian Atomic Energy Commission: The First Ten Years. Reprinted from the Journal Atomic Energy, April 1963.' *Philip Baxter Papers* UNSW/CN1053 (Sydney: UNSW Archives).

⁷⁷ Philip Gissing, 'Baxter, Sir John Philip (1905 - 1989)', in *Australian Dictionary of Biography* (Melbourne: Melbourne University Press, 2000).

⁷⁸ Walter A McDougal, 'The Cold War Excursion of Science', *Diplomatic History* 24, (1), 2000, 117–27. Reynolds, *Australia's Bid for the Atomic Bomb*, 48–69.

Oliphant's position was widely reported and respected.⁷⁹ On the basis of the public debate to which he contributed, atomic energy as a means to support industry, but not defence, had cautious, but widespread support. Nevertheless, despite the focus in public discussion on atomic power, for government, defence remained paramount.⁸⁰ Philip Baxter's belief that nuclear energy and weapons should be the centrepiece of a 'courageous' government approach to nuclear development remained government policy.⁸¹ Australia had to be in this research race or be left behind economically and be left exposed to military threats.

The defence of the British Commonwealth, Wayne Reynolds has shown, was from as early as 1947 deemed to lie in the security of the power supply across the member nations in the event of a nuclear attack. The Snowy Mountains Scheme, he argues, was intended to be a first step towards atomic power for Australia (the development of a nuclear industry required a vast amount of power in the first place), a move that political and defence leaders believed to be necessary to assure national security. It was part of a larger strategy, negotiated with other western nations, especially Britain. Uranium mining was commenced in the Northern Territory to assure supply for the United Kingdom, which in turn shared the latest nuclear research findings, research that would be extended in Australian universities.⁸²

Seeking to secure the place of universities in that strategy, Baxter convened an atomic energy symposium at the University of New South Wales in 1954. At the top of the

⁷⁹ Stewart Cockburn and David Ellyard, *Oliphant: the life and times of Sir Mark Oliphant* (Adelaide: Axiom Books, 1981), 144–228.

⁸⁰ 'Nation Incapable of Developing Atomic Bomb', *The Mercury*, 13 October 1949. Reynolds, *Australia's Bid for the Atomic Bomb*, 25–69.

⁸¹ J.P. Baxter, 'The Use of Scientific Knowledge by Governments and Industry. Tenth Congress of the Universities of the Commonwealth. Report of Proceedings. Sydney August 17–23', in *Papers of Sir Philip Baxter* UNSW/CN1053 (Sydney: UNSW Archives, 1968), 263.

⁸² Reynolds, *Australia's Bid for the Atomic Bomb*, 48–69.

agenda, for the nation's atomic scientists assembled there, was a very expensive piece of research infrastructure: they needed a nuclear reactor. At the University of Sydney the Professor of Physics, Harry Messel, was keen to install a small nuclear reactor for research purposes on campus.⁸³ Baxter ridiculed Messel's proposals:

I think we should build a reactor very soon but not a low-powered toy reactor for use in the Universities. We want a real reactor from which we can study and learn.⁸⁴

Baxter described small reactors as a waste of money, a 'fetish' amongst universities wishing to show off to guests.⁸⁵ A reflection of Baxter's revulsion to rarefied scholarship, atomic research, he argued, needed to be conducted in a 'real reactor' that had tangible implications for industry and defence.⁸⁶ Sydney University academics suggested that they could build both. A university-based reactor would offer the opportunity to train students without exposing them, at the larger plant, to national secrets.⁸⁷ The existence of national secrets in the universities was still quite new, a legacy of academic war work. Oliphant, whose influence in the scientific community was waning, despite his considerable presence in the public sphere, believed no science should be done in secret. Secrecy, he argued, was the opposite of knowledge.⁸⁸

Despite the impediments for teaching that the need for secrecy presented, Baxter was keen that the nexus between university science and national defence be maintained. Winning the battle for the large, industrial nuclear reactor at Lucas Heights in Sydney, Baxter continued to fight to ensure that, in the nature of its construction, the option for

⁸³ Gissing, 'Sir Philip Baxter, Engineer', 124.

⁸⁴ 'Atom Men Explode on Small Reactors', *Sydney Morning Herald*, 1 September 1954.

⁸⁵ 'Professors Differ on Atomic Plant', *Sydney Morning Herald*, 2 September 1954.

⁸⁶ *Ibid.*

⁸⁷ 'Atom Research Plant 'One of the Most Modern in the World'', *Sydney Morning Herald*, 12 October 1954. Gissing, 'Sir Philip Baxter, Engineer', 124.

⁸⁸ 'Canberra Awaiting Atom Scientist', *The Mercury*, 4 January 1947. 'Mankind in the Atomic Age. Prof. Oliphant Discusses Secrecy and Control', *The Advertiser*, 25 January 1947.

Australia to develop nuclear weaponry was never excluded. Yet there were complications, political and practical, in realising Baxter's dream of an Australian nuclear reactor. Conditions attached to the purchase of parts under international nuclear non-proliferation rules limited the types of reactor that could be built. There were other limitations, too. Avoiding non-proliferation restrictions was complicated by disputes within the Commission about the technical specifications of the reactor. These debates were informed by questions about whether Australia had the relevant resources – for example, sufficient long-term supply of beryllium – to sustain the types of reactor favoured by different parties.⁸⁹

Baxter's determination to align university knowledge to Australian defensive and industrial capacity was grounded in his conservative political persuasions.⁹⁰ Baxter argued that Australian research and development needed to be directed to economic and military progress as its contribution to the dominance of western democracy over communism. Soviet technological success was a 'rude awakening' he said, from the 'comforting belief' that democracy produced better science, or that the west 'had a kind of natural aptitude for this sort of work'.⁹¹ It was for this reason that Baxter placed his hope in atomic research. With just one technology he believed, and on the basis of its own natural resources, Australia could assure the type of economic and military security that nations internationally were battling to attain.

Despite this belief and its centrality to Australia's Cold War aims in the 1950s, Baxter was never successful in persuading the government to implement an integrated

⁸⁹ Gissing, 'Sir Philip Baxter, Engineer', 125.

⁹⁰ Gissing, 'Baxter, Sir John Philip (1905 - 1989).'

⁹¹ Baxter, 'Education for the Nuclear Age' in UNSW/CN1053/Box16 *Papers of Sir Philip Baxter* (Sydney: UNSW Archives, 1957).

research, energy and defence strategy in atomic power. Evidence was mounted against Baxter's position early in the process. Economic analysis failed to affirm the widespread belief that atomic energy would support Australian economic development. In fact at the 1954 symposium, a group of economists (drawn from Coombs's Keynesian group in Canberra) demonstrated that there was no economic necessity – or even benefit – for Australia to invest in nuclear energy.⁹²

Economic analysis was just the start. The dangers of mutual annihilation influenced popular movements opposed to nuclear arms. Political opposition to nuclear weapons grew in the mid-1950s and public support for the atomic energy scheme declined. By the 1960s, when the 'ban the bomb' movement had gained momentum worldwide, there was vastly diminished support for the idea.⁹³ The result for Baxter was that his 'backroom machinations' had little effect.⁹⁴ It did not stop Baxter from pressing his point, however and he resorted to joining the Australian Association for Cultural Freedom, a movement he had formerly opposed. He used their networks to seek more opportunities to make his case among influential thinkers and in the media.⁹⁵ This effort also failed. The public opposition to the nuclear program grew to a point where politicians could no longer afford to support Baxter's views. In fact in the early 1970s when Baxter maintained, on ABC radio, that Australia needed to produce nuclear

⁹² Tim Rowse, *Nugget Coombs: A Reforming Life* (Cambridge: Cambridge University Press, 2002), 264–8.

⁹³ Les Dalton, *Politics of the Australian Peace Movement* (Melbourne: LaTrobe University Centre for Dialogue, 2011), 30–2.

⁹⁴ Gissing, 'Sir Philip Baxter, Engineer', 126.

⁹⁵ *Ibid.*

weapons, ASIO depicted him in their correspondence to Canberra politicians as an embarrassment and a political liability.⁹⁶

Academic Freedom in the Cold War

University research had become politicised. It was linked to the future of democracy and capitalism and was increasingly the focus of political anxiety. The effect was to put academic staff on alert. On individual campuses staff solidarity had been fuelled by low wages for university teachers in the decade after the war and the growing tendency for academics to look outwards to the social needs of the community. Some more radical and disenchanted scholars sought to unite with university leaders and use collegial action on a range of academic, moral and political issues.⁹⁷ In 1952 they formed a Federal Council of University Staff Associations, later (and more memorably) named the Federation of Australian University Staff Associations (FAUSA).⁹⁸ Among this group of scholars there were those who, according to one prominent FAUSA leader, Ken Buckley, were becoming more 'bolshie'. Political and ideological conflicts were growing on campuses across Australia. One incident at the University of Sydney, known as the 'Knopfelmacher case' highlights the potency of those divisions.⁹⁹

The Knopfelmacher case began in 1965 with the decision by David Malet Armstrong, Challis Professor of Philosophy at Sydney University from 1964 until 1992, to seek to

⁹⁶ ASIO, 'Comments by Sir Philip Baxter on ABC Program – Australia's Nuclear Weapons Option and Nuclear Power', in NAA/A463/39 *File Sir Philip Baxter* (Canberra: National Archives of Australia, 1972).

⁹⁷ K. Buckley, 'Early Years: The Origins of FCUSAA', in Peter Chapman (ed.), *40 Years of FAUSA: 1952-1992 Four Decades of Representing University Staff* (Melbourne: National Tertiary Education Union, 1992), 4.

⁹⁸ Peter Chapman (ed.), *Forty Years of FAUSA: Four Decades of Representing University Staff* (Melbourne: NTEU, 1993), 2. Referred to as FAUSA hereafter.

⁹⁹ K. Buckley, 'Early Years: The Origins of FCUSAA', 4.

employ fellow anti-communist Frank Knopfelmacher. Some decades later, Armstrong mused: ‘I was a pretty innocent young professor. I didn’t understand much about university politics anyway. I certainly didn’t foresee the row’.¹⁰⁰ Nevertheless, he was well prepared for one. The three folders of material he kept on the Knopfelmacher dispute are testament not only to Armstrong’s fastidious filing habits, but also to the amount of political preparation Armstrong undertook to give Knopfelmacher the greatest chance of being appointed to the position. His letters show that he colluded with colleagues to ensure Sydney University was currently short of competent logicians, for instance, elevating the necessity of Knopfelmacher’s skills.¹⁰¹ Unsigned letters from colleagues attest to the presence of known enemies in the process:

Dick either has written or will do so very soon re. S’s latest ploy (very transparent) re. trying to make sure, without appearing to do so, that K has no chance.¹⁰²

‘S’ refers to Wal Suchting, a junior member of staff in the Sydney philosophy department. Clearly, Armstrong and those around him *did* foresee a conflict.

By the time the university selection committee met, student and staff radicals had vocalised their significant reservations about appointing Knopfelmacher.¹⁰³ Leading FAUSA figure and editor of the union journal *Vestes*, Ted Wheelwright, lobbied members of the committee to vote against the appointment. When Armstrong returned from overseas the wavering committee then voted in Knopfelmacher’s favour.

¹⁰⁰ David Malet Armstrong, *Interview with David Armstrong, Professor of Philosophy – Interviewer, Edgar Waters* (Canberra: National Library of Australia, 1986).

¹⁰¹ David Malet Armstrong, Knopfelmacher Dispute, *Papers of David Armstrong* NLA/MS9363/6/1–3 (Canberra: National Library of Australia, 1965).

¹⁰² *Ibid.*

¹⁰³ ASIO, File on E.L. Wheelwright. in *Personal Archives of Dr E L (Ted) Wheelwright, Accession 1972, Box 1; ‘The Best of ASIO’* (Sydney: University of Sydney Archives, 1965). Robert M Scoble, ‘The Knopfelmacher Case’, *Quadrant* 15 (5), 1971, 72–82.

Despite that, the Professorial Board rejected their recommendation.¹⁰⁴ Confidential discussions at the Board were leaked to the press leading to fears of a communist conspiracy in the University, raised in question time in the New South Wales State parliament.¹⁰⁵ The official Sydney University history suggests that Knopfelmacher's weak resume was the real impediment to his appointment.¹⁰⁶ Staff of ASIO, who were watching the case closely, clearly did not believe that to be the reason.¹⁰⁷

A second appointments committee was created and ASIO files show that the Director-general of ASIO, Colonel Charles Spry, reported every few days to the Attorney General and Prime Minister on progress towards having Knopfelmacher appointed.¹⁰⁸ The position was re-advertised and Knopfelmacher applied again. ASIO reported on the number of eligible voters on the Professorial Board, suggesting that if a greater number attended than in the first consideration of his application, it would 'reverse the Board's previous decision and appoint Dr Knopfelmacher to the position'.¹⁰⁹

Wheelwright lobbied members of this second committee too, which rejected

¹⁰⁴ ASIO, 'Memorandum to Hon B.W. Snedden, Attorney General', in *Personal Archives of Dr E L (Ted) Wheelwright, Accession 1972, Box 1; 'The Best of ASIO'* (Sydney: University of Sydney Archives, 1965).

¹⁰⁵ ASIO, File on Frank Knopfelmacher NAA/A6119/3950 Volume 1 (Canberra: National Archives of Australia, 1965).

¹⁰⁶ W.F. Connell et al., *Australia's First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995), 165–6.

¹⁰⁷ It is not clear whether ASIO was following the case all along, or because Menzies asked them to. On 16 November 1965, William Charles Wentworth IV wrote to Menzies indicating he would like to raise the Knopfelmacher case in parliament, but he did not know all the facts. It is possible then that ASIO began following the case as a result of the subsequent need for facts to supply to parliament. Certainly this is why they reported regularly on the case to Menzies and to the Attorney General, Billy Snedden. Material in the Knopfelmacher file does date from earlier than this, however – April, 1965, at least – including letters to Snedden, suggesting longstanding interest. Surveillance records in the Knopfelmacher file suggest that ASIO was watching for actionable statements by University staff, reporting that Professor Wilbur Christiansen called Knopfelmacher a 'McCarthyite' – 'but this was later changed to "Goldwaterite"'. This is consistent with findings by Lachlan Clohesy that Wentworth regularly pressured ASIO into anti-communist collusion. ASIO, File on Frank Knopfelmacher NAA/A6119/3950 Volume 1. Lachlan Clohesy, 'Cold War Collusion: ASIO and W.C. Wentworth', in Bobbie Oliver (ed.), *Labour History in the New Century* (Perth: Black Swan Press, 2009), 121–31.

¹⁰⁸ ASIO, File on E.L. Wheelwright in *Personal Archives of Dr E L (Ted) Wheelwright, Accession 1972, Box 1; 'The Best of ASIO'* (Sydney: University of Sydney Archives, 1965). ASIO, File on Frank Knopfelmacher NAA/A6119/3950 and NAA/A6119/3951 (Canberra: National Archives of Australia, 1965).

¹⁰⁹ Ibid.

Knopfelmacher's application. Some members of that committee told the press that they considered Knopfelmacher to have been excluded on political grounds.¹¹⁰ Harry Eddy, adult education tutor for the Worker's Education Association and author of an exposé of another case (discussed shortly), wrote to the staff association, suggesting that rejection of Knopfelmacher's application was a violation of academic freedom. Wheelwright and Buckley, representing the staff association but both closely involved in preventing Knopfelmacher's appointment, replied that they were convinced that all was right in this instance.¹¹¹

The Knopfelmacher case may have been unique to the Sydney Philosophy Department, which experienced significant divisions along political lines (further discussed in the next chapter). But the case also highlights the extent to which, in the Cold War context, the control of academic appointments had become an ideological battleground. Armstrong's wish to appoint a fellow anti-communist, the staff association's desire to prevent it, ASIO's involvement in the case and Menzies' close observation of it demonstrate that key players considered the stakes to be high. The role of the Professorial Board in making political, as well as academic, judgements along with discussion of the case in the New South Wales and Federal parliaments, attest to widespread participation in the battle for political regulation of knowledge through controlling the presence or absence of particular university scholars.

This was a battle ASIO took seriously, fearing the effect of 'bolshie' academics teaching and presenting their ideas in the public sphere. Colonel Spry persuaded Menzies that university-based intellectuals represented a threat, suggesting they be

¹¹⁰ Connell et al., *Australia's First*, 165–6.

¹¹¹ Copies of both letters are in Armstrong's file. Armstrong, 'Knopfelmacher Dispute.' *Papers of David Armstrong* NLA/MS9363/6/1–3 (Canberra: National Library of Australia, 1965).

subject to widespread investigation.¹¹² In Canberra especially ASIO kept academics that they believed had communist inclinations under regular observation.¹¹³ Marcus Oliphant believed that his career was stunted as a result of a negative security report, and he was not alone.¹¹⁴ Spry's suggestion that academic appointments be vetted was passed along by Menzies to the Australian National University in the form of a request that the university assure 'the right type of man' (his emphasis) be appointed to each role.¹¹⁵ Vice-chancellor Douglas Copland replied that they were uncomfortable with a political test for staff appointments, but nevertheless agreed that no 'suspect' staff member would be promoted to positions of authority.¹¹⁶

In order to influence the political climate on university campuses, ASIO regularly informed university administrators of 'suspect' activities, based on their widespread surveillance. The effect of ASIO reporting was often significant. ASIO's analysis of the content of lectures and course notes on Russian history, for example, led to a report that prevented Melbourne academic, Max Crawford, from taking up a Rockefeller fellowship. Crawford's security file described him as a risk and, while awarded the fellowship, he was not permitted to enter the United States to take up the position.¹¹⁷ While ASIO was focused on the political left and university intellectuals, they had other targets too. Their scrutiny extended to research that might be put to political and defensive use, even if its researchers were above suspicion. They kept watch on Philip Baxter, as an atomic researcher, for example, despite his anti-

¹¹² Anderson, *A Historian's Life*, 1.

¹¹³ Foster and Varghese, *The Making of the Australian National University*, 121.

¹¹⁴ Phillip Deery, 'Political Activism, Academic Freedom and the Cold War: An American Experience.' *Labour History* 98, 2010, 183–205.

¹¹⁵ Foster and Varghese, *The Making of the Australian National University*, 125.

¹¹⁶ Anderson, *A Historian's Life*, 236–7.

¹¹⁷ *Ibid.*

communist stance: many metres of still-unavailable records of his activities are stored in the Australian National Archives.¹¹⁸

Academics were aware that the government was watching them. Many became increasingly anxious. Suspicion of the government, rumoured collusion of their academic leaders with ASIO and the growing overt politicisation of university work was making the university environment an uneasy one. Apprehension had additional international sources. In the United States some politicians expressed fears that influential members of society were secretly pushing a communist agenda. United States Senator Joseph McCarthy implemented a range of well-known policies designed to root out the communist threat. In universities the effect was severe. In the early 1950s academics with known or suspected communist links were 'blacklisted', unable to find employment in institutions across the United States, as almost every university implemented the government's anti-communist policy. The environment of suspicion and accusation became known as 'McCarthyism', as intellectuals, including university academics, were accused with little recourse to defend themselves, posing a significant threat to their careers and livelihood.¹¹⁹ Fears that the United States experience could be replicated in Australia undermined any residual trust academics had in the government and university administrators.¹²⁰ The emerging ideological battle forged considerable change in the universities, in the ways staff related to the institution and its leadership. Those transformations were important, for it would begin to set one part of the university against another, significantly influencing disputes over the regulation of knowledge in subsequent decades.

¹¹⁸ ASIO, File on Sir Philip Baxter, NAA/A463 (Canberra: National Archives of Australia, 1956-1973).

¹¹⁹ Ellen W. Schrecker, *No Ivory Tower: Mccarthyism and the Universities* (Oxford: Oxford University Press, 1986).

¹²⁰ Anderson, *A Historian's Life*, 225.

The concerns of State and Federal governments, fuelled by Cold War anxieties and heightened fears about the role of academics in educating future generations, was no more evident than in the controversy over the appointment of historian Russel Ward. In late 1955 Ward had finished his PhD and, while negotiating a contract for publication of his thesis, later the classic, *The Australian Legend*, he applied for a job at the University of New South Wales. The selection committee, chaired by economic historian Max Hartwell, recommended his appointment in early 1956. Philip Baxter, however, refused to sign off on their recommendation. When Hartwell queried Baxter's reasons, he was told that a security report on Ward found him to have participated in 'seditious circles'.¹²¹ Hartwell protested to the University Council, eventually resigning over the issue.¹²²

For Ward, Baxter's veto was a serious blow. He was reluctant to return to school teaching and keen to secure a university job. Moreover, as he told Hartwell, his family was running out of money: 'the water will be cut off 16 March', he explained.¹²³ When the appointment was unsuccessful, Ward blamed the university's Chancellor, Wallace Wurth, who he had encountered before. In 1952, Ward had been offered a job at Wagga Wagga Teachers' College. He and his family had already moved there when the New South Wales Public Service Board, then chaired by Wallace Wurth, refused to confirm his appointment, compelling them to pack up and leave again. Ward was not given an explanation, though the New South Wales Teachers'

¹²¹ Russel Ward, *A Radical Life: The Autobiography of Russel Ward* (Melbourne: Macmillan, 1988), 237–8. Letters from Ward to Hartwell 1955-1961, *Hartwell File*: 'Russel Ward', UNSW/CN99A81 (Sydney: UNSW Archives, 1956).

¹²² Ibid. O'Farrell, *UNSW: A Portrait*, 70–2.

¹²³ Letters from Ward to Hartwell 1955-1961, *Hartwell File*: 'Russel Ward', UNSW/CN99A81 (Sydney: UNSW Archives, 1956).

Federation asked for one on his behalf.¹²⁴ The minutes of the Wagga Wagga Teachers' College expressed the embarrassment felt by its staff, but did not give a reason for the incident.¹²⁵ Nor is an explanation available from the minutes of the Public Service Board, which are missing from that period. Nevertheless, Ward was persuaded that his appointment was rejected due to his past membership of the Communist Party.¹²⁶

Subsequent accounts of the Ward case point to the involvement of ASIO, though once the case reached the press and questions were asked of Menzies in parliament, ASIO denied any involvement.¹²⁷ Nevertheless, Wayne Reynolds claims that on the day that Baxter was asked to sign off on Ward's appointment, he was attending a meeting of the Atomic Weapons Test Committee, a meeting protected by ASIO staff. While ASIO may not have provided Baxter with a formal evaluation of Ward, they could well have spoken of him informally on that day.¹²⁸ Ward's ASIO file does not suggest this, however, for, while they had certainly been following his movements, even in handwritten notes between agents they fail to recall ever discussing Ward with anyone from the University of New South Wales.¹²⁹ In a letter to Menzies, ASIO staff speculated that 'the appointing authorities may have got information from any of a number of sources. They commonly cast their nets as widely as possible'.¹³⁰

¹²⁴ NSW Public Service Board, Public Service Board Reference Card for R.B. Ward, *NSW Public Service Board Reference Cards* NSW/12396/11/2898 (Sydney: NSW State Records, 1911-1974).

¹²⁵ Wagga Wagga Teachers College Lecturers Association, 'Minutes of the Meeting Wednesday 27th February', in *Wagga Wagga Teachers College* (Wagga Wagga: Charles Sturt University Regional Archives, 1952).

¹²⁶ Ward, *A Radical Life: The Autobiography of Russel Ward.*, 237-8.

¹²⁷ ASIO, File on Russel B. Ward, NAA/A6119/278 278 (Canberra: National Archives of Australia, 1949-1957)..

¹²⁸ Reynolds, *Australia's Bid for the Atomic Bomb*, 147.

¹²⁹ ASIO, File on Russel B. Ward, NAA/A6119/278 (Canberra: National Archives of Australia, 1949-1957).

¹³⁰ *Ibid.*

Years later, Frank Crowley, prominent historian and former Dean of Arts at the University of New South Wales contradicted the received version of the Ward case, claiming that the radical outrage at the treatment of Ward distorted the reasoning behind Baxter's decision. In 1965, ten years after the initial incident, Crowley was appointed Professor of history at the University of New South Wales, and claimed that he was asked to see Baxter almost straight away. Baxter wanted to confide in a historian the real reason for his exclusion of Ward. Waving a file before Crowley, Baxter told him that Russel Ward's public service record (from his time as a school teacher in New South Wales) contained unsubstantiated reports gleaned from fellow teachers that Ward had a tendency to behave inappropriately with female students. This confidential information, Baxter told Crowley, was not something Baxter was able to reveal publicly. Crowley declared the Ward case 'a godsend for left wing activists' in the late 1950s and early 1960s, suggesting that the left had exaggerated the politics associated with Ward's exclusion in order to enhance their own position.¹³¹

Given the ten years between Ward's application and the meeting with Crowley it is more likely that Baxter was making up a new denial of the political test, a pattern of changing stories he continued into the 1980s.¹³² If Baxter was willing to confidentially share this information with Crowley, he would surely have done so ten years earlier with Hartwell, as chair of the appointments committee, undoubtedly preventing the subsequent media coverage and damage to the reputation of the University of New South Wales that resulted from Hartwell speaking to the press.¹³³

¹³¹ Frank Crowley, 'The Ward Fabrication', *Quadrant* 48 (5), 2004, 30–3.

¹³² O'Farrell, *UNSW: A Portrait*, 98.

¹³³ Hartwell did not go to the press straight away, however, his file of letters at the University of New South Wales archives indicating that he would have preferred the issue to be resolved among

What Crowley's account does highlight is the significance of incidents like the Ward case to the growth of radicalism among university staff and the changing nature of academic interaction with their institutions as a result of the mistrust infecting universities. To elucidate this, it is necessary to look to the way Cold War politics in the universities strengthened the emerging academic union, FAUSA.

The most prominent incident for FAUSA was the Orr case, which was a frequent topic for discussion in university corridors, at academic dinner parties and in libertarian 'push' pubs from 1956 through to the mid-1960s.¹³⁴ It had all the elements of a delicious scandal. An already controversial professor, Sydney Orr, had seduced one of his students and been summarily dismissed from his professorship. After his unsuccessful appeal, Orr persuaded some of his colleagues that he had been set up, that in fact his dismissal was for political reasons. Orr's supporters, R.D. 'Panzee' Wright (more often 'Pansy' in the primary sources), Professor of Physiology at Melbourne University and Harry Eddy, at the Worker's Education Association in Sydney, promoted his cause.¹³⁵ Eddy published (with substantial contributions from Orr himself) a lengthy and inscrutable book, simply entitled *Orr*.¹³⁶

In response to the Orr case, FAUSA put a black ban on the University of Tasmania, agreeing that no philosopher would take a position at Tasmania and that no university

'university men' rather than in public. *Hartwell File: 'Russel Ward'*, UNSW/CN99A81 (Sydney: UNSW Archives, 1956).

¹³⁴ Cassandra Pybus, *Gross Moral Turpitude: The Orr Case Reconsidered* (Melbourne: William Heinemann Australia, 1993), 21–9.

¹³⁵ Cassandra Pybus consistently uses the spelling Panzee as a signifier of the nickname's origins – 'Chimpanzee'. Panzee's contemporaries wrote to him as 'Pansy', which evidently confused the authors of the ANU history who pointed out that this gentle, even camp, name did not at all suit this gruff, masculine man. Ibid. Foster and Varghese, *The Making of the Australian National University*, 3–4.

¹³⁶ W.H.C. Eddy, *Orr* (Brisbane: Jacaranda Publishers, 1961).

would later employ a philosopher who did.¹³⁷ FAUSA published a censure of the University of Tasmania in every issue of *Vestes* for the duration of the ban, considerably disrupting the capacity of that university to attract staff.¹³⁸ Many academics across Australia – especially the philosophical disciples of John Anderson, who took a close interest in the case – were convinced that seducing a young woman was unlikely to be the real reason to lay off a philosopher.¹³⁹ It was widely believed that the dismissal of Orr represented a violation of academic freedom and that the censure of the University of Tasmania was just.¹⁴⁰

More than thirty years later, Cassandra Pybus made a compelling case opposing that orthodoxy. The assumption that seducing a student was not sufficient reason for dismissal, she suggested, was grounded more in misogyny than fact. Orr's attempt to shroud his misconduct with the trappings of a Cold War conspiracy, Pybus suggested, was part of a long habit of self-serving academic fraudulence, concealing his scholarly incompetence.¹⁴¹

The importance of Orr for this thesis is not in Orr's dismissal, but rather the implications of the legal case that followed for the structure of relationships between universities and their leaders on one hand, and academic staff on the other. When Orr took legal action against the University of Tasmania, the university's defence was

¹³⁷ Buckley, 'Early Years: The Origins of FCUSAA.' Alan Barcan, *Radical Students: The Old Left at Sydney University* (Melbourne: Melbourne University Press, 2002), 316.

¹³⁸ Pybus, *Gross Moral Turpitude*, 169. Federal Council of University Staff Associations, 'The Russell Ward Case: Statement Unanimously Adopted by the FCUSAA at Its Annual General Meeting 14, 15 August 1961', *Vestes* 4 (3), 1961, 7–8.

¹³⁹ Alan Barcan argues that Anderson's interest in the case was derived from having a student lover himself. Barcan, *Radical Students*, 316.

¹⁴⁰ Pybus, *Gross Moral Turpitude*, 169. Barcan, *Radical Students*, 316.

¹⁴¹ Pybus, *Gross Moral Turpitude*, 166–71.

grounded in their claim that, as Orr's employer, they had the right to dismiss him.¹⁴² The *Master and Servant Act 1856* in Tasmania defined the contractual obligations between employers and their staff until 1976, a structure that required employees to perform duties as detailed by their employer.¹⁴³ The university maintained that the master-servant structure applied to Orr as to any other employee in Tasmania. Orr's lawyer argued that a professor was not subject to the *Master and Servant Act*, for if they were, it would violate academic freedom. It was a convoluted and awkward argument, added to the end of the evidence as if Orr's lawyer himself was embarrassed to present it.¹⁴⁴ Justice Green, presiding in the case of *Orr v University of Tasmania* found for the university, specifically concurring that Orr was in a servant relationship to the institution as master. Justice Green could not see, he stated in his judgement, why academic freedom should put a professor outside the boundaries of employment law.¹⁴⁵ Justice Green was not the only one to be unimpressed. The general community, Pybus claimed, 'did not care for the suggestion that academics were superior to the legal obligations which govern contracts of employment'. Academic freedom did not place academics *supra legem*, above the law, she maintained.¹⁴⁶

Cassandra Pybus drew on Justice Green's dismissal of the idea that a professor was not subject to the master-servant structure to conclude that FAUSA was less interested in academic freedom than they were in promoting their own political

¹⁴² *Orr v University of Tasmania*, Green, J. Copy in *FAUSA Records: Orr Case* NBA/E194/1/FAUSA (Canberra: Noel Butlin Archives, Australian National University, 1956).

¹⁴³ *Master and Servant Act 1856* (Tasmania). Further history and discussion of the Master and Servant Act is in A.P. Davidson, 'A Skeleton in the Cupboard: Master and Servant Legislation and the Industrial Torts in Tasmania', *University of Tasmania Law Review* 5, 1975, 123–46.

¹⁴⁴ A transcript of Orr's lawyer's argument is in *FAUSA Records: Orr Case* NBA/E194/1/FAUSA in *Federation of Australian University Staff Associations* (Canberra: Noel Butlin Archives, Australian National University, 1956–1963).

¹⁴⁵ *Orr v University of Tasmania*, Green, J.

¹⁴⁶ Pybus, *Gross Moral Turpitude*, 73–6.

agenda. ‘No matter how some people attempted to dress it up’, she argued, ‘the concern with the master-servant relationship was a trade-union issue, to do with the protection of academic tenure and the terms and conditions of academic appointments’.¹⁴⁷ The FAUSA files on the case, however, demonstrate that while FAUSA was certainly interested in promoting their political position, academic freedom was nevertheless a key concern.

The issue of the master-servant relationship was central even before FAUSA became involved in the case. Indeed FAUSA did not do so until 1958, two years after Orr’s dismissal. Their minutes demonstrate that they were not initially convinced that the University of Tasmania was wrong to dismiss Sydney Orr. Despite pressure from concerned colleagues, particularly John Anderson, they felt compelled to wait until the local university staff association invited them to step in.¹⁴⁸ When that happened, FAUSA leaders visited the University of Tasmania. For FAUSA, it was not only that the court found that Orr was indeed a servant of the university. Primarily, their focus was that the University of Tasmania itself maintained that he was. Ken Buckley and Roland Thorp wrote:

Just as disturbing as the actual Court ruling (that the relationship of the University to a professor is that of master to servant) is the fact that the University itself, through the lawyers it briefed, propounded this false concept long before the Court so ruled – and the University has not since disavowed it.¹⁴⁹

¹⁴⁷ Ibid.

¹⁴⁸ ‘Minutes of the 1958 Annual Meeting of the Federal Council of University Staff Associations of Australia’. Copy in *Hartwell File ‘Russel Ward’*, UNSW/CN99A81 (Sydney: University of NSW Archives, 1958). E.L. Wheelwright, ‘Comments, and a Manifesto’, in Peter Chapman (ed.) *40 Years of FAUSA: 1952-1992 Four Decades of Representing University Staff* (Melbourne: National Tertiary Education Union, 1992), 11.

¹⁴⁹ R.H. Thorp and K. Buckley, ‘Report on a Visit to the Tasmanian Association’, *Vestes* 1(5), 1958, 4.

Unlike the court's failure to understand academic freedom, the fact that the University of Tasmania continued to systematically ignore the structures that assured it was a problem that FAUSA considered their responsibility to address.¹⁵⁰

FAUSA sought legal counsel on the master-servant issue. In 1958 James Montrose, Dean of Law at Queen's Belfast, advised them that in his view a professor could not be an employee. Under the structure of the University of Tasmania, he argued, they were designated a 'member'. Unlike a professor, a servant, Montrose contended, occupied a 'subordinate position'.¹⁵¹ This was not about the professor's social status, it was a freedom from the master's authority that was necessary to assure an academic's intellectual autonomy and integrity. Nor was it to suggest that an academic was not subject to contractual obligation, or that a professor could not be properly dismissed for misconduct or illegal activity. Indeed, he argued, the Orr dismissal may have been just and correct. The university's claim to the master-servant structure was the key problem, for under that type of relationship every aspect of a professor's work, including the content of their teaching and research, could theoretically be subject to the will of the university's leaders. The case set a precedent therefore that carried structural implications for academic freedom throughout Australia.¹⁵²

¹⁵⁰ Ibid.

¹⁵¹ J.L. Montrose, 'The Legal Relation between a University and Its Professors', in *FAUSA Records: Orr Case* NBA/E194/1/FAUSA (Canberra: Noel Butlin Archives, Australian National University, 1956).

¹⁵² Ibid.

Conclusion

In 1961 Robert Menzies wrote a short, terse letter to Max Hartwell:

The extent of government interference in university matters in Australia has been grossly exaggerated ... much time is being wasted in defending something which is not in danger in Australia – academic freedom'.¹⁵³

It is unclear whether Menzies really believed this. He certainly sought mechanisms that would enhance the Commonwealth's control through the Universities Commission as well as by using ASIO officers to monitor and regulate academic and political ideologies. Nevertheless, members of the universities believed that his aim in implementing the Murray review was to augment the authority and significance of Australian universities, maintaining their independence and intellectual freedom. As higher education expanded, Menzies sought in the Martin review to protect their traditional culture and purpose by sequestering growth in the Colleges of Advanced Education. Institutional histories in general suggest that university administrators widely viewed Menzies as their ardent supporter.

And yet when ASIO sent agents to investigate and influence academic staff in Australian universities, that disrupted the alliance that had grown during the Second World War between academic pursuits and government goals. While some vice-chancellors evaded the government's requests that the appointment of academic staff be determined by their political ideologies and associations, other academics nevertheless found that their careers were stunted as a result of adverse security files.

¹⁵³ Robert G. Menzies, 'Letter to Max Hartwell 6 November 1961', in *Hartwell File: 'Russel Ward'*, UNSW/CN99A81 (Sydney: UNSW Archives, 1961).

It was no longer clear to many university scholars that the government was on their side. In fact, for some academics, ASIO positioned them in an explicitly adversarial relationship to government and their own university leadership. The master-servant structure that was determined in the Orr case affirmed, for leaders of the emerging union, that university administrators were in a position to assert power over academics in ways that could disrupt their control of teaching and research.

Moreover, in opposing particular political persuasions on campus, the government exposed its own ideological stamp in this Cold War context. In so doing the alliance of universities with the state revealed that universities themselves were in fact serving an ideological and political master.

Chapter Three: Knowledge and Revolution 1967-1975

In July 1969, Louis Matheson, the Vice-Chancellor at Monash University, entertained Clark Kerr, President of the University of California, adjourning to the staff club for lunch. Before they could finish, hundreds of students invaded their lunch party, outraged about disciplinary action against students who had conducted a sit-in at a recent University council meeting. This sit-in was one of five major on-campus student protests that occurred that year.¹ For Clark Kerr, this must have all seemed very familiar. The University of California's Berkeley campus was an infamous site for student uprisings.

University student radicalism is a historical icon – a cliché, even – of the 1960s and 1970s. To many who were there and to some who wished they were, the era defines the way university students in some way *ought* to be. For Bill Readings, the ideal embodies more than mere nostalgia. The '1968 generation' Readings argues, represents the moment when the university internationally was exposed for what it was: a hegemonic instrument, empowered by the university's claim to have a special authority over truth.² In Australia, that claim was attached to lofty ideals. Truth, civility and prosperity were the values embodied in Australian higher education, now nationalised under Menzies, as a tribute to his government's ideal nation, economy and culture. A new generation of radical students, however – just like some of the academic staff his government had sent ASIO agents to watch from the 1950s – increasingly viewed those government ideals with suspicion and even contempt.

¹ J.A.L. Matheson, Chronology File: Handwritten Notes Kept Throughout to Give Chronology of Events, in *Student Ephemera* MON798 1967-1975 (Melbourne: Monash University Archives, 1969).

² Bill Readings, *The University in Ruins* (Cambridge M.A: Harvard University Press, 1996), 18, 135–149. Readings uses 1968 (referring to the events of May 1968 in Paris) to represent the whole of the student revolutionary period.

Much of the literature on 1960s and 1970s protest movements – such as Verity Burgmann’s *Power and Protest* – focus on the New Left and youth protest broadly, rather than their impact on the universities specifically.³ Others give even greater breadth, and consider the social and political milieu of the 1960s and 1970s. Donald Horne’s *Time of Hope*, captured the social and political mood, while Terry Irving, David Maunders and Geoffrey Sherington in sections of *Youth in Australia* analysed the youth culture that emerged from the significant demographic, social and political changes that accompanied the ‘baby boomer’ generation’s growth to adulthood.⁴ But few of these discuss higher education, except in passing. Ann Curthoys’s *Freedom Ride* begins at a university, but is focused on the movement to support indigenous rights in Australia.⁵ John Docker’s 1988 chapter ‘Those Halcyon Days’ describes university activities but its focus, like Burgmann’s, is the emergence (and later demise) of the New Left.⁶ The small number of studies that do focus on universities tend to concentrate on specific institutions. They are typically memoirs and reminiscences rather than broader analytic studies. These are important, since the official record commonly consists of university disciplinary reports and haphazard caches of roneoed broadsheets, but their specificity prevents consideration of the wider impact of student radicalism.⁷ A recent article by C.A. Rootes gives a useful

³ Verity Burgmann, *Power and Protest: Movements for Change in Australian Society* (Sydney: Allen & Unwin, 1993).

⁴ Donald Horne, *Time of Hope: Australia 1966-72* (Sydney: Angus & Robertson, 1980). Terry Irving, David Maunders, and Geoffrey E. Sherington, *Youth in Australia: Policy Administration and Politics* (Melbourne: Macmillan Education, 1995).

⁵ Ann Curthoys, *Freedom Ride: A Freedom Rider Remembers* (Sydney: Allen & Unwin, 2002).

⁶ John Docker, ‘Those Halcyon Days: The Moment of the New Left’, in Brian Head and James Walter (eds), *Intellectual Movements and Australian Society* (Oxford: Oxford University Press, 1988), 289–307.

⁷ Examples include Don Beer, ‘Doing a Van Winkle? Student Activism and Attitudes at the University of New England, 1964-69’, *History of Education Review* 25 (2), 1996, 34–48. Don Beer, *A Serious Attempt to Change Society: The Socialist Action Movement and Student Radicalism at the University of New England, 1969-75. Transcripts of Interviews* (Armidale: Kardoorair Press, 1998). Barry York, *Student Revolt! La Trobe University 1967-1973* (Canberra: Nicholas Press, 1989). Alan Barcan, ‘Student Activists at Sydney University 1960-1967: A Problem of Interpretation’, *History of Education Review* 36 (1), 2007, 61–79. Alan Barcan, *From New Left to Factional Left: fifty years of student*

analysis of the political implications of the movement nation wide, as well as its international linkages.⁸ In that paper, however, as in other accounts, student radicalism is seen as an important part of Australian political history, rather than as a major turning point in the history of Australian educational thinking. Alan Barcan has recently expanded earlier work on the ‘Old Left’ at Sydney University to produce a new study of 1960s and 1970s radicalism at Sydney. While drawing out the implications for later political changes that he believes resulted from shifts in those student approaches, Barcan suggests that the period where students sought transformations to the university itself was a time in which they lost focus, distracted by lesser, ‘intramural’ issues.⁹ This emphasis on its consequences for high politics obscures the reality that student radicalism had implications for the place of university knowledge in Australia and its subsequent regulation that were also profound and lasting.

Even though student revolutionaries were in fact a very small minority of the student body on all Australian campuses, they nevertheless succeeded in disrupting the dominant vision of higher education, held by government and university management. As a result of student radicalism, the internal structures and functions of the universities were transformed. This is a familiar story, but there are dimensions, or perhaps little understood consequences of this period of upheaval, that have largely escaped scholarly attention. In challenging the legitimacy of university authority –

activism at Sydney University (Melbourne: Scholarly Publishing, 2011). This narrow focus does tend to also be the case for work whose titles might indicate a wider scope, such as Graham Hastings, *It Can't Happen Here. A Political History of Australian Student Activism* (Adelaide: Students Association of Flinders University, Empire Times Press, 2002). Mick Armstrong, *1,2,3 What Are We Fighting For? The Australian Student Movement from Its Origins to the 1970s* (Melbourne: Socialist Alternative, 2001).

⁸ C.A. Rootes, ‘The Development of Radical Student Movements and their Sequelae’, *Australian Journal of Politics and History* 34 (2), 2008, 173–86.

⁹ Barcan, *From New Left to Factional Left*, 93–116.

indeed, in questioning the very basis of western knowledge – radical critics cast doubt on the idea of the university.

The university survived nevertheless, but its legitimacy, for some, was called into question. By questioning the ideal of the production of truth through university research and teaching, radicals raised uncertainties among other sections of society. When research was produced for the ‘public good’, to which members of ‘the public’ did this refer? In questioning the authority of elite scholars, students planted doubts about the authority and value of the university. In so doing, they also instigated misgivings about the use of public funds to support higher education. The consequent legitimisation crisis for universities had far reaching consequences not only for the future public policy environment for universities, but also for the university’s own relationship to the knowledge it produced.

Universities and Class Power

With the growth of university enrolments after the 1957 Murray Review and the new opportunities offered to school leavers with the expansion allowed by the Martin Review, in 1965 there were more than 110,000 students enrolled in universities and Colleges of Advanced Education – nearly three times as many as in 1957. The ‘baby boomer’ generation, as it entered the universities, causing much of this increase in enrolment, encountered a system on the brink of change. Expansion in student numbers had been coupled with a growth in staff numbers and the new generation of academics were bringing novel and sometimes, as Chapter Two discussed, ‘bolshie’ ideas to their university work. Cold War politicisation of university knowledge did not fail to influence the students entering higher education, who looked at the

university itself, and began to question its impact on Australia's social and economic environment.

University student radicalism was an international phenomenon that came to the public's attention during the Free Speech movement at the University of California Berkeley in 1965.¹⁰ The political and cultural mood of the era was then immortalised in May 1968 when a student barricade uprising in Paris spread to the working community, nearly collapsing the French government. Student radicalism on university campuses in Australia and internationally, however, had a longer history. At the University of Melbourne in 1917, Communist student Guido Baracchi was censured by the university's administration for his opposition to the Great War.¹¹ Student radicalism grew through the 1930s and particularly in the 1940s with the influx of students through the Commonwealth Reconstruction Training Scheme. Those students were later designated as the 'Old Left'. A shift from 'old' to 'new' left-wing politics occurred when the Soviet suppression of the 1956 Hungarian Revolution shocked western communists, causing many to move their allegiance away from traditional Communist Party structures. Many radicals, particularly in universities, began to consider new ideas and approaches to their politics. A 'New Left' emerged.¹²

One focus of the emerging student New Left in Australian universities was the university's role in perpetuating class distinctions. A university degree, student radicals argued, acted as a class barrier. In the 1960s, when (despite recent growth)

¹⁰ Robert Cohen and Reginald E Zelnik, *The Free Speech Movement: Reflections on Berkeley in the 1960s* (Berkeley: University of California Press, 2002).

¹¹ Stuart Macintyre and R.J.W. Selleck, *A Short History of the University of Melbourne* (Melbourne: Melbourne University Press, 2003), 63–5.

¹² Barcan, *From New Left to Factional Left*, 12–5.

relatively few went to university, a degree enabled better paid jobs and elevated graduates to membership of an educated class, conferring social capital. The university's right to choose who they would enrol and who they would graduate made those institutions key sponsors of class power in Australia. In 1968, Monash students protested:

I am burning this degree as an expression of opposition to the belief that this piece of paper should make me a privileged person ... that because I have met certain formal requirements set by the establishment, I should earn \$60 per week while the broad masses should subsist on a basic wage or a pension. I dispute the belief that this degree makes me more human, more intelligent, more moral.¹³

In the same spirit, the previous year's students had awarded a Monash degree to a pig.¹⁴

In opposing the university's association with social hierarchy, students also opposed the stratified structures that governed each campus. In hindsight some of these incidents seem remarkably trivial. At the time, however, they were symptomatic of growing disaffection and a sustained critique of the illegitimate and oppressive power in almost every administrative gesture of the university. At Monash University, with its Maoist-dominated Labor Club, this found expression in a long battle over the university car park. To facilitate a new fee for student parking, Monash had separated student from staff areas in the car park. Students protested not only against the imposition of fees, but also against the structure of the car park as a reflection of the university's hierarchy and society's class distinctions. 'No longer is the issue simply one of car parking,' claimed one issue of *Print*, the 'broadsheet' of the Monash Labor

¹³ Paul Francis Perry, *The Rise and Fall of Practically Everybody. An Account of Student Political Activity at Monash University 1965-1972* (Melbourne: P.F. Perry, 1973), 34b.

¹⁴ 'Monash – Students Award Honorary Degree to a Pig.' *Honi Soit*, 3 Oct 1967.

Club, ‘the issue is the place of students in the university’.¹⁵ They likened the lesser status of students among university members to the lower position, in economic and cultural standing, granted to less educated citizens in society. Red, green and yellow signage designated different categories of car parking spaces and students temporarily painted all the signs red to indicate their protest against such signifiers of inequality.¹⁶

Student opposition to social hierarchy led them to crusade for a reform of university governance structures. As a result, Australian universities all faced demands for increased student participation on bodies responsible for running the university. This, students argued, would demonstrate that the university valued them as socially equal. Odd things sometimes prompted such insistence. Overdue library books – a topic at least as banal as the Monash car park – was *the* issue at the University of Sydney in April 1967. Students held mass meetings, more than one thousand signed a petition, and more than two hundred people conducted several sit-ins (sometimes overnight) of the University of Sydney’s Fisher library as a protest against increased fines.¹⁷ Fines, they proclaimed, harmed poorer students and failed to deter richer ones, perpetuating social disadvantage. ‘The chief librarian and his nebulous associates’, students complained, ‘treated students as morons – not worthy of consultation or consideration in what is essentially their own problem.’¹⁸ The lesser standing of students in the university hierarchy, they argued, reflected a lack of respect for their right to have a say in decisions that impacted them. This seemed exploitative, asserting power that

¹⁵ *Print* (No. 28) April 28 1969, in *Print: Broadsheet of the Monash Labor Club MON798* (Melbourne: Monash University Archives, 1969).

¹⁶ *Ibid.*

¹⁷ *Honi Soit*, 19 April 1968. Harrison Bryan, ‘The Fisher ‘Sit-Ins’ Of April 1967’, *Vestes* 11 (2), 1968, 157.

¹⁸ *Honi Soit*, 5 April 1967.

only hierarchy could supply. The university's failure to consult and communicate with students was an expression of that division in status.

Other incidents sharpened the critique of university administration. Victoria Lee was given some bad advice when she was at school, when her careers advisor told her that completing maths for her high school matriculation was unnecessary, since she wanted to study anthropology and archaeology. Upon application to the University of Sydney in 1969, however, she found that, although she had the required grades, she did not have the required maths. Victoria Lee then enrolled at Macquarie University and took the anthropology and archaeology she needed at Sydney, having them credited to her Macquarie degree. She did this on the understanding that Sydney accepted students who had successfully completed a year at another New South Wales university. After that year, she reapplied to Sydney in 1970, only to find that the Professorial Board had changed the rules and students from other universities were no longer eligible for admission. Victoria Lee's letter to the University's Senate explaining all this was reprinted in the student newspaper, *Honi Soit*. Students were deeply concerned about the fact that the Professorial Board had decided to change admission requirements but forgotten to publish the change in the University Calendar or anywhere else.¹⁹

Students were horrified, although limiting access to the university was not necessarily their concern. Writing for *Honi Soit*, one student agreed with the Board's plan, which was to 'keep out *inferior* students...to ensure that there is not a flood of applicants to enter Sydney University from people who have completed first year at New South Wales and Macquarie. The resolution was not passed to exclude a student like

¹⁹ Victoria Lee, 'Letter to University of Sydney Senate', *Honi Soit*, 5 March 1970 .

Victoria Lee who had easily made the quota for this university'.²⁰ Their main concern, however, was not the unfair exclusion of Victoria Lee, but that the Professorial Board had implemented unpublished decisions. The Student Representative Council asked politely that student representatives be elected to the Board so they could keep abreast of events.²¹ When they were refused, politeness was cast aside. Students occupied the administrative offices in Sydney's Main Quadrangle for three days in support of increased participation in University governance.²²

The Victoria Lee case was not an isolated incident. Students on all campuses demanded increased representation. Their demands often succeeded. At the Australian National University there was a sit-in at the university administrative offices, seeking student participation in university governance, a change made by the early 1970s.²³ Student radicals at the University of New England set aside divisions between student groups and the university to work with administrators to restructure academic governance to include students.²⁴ At Melbourne University, a formal Planning Group was established to investigate university governance, on which representatives of all types of staff and students served, with students elected by the student body. Simon Marginson, then Arts II (Hons), in his policy speech seeking election (successfully) for a position in the Planning Group, said that such participation should enhance student control over their education and learning environment.²⁵ In all universities, the argument was made and re-made, that students should have a more active say in the

²⁰ John Maddocks, 'The Case of Victoria Lee', *Honi Soit*, 19 March 1970.

²¹ Percy Allen, 'Letter to the Chair of the Professorial Board Requesting Student Representation on Professorial Board', *Honi Soit*, 12 March 1970.

²² *Honi Soit*, 25 March 1970.

²³ University of Sydney, Report of the Committee on Examination and Assessment, in *Minutes of the Academic Board* (Sydney: University of Sydney Archives, 1975).

²⁴ Don Beer, *A Serious Attempt to Change Society*, 119.

²⁵ Simon Marginson, Policy Speech: Planning Group to Investigate University Government, in *Andrew Reeves Papers* NLA/MS8076/1/7 (Canberra: National Library of Australia, 1971).

aspects of university life that impacted them as a matter of inclusion in the university community.

The Australian Vice-Chancellors Committee took a detailed interest in the trend as it emerged. In 1970 they reported on a survey of student participation in all Australian universities, noting the number of representatives at all levels, from Council and Academic Board to departmental staff-student liaison groups.²⁶ The Vice-Chancellors colluded on desirable levels of participation. 'If one university put twenty students on its Council', Louis Matheson pointed out, 'all universities would be under pressure to do the same'.²⁷

While they attempted to limit the levels of student participation, universities were ready to change. The level of power and authority granted to academics at professorial level was already making many academic staff uncomfortable. A.P. Rowe's description of professorial power in *If the Gown Fits*, published in 1960, had prompted Perce Partridge to critique the authority of the 'professor-god'.²⁸ In the same spirit, Geoffrey Serle, observing changes in the character of university departments, wrote an article about 'god-professors' in 1963, which included suggestions about ways to democratise academic governance.²⁹

While for junior staff, overly powerful professors might be powerful patrons in increasingly large departments, more often they were seen as antiquated obstacles to their right to explore and teach their own courses. For students, respect for

²⁶ AVCC, *Report on Student Participation* (Sydney: University of Sydney Archives, 1970).

²⁷ Victorian Universities Committee, Minutes of the Meeting of the Victorian Universities Committee April 1968, in *Student Participation File* MON84/96/012 (Melbourne: Monash University Archives, 1968).

²⁸ Partridge, 'Universities in Two Countries', 54.

²⁹ Geoffrey Serle, 'God-Professors and Their Juniors', *Vestes* 6 (1), 1963, 11–7.

professorial standing seemed to grant an authority over knowledge that was based on nothing more than social rank. University leaders were conscious that they were maintaining an indefensible position by excluding most members from decision making structures. Student protest provided the push universities needed for reform. By the mid-1970s, university Professorial Boards were replaced with more egalitarian structures that included representatives of sub-professorial academic staff and students.³⁰ By restructuring authority within the university on a (slightly) more egalitarian basis, academics and administrators began to diminish the special status of the professor.

Universities and the ‘establishment’

Student opposition to professorial authority, however, went beyond immediate and local objections to hierarchy. When Monash students declared that ‘the University is an instrument of the ruling class’, they did not just mean that its internal structure mirrored unfair social differentiation.³¹ They were referring to the function of the university in perpetuating forms of social and economic advantage in society broadly. Many were increasingly persuaded that the modern university was complicit in the goals of what they broadly dubbed ‘the establishment’.³² The ‘mass university’, according to Terry Irving, radical lecturer in politics at Sydney University, promoted knowledge that legitimised the nation-state, capitalism, elitism – structures that all relied on the subjugation of some members of society for the benefit of others.³³ The university relied on power, enacted through its function in legitimising certain forms

³⁰ For example ‘Professorial Board to Be Restructured’, *Honi Soit*, 29 July 1970.

³¹ ‘Print: Special Open Day Issue’, *Print* Broadsheet of the Monash Labor Club MON798 (Melbourne: Monash University Archives, 1970).

³² Donald Horne said: ‘The great causes of university cafeterias reflected the more general perturbations of the times – not only Vietnam, but the general dissatisfactions with power’ Horne, *Time of Hope: Australia 1966-72*, 42.

³³ Terry Irving, ‘The Free University’, *Honi Soit*, 14 Sept 1967.

of hegemonic knowledge. Linear historical narratives, scientific progress, technological superiority, political, philosophical and economic theory all propagated by the universities had nourished and justified imperial dominance, state authority over individuals and exploitation of indigenous people. Beyond producing graduates and professors who would continually replenish society's elite, university knowledge itself was foundational to political, social and financial inequalities.

In addition to those ideas and narratives, as they were presented in lectures, courses and publications, the ways the university effected its mission also perpetuated established ideas and social structures. 'Just as the university serves the nation', claimed Terry Irving, 'so the "good" teacher serves the university by instructing his students efficiently in those skills whose acquisition the nation has already made a condition of his entry to the university'.³⁴ The use of university admissions to restrict access to knowledge was an issue of concern to a new generation of educators. Ideas were floated about ways to extend university knowledge to those who had been unable to gain admission. Some of these radical critiques gained political traction. In the United Kingdom, an Open University was established in 1969, making higher education available to a much wider spectrum of citizens.³⁵

In Australia, student-driven grassroots initiatives, like the 'Learning Exchange' in Canberra, made learning resources available to people not enrolled at university.³⁶

The most radical of these experiments was based near the University of Sydney. Bob

³⁴ Terry Irving, 'The Mass University and the Free University as Utopia', in S. D'Urso (ed.), *Counterpoints: Critical Writings on Australian Education* (Sydney: John Wiley & Sons Australasia, 1971), 21.

³⁵ 'The Open University', *National U 5* (11), 1969, 8. K.E. Beazley. *Universities, Critics, Students, Protest and Other Problems*. Address to Annual Meeting of Convocation, University of Melbourne, by the Hon. K Beazley MHR, Friday 7 April 1972.

³⁶ 'The Learning Exchange', *Woroni* 25 (11), 1973, 4.

Connell, Terry Irving and Rowan Cahill established a Free University (known as the Free U – a local articulation of an international movement) in a terrace house near Sydney’s Darlington campus.³⁷ Launched in 1968 with 150 students, at its peak the Free U had approximately three hundred participants, of which around twenty were University of Sydney staff.³⁸

This experiment had the dual mission of widening knowledge to be inclusive and connecting study to the real problems of society. To achieve this, it was an important principle of the Free U that course content not be fixed.³⁹ Study groups were immersive and experiential, blurring the boundaries between theory and practice, ideas and emotions:

When you walk in the front door of the Free U, you leave outside the formal distinction between students and teachers ... The group studies what the people in it decide they want to study... The way they tackle it is decided by themselves on the spot: not by someone else beforehand. The ‘course’ is what the people in the course group make of themselves.⁴⁰

At the Free U, staff and students were equal. Course leaders were ‘convenors’, not lecturers, and there was no assessment.⁴¹ This was in stark contrast to normal learning and teaching. The ‘mass university’, as Terry Irving had called it, encouraged staff-student ratios that positioned teachers in an elevated relationship to their students.⁴² This gave students the false impression that they were lacking in knowledge, that they required instruction and should submit to the authority of a scholarly master.

³⁷ Irving, ‘The Free University.’ Brian Freeman and Bob Connell, ‘Free University’, *National U* 4 (1), 1968, 2.

³⁸ W.F. Connell et al., *Australia’s First: A History of the University of Sydney Volume 2 1940-1990* (Sydney: Hale & Iremonger, 1995), 360–1.

³⁹ Freeman and Connell, ‘Free University’, 2.

⁴⁰ Bob Connell, ‘Inside the Free U’, *Honi Soit*, 19 April 1968.

⁴¹ Irving, ‘The Mass University and the Free University as Utopia.’

⁴² Rowan Cahill et al., ‘The Lost Ideal: Position Paper of the Committee for a Free University’, *Honi Soit*, 3 Oct 1967.

This power structure was famously criticised by Brazilian theorist Paulo Freire. For Freire, this traditional pedagogical formulation not only reflected society's oppressive structures but also reinforced them. By assuring students assented to established ideas, and by granting them no space in which to question them, society's norms would be continually maintained.⁴³ Free knowledge, as in the Free U, was the opposite: here, the distinctions between instructor and instructed were blurred and everyone was accorded the status of knowledge producer. Instead of submitting to knowledge that conformed, students would produce their own knowledge for the purposes of social reform.⁴⁴

Despite these inclusive ideals, some participants considered the Free U more clique than community.⁴⁵ Its structure, they felt, had freed knowledge from one kind of establishment but enclosed it in another. Women and feminist knowledge, for example, had limited expression in what some female members considered still a male-dominated institution.⁴⁶ The Free U closed in 1972, a temporary experiment with pedagogies that explicitly supported social justice and, in so doing, also made adjustments to the idea of university knowledge.⁴⁷ Its values were not lost, however, and were expressed in the teach-ins that were a feature of every campus throughout the student revolutionary period.⁴⁸

⁴³ Paulo Freire, *Pedagogy of the Oppressed* (New York: Continuum Publishing, 1970), 71–86.

⁴⁴ Freeman and Connell, 'Free University.'

⁴⁵ Megan Jones, 'Remembering Academic Feminism' (PhD Thesis, University of Sydney, 2002), 55.

⁴⁶ Ibid. Ann Curthoys, 'The End of the Free U?' *Arena* 20 (1969), 35–40.

⁴⁷ Despite the brevity of the Free U's existence, similar pedagogies had more permanent expression through organisations like the Higher Education Research and Development Society of Australasia (HERDSA), which was established in 1972 and encouraged socially situated, student-centred approaches through professional development for university teachers. Robert A Cannon, 'The Professional Development of Australian University Teachers: An Act of Faith?', *Higher Education* 12, 1983, 19–33.

⁴⁸ Docker, 'Those Halcyon Days', 296. Furthermore, its pedagogical values still infuse student-centred learning across higher education. See David Boud, 'Aren't We All Learner Centred Now? The Bittersweet Flavour of Success', in Paul Ashwin (ed.), *Changing Higher Education: The Development of Learning and Teaching* (London: Routledge, 2006), 19–32.

In addition to radical student and staff criticisms of university teaching practices, university admissions processes were a source of concern. Just as the Russel Ward case (see Chapter Two) demonstrated that universities might exclude academic staff on the basis of their political persuasions, so might students be similarly excluded. Enrolment and, if need be, university disciplinary procedures, could be deployed to quell student critics. This issue came to a head in Melbourne when high profile student activist Albert Langer attempted to enrol for a postgraduate degree. Applying first at Monash, the university's administration made it clear that, despite being a graduate, he would not be welcome in any course – or indeed in any classroom.⁴⁹ The university held out against the inevitable student protests until Langer shifted his application to Melbourne University.

At the University of Melbourne, the regulation used to refuse Langer's admission – regulation 3.3.18 – was subject to intense internal criticism, staff and students maintaining that it was a form of political test for admission.⁵⁰ Students occupied a Professorial Board meeting in protest. Under pressure, the Board formed an 'unofficial subcommittee' to review 3.3.18.⁵¹ Unfortunately for the committee, a draft of a new regulation was leaked. Since it still contained provisions for excluding potential students on political grounds, students organised a general meeting.⁵² On 6th May 1971, one thousand students marched from their mass meeting to the

⁴⁹ Matheson, Chronology File: Handwritten Notes Kept Throughout to Give Chronology of Events. '2b or Not 2b – That Is Not the Question', *Print* (Vol 4 No. 1) 4 March 1970. 'Langer – Unsafe in Any Course', *Print* (Vol 4 No. 1) 4 March 1970. Also in subsequent editions of *Print*: Vol 4 No. 6 (12 March 1970), Vol 4 No. 8 (17 March 1970), Vol 4, No. 9 (18 March 1970), Unnumbered edition 6 April 1970, Undated edition (Vol 4 No. 16) organising a protest that took place in April 1970, followed by 'ceremonial donning of Albert Langer masks'. *Print* Broadsheet of the Monash Labor Club, MON798 1967-1975 (Melbourne: Monash University Archives, 1967-1975).

⁵⁰ Armstrong, *1,2,3 What Are We Fighting For?* 86.

⁵¹ Melbourne University News No. 2 June 1971, *Andrew Reeves Papers* NL/MS8076/1/2 (Canberra: National Library of Australia, 1971).

⁵² *Ibid.*

administration building to protest against the political test implied in the admissions clause.⁵³ They locked in the Vice-Chancellor and around two hundred staff for more than five hours by bricking up the entrance to the building and creating other types of barricades.⁵⁴ Staff attempting to leave were repelled with streams of water from fire hoses. One angry staff member threw a brick at students.⁵⁵ The incident attracted the attention of politicians and was reported throughout the media.⁵⁶ Despite all this, Langer was never admitted. He later applied to Sydney University, where, after checking the university's statutes, his application was summarily (but quietly) rejected.⁵⁷

The highly visible presence of student radicals in the 1960s and 1970s was testament, however, to the fact that admissions did not universally succeed in excluding those that the university might deem politically undesirable. Those who were admitted but did not conform, students repeatedly argued, were subjected to university discipline. Disciplinary procedures, a young Geoffrey Robertson (later a human rights lawyer, famous in the 1980s for his television 'hypotheticals') argued, were deployed in ways that failed to reflect the values normally embodied in modern systems of justice.⁵⁸ In response to such criticisms, universities began to reform their older *in loco parentis* traditions of discipline, often incorporating forms of student representation. But student rebellion had momentum and changes – even ones that to university administrators seemed quite radical – did not always solve the problem. At Sydney

⁵³ Disciplinary Actions for Lock-in (Pamphlet), *Andrew Reeves Papers* NL/MS8076/1/3 (Canberra: National Archives of Australia, 1971).

⁵⁴ 'Uni Head and Staff Locked In. Student Blockade', *The Sun* 7 May 1971.

⁵⁵ *Ibid.* Armstrong, 1,2,3 *What Are We Fighting For?*, 85.

⁵⁶ John Poynter and Carolyn Rasmussen, *A Place Apart: The University of Melbourne: Decades of Challenge* (Melbourne: Melbourne University Press, 1996), 395–8.

⁵⁷ University of Sydney, Vice-Chancellor's Report to the University Senate – Application for Admission from Two Persons Guilty of Misconduct. *Minutes of the Senate*, 2 Feb 1971 (Sydney University of Sydney Archives, 1971).

⁵⁸ Hurd Hatfield, 'Proctorial Farce Ends at Last', *Honi Soit*, 18 June 1970.

University in 1970, the students who had recently stood before the disciplinary committee (known as the Proctorial Board) were among the earliest to be elected to it. Their first act was to call a Proctorial Board meeting on their own authority. The student proctors formed a quorum, though they were ‘forced’ to eject the (only) Professor who was acting as the Board’s secretary for ‘offensive interruption of student proctors’.⁵⁹ Their aim was to instate a joint Student Representative Council and Staff Association Standing Committee on Discipline, transferring the responsibility for re-thinking discipline to the broader university membership.⁶⁰

On the rare occasion like this that students did obtain control over aspects of the university – most often by force and thus temporarily – they attempted to redirect the effort of the institution away from ‘the establishment’. La Trobe University students in Victoria took over the university’s Careers and Appointments office that had been used for military recruitment and redirected its resources to ‘the revolution’ – most likely meaning they used its stationary and stencil duplicator to add to the copious roneoed ‘broadsheets’ student radicals produced.⁶¹

Those La Trobe students were responding to the most pressing issue confronting university age youth in Australia – the Vietnam War. By 1970, radical students were an integral part of the growing movement that opposed the war.⁶² To them, the

⁵⁹ *Honi Soit*, 29 Oct 1970.

⁶⁰ Ibid. Sybil M. Jack, *History of the Sydney Association of University Teachers 1943-1993* (Sydney: University of Sydney Printing Service, 1994), 103.

⁶¹ York, *Student Revolt! La Trobe University 1967-1973*, 91.

⁶² Burgmann, *Power and Protest: Movements for Change in Australian Society*, 190. The Facts About the Anti-LBJ Demonstration. Pamphlet. *Student Ephemera File 1967-1968 MON342* (Melbourne: Monash University Archives, 1968).

Vietnam War represented a great deal that was wrong with established ideas.⁶³ Even on this issue, the university displayed complicity. University knowledge was not independent and objective but inextricably linked to propagating the war effort. At South Australia's University of Adelaide, students found that university equipment was being used to pursue weapons research.⁶⁴ What had been a virtue in the Second World War was certainly not during the conflict in Vietnam. The Adelaide Students for Democratic Action group were prompted to declare that they stood for 'the destruction of this university [and] the destruction of the social system to which the university is a willing bootlicker'.⁶⁵ Science was marshalled to kill more efficiently. Research was tied to the success of the 'military-industrial complex'. It was a means of perpetuating western dominance over the 'Third World'.⁶⁶ Over the past twenty years, as the Cold War had taken hold, activity in the universities had been repeatedly revealed as having political consequences. But for the new generation of students, it was university support of military action that demonstrated that university knowledge was ideological, not objective.

University authority over knowledge

Radical students increasingly saw that the university's power lay in its control of truth.⁶⁷ The University of Queensland Society for Democratic Action described:

[the] crucial role of the University in a neo-capitalist society, both as a defender of the status quo and as a producer of specialists for its technology. Staff lecture with no obvious viewpoint in the name of spurious objectivity.⁶⁸

⁶³ For example, *Grass Roots* (Vol 4. No. 8) 20 April 1971, in *Grass Roots* Broadsheet of the Students for Democratic Action (Adelaide: Adelaide University Archives, 1971). Society for Democratic Action University of Queensland, *Student Guerilla*, 13 June 1968.

⁶⁴ *Grass Roots* (Vol 4. No. 8), 20 April 1971, in *Grass Roots* Broadsheet of the Students for Democratic Action (Adelaide: Adelaide University Archives, 1971).

⁶⁵ *Ibid.*

⁶⁶ Readings, *The University in Ruins*, 160. Cf. Henry Giroux, *The University in Chains: Confronting the Military-Industrial-Academic Complex* (Boulder: Paradigm Publishing, 2007).

⁶⁷ Readings, *The University in Ruins*, 160.

Through the university's educational apparatus, ideologically-loaded knowledge was passed on to the next generation of tertiary educated Australians as if it were unquestionable. University power was assured through curricula and teaching. Compliance with established forms of knowledge was enforced through examination.⁶⁹

'God is an exam', was the headline for one student article, arguing for rebellion against the tyranny of examination.⁷⁰ On 8th November 1973 more than three hundred students at the University of New England in the regional New South Wales town of Armidale held a 'Peasants' Revolt' against exams. They felt that parroting their teachers' knowledge affirmed it – that through examination 'professors would expropriate people's work and use it in a very feudal way'.⁷¹ Their protest became a violent struggle, followed by a twenty-four hour occupation of the university's administrative offices.⁷² Melbourne University students formed an 'SRC Exam Reform Group' and published articles with titles like 'Abolish Exams'.⁷³ They distributed protest stickers that students could put in their exam booklets, saying: 'I consider this exam to serve no educational purpose as all. I sit it under duress, because no creative alternative has been offered.'⁷⁴

⁶⁸ Society for Democratic Action, University of Queensland, 'Lecturing on Navigation While the Ship Goes Down', *Student Guerilla*, 11 April 1969.

⁶⁹ Beer, *A Serious Attempt to Change Society*, 12.

⁷⁰ Phil O'Carrol, 'God Is an Exam', *Woroni* Undated (1974).

⁷¹ Beer, *A Serious Attempt to Change Society*, 12.

⁷² *Ibid.*

⁷³ Melbourne University SRC Exam Reform Group, 'Abolish Exams', *Andrew Reeves Papers* NL/MS8076/2/16 (Canberra: National Library of Australia, c.1970).

⁷⁴ *Ibid.*

Students at the Australian National University campaigned for four years to reduce the quantity of marks assigned to examination.⁷⁵ By 1973 students there were boycotting exams. Portrayed as analogous to Vietnam War draft resistance, they published an ‘Exam Resister’s Manifesto’.⁷⁶ In 1974 Australian National University students occupied university buildings to protest against exams, as did students in the History Department at Flinders University in South Australia.⁷⁷

University protest groups were supported by research, conducted and distributed by the Australian Union of Students.⁷⁸ They argued that exams failed to fulfil a role in the educating mission, and had a negative impact on students. Higher stress levels were attached to a single exam when it was the only means of assessment, resulting in unfortunate suicides.⁷⁹ The stress of exams, they claimed, was evidence of its power to mould a student’s intellectual self according to an established canon, granting control over the propagation and perpetuation of particular forms of knowledge to the exam-setters.⁸⁰ Moreover, students questioned the validity of exams as assessment given the types of preparation they promoted – memorisation and cramming. Rather than inspiring learning, exams killed it.⁸¹ Assessment, it was increasingly felt, should support learning by individuals, instead of sorting and categorising them. It was hoped that, if any assessment was used at all (only a minority felt that there should be

⁷⁵ John Crawford, ‘Letter to ANU Students Regarding Petition on Examinations’, *Woroni*, 21 July 1970.

⁷⁶ Australian National University Exam Resisters' Collective, ‘Exam Resisters' Manifesto’, in *Woroni*, Undated July 1973.

⁷⁷ David Lockwood, Julius Roe, and Chris Warren, ‘Feeling Board?’ *Woroni*, 2 May 1974. Hastings, *It Can't Happen Here*, 75–128.

⁷⁸ Australian Union of Students, Examination Papers: Background Papers on Assessment, Prepared for Campus Activists by the Australian Union of Students, *Tom Hurley Papers 1973-1976* (Melbourne: Melbourne University Archives, 1975).

⁷⁹ Beer, *A Serious Attempt to Change Society*, 12–4.

⁸⁰ Cf Keith Hoskin, ‘Foucault under Examination: The Crypto-Educationalist Unmasked’, in Stephen J. Ball (ed.), *Foucault and Education: Disciplines and Knowledge* (London: Routledge, 1990), 29–56.

⁸¹ University of Melbourne Student Representative Council, Alternatives to Exams: An Exam Survival Handbook, *Andrew Reeves Papers* NL/MS8076/1/8 (Canberra: National Library of Australia, c.1973).

none), then it should support individual empowerment rather than function as an instrument of obedience to norms dictated by universities.⁸² A key goal was to increase the sense of power over one's own world, freeing students from authoritarian control: 'Most students do not feel that they are able to control their own destiny', read the Educational Policy of the Australian Union of Students.⁸³

At the University of New England, during the Peasant's Revolt campaign, students claimed some ownership over knowledge:

It was an incredible, creative time with people writing poetry. For the first time students had control of something that was ours. Actually it is incredible what creativity comes out of people when they're in control of even a small part of their destiny.⁸⁴

The possibilities for claiming knowledge as a kind of communal wealth and creative realisation prompted students taking Classical Marxism to draw their chairs together to complete the exam collaboratively, 'in the true spirit of Marxism'. The university called the police. The students who participated spent the remainder of the exam period dodging officials trying to serve them legal injunctions. Challenges to examination posed a threat to the university's authority and mission and the university took it seriously.⁸⁵

The idea of changing assessment, however, had the support of a growing cohort of academic staff. Indeed, an overall reduction of the proportion of examination in university assessment is one of the lasting legacies of the student revolutionary period. Universities, reviewing their assessment practices, were progressively

⁸² University of Sydney, 'Report of the Committee on Examination and Assessment', *Minutes of the Academic Board* (Sydney: University of Sydney Archives, 1975).

⁸³ Australian Union of Students, 'Education Policy' in *Woroni*, Undated, July 1973.

⁸⁴ Beer, *A Serious Attempt to Change Society*, 14.

⁸⁵ *Ibid.*

persuaded that other forms of assessment would better support student learning. If it did that, they believed it would also offer a more valid evaluation of student performance.⁸⁶ Regarding student desire for independent thinking, however, University of Sydney philosopher Professor David Armstrong considered the shift to continuous assessment a Pyrrhic victory:

Exams enable students to put off their work until the end of the year and that strikes me as an immensely valuable thing ... if you [have] a system of continuous assessment ... you have a pretty hard life. I like for the Faculty of Arts the idea that you sit around for a long time discussing things in coffee shops and pubs and quadrangles and anywhere else that you can get some seating and, finally, towards the end of the year you've got to get some work done ... That's a good way, I think, to conduct an Arts education; students educate each other in the course of this.⁸⁷

New methods that reduced the old-fashioned examination but continued to assess a set curriculum – indeed to do so continuously – ultimately failed to reduce the university's authority over knowledge.

Some students also turned to curriculum reform to press their case. Their focus was student choice. A prescribed curriculum, some students argued, could be likened to military conscription:

The university has ... [an] obligation to go out and speak as honestly, persuasively and precisely as it can to prospective members, offer an invitation and not rely on educational conscription.⁸⁸

Junior staff often agreed with the emerging ethic of student choice.⁸⁹ Expanding opportunities for students to design part of their own curriculum by choosing more of

⁸⁶ Report of the Committee on Examination and Assessment, *Minutes of the Academic Board* (Sydney: University of Sydney Archives, 1975).

⁸⁷ David Malet Armstrong, *Interview with David Armstrong, Professor of Philosophy – Interviewer, Edgar Waters* (Canberra: National Library of Australia, 1986).

⁸⁸ C. Fendley, 'The Uni Dilemma', *National U*, 24 March 1969.

⁸⁹ Terry Irving, Honorary Professorial Fellow, University of Wollongong, Personal Communication to Hannah Forsyth, 15 December 2010 (Sydney).

their subjects was extended, in some more radical quarters, to allowing absolute choice for students, removing any core requirements for study at all.⁹⁰

Arguments for curriculum choice drew on German enlightenment claims to *lernfreiheit*: the notion that students should be able to choose what they studied as a matter of academic freedom.⁹¹ What was new was that this type of academic freedom became connected in student rhetoric to participatory democracy.⁹² Participatory, rather than parliamentary, democracy was a powerful theme in radical discourse, informed by contemporary local literature like Carole Pateman's 1970 book *Participation and Democratic Theory*.⁹³ If knowledge was power, as students argued, curriculum choice reflected the hope that it would be distributed more evenly.⁹⁴ But if universities clung to established curricula, students felt they needed to wrest control forcefully from the professorial grip.

The struggle between an alliance of staff and student radicals and professorial control of knowledge was nowhere more melodramatically enacted than the Sydney philosophy department. A sequence of conflicts had emerged there, beginning with the Knopfelmacher dispute in 1965 (discussed in Chapter Two). Soon afterwards, a staff proposal to teach a course on Marxism-Leninism was vetoed by the department's senior professor, David Armstrong. The relative power of professorial and sub-professorial staff was the subject of ongoing tension, which escalated when a majority

⁹⁰ In 1973, George Molnar, lecturer in philosophy and member of the Sydney Push, proposed abolishing all core (or required) areas of study. D.W. Rayment, 'The Philosophy Department Split at Sydney University' (Honours Thesis, University of Sydney, 1999).

⁹¹ C. Fendley, 'The Uni Dilemma', *National U*, 24 March 1969.

⁹² John Searle, *Campus War* (Harmondsworth: Penguin, 1972), 177.

⁹³ Carole Pateman, *Participation and Democratic Theory* (Cambridge: Cambridge University Press, 1970). See also Lewis d'Avigdor, "'Let the Lunatics Run Their Own Asylum': Participatory Democracy at the University of Sydney 1960 – 1979' (Honours Thesis, University of Sydney, 2011).

⁹⁴ Terry Irving, Honorary Professorial Fellow, University of Wollongong, Personal Communication to Hannah Forsyth, (Sydney: 15 December 2010).

of junior staff voted to allow all students to attend and vote at department meetings, despite professorial objections. A division in the department over whether there should be a core curriculum at all finally led the university to give permission for the department to split, so that for more than two decades the university hosted two separate philosophy departments.⁹⁵ While it was most obviously divided along political lines, the schism was also epistemological: was knowledge constructed on the basis of foundational truths protected by professors or was it ideological and political, amenable to critique by sub-professorial staff and students?⁹⁶

Professorial authority was a vexed question for some staff and students. Professors had traditionally had a special status in their departments, often with sole authority over curriculum and appointments – what Geoffrey Serle and now student radicals called the ‘god-professor’.⁹⁷ As departments grew with the fuel of government funding after the Murray report, many now had more than one professor. According to some students and staff this seemed a nonsense, rather like having two monotheistic gods. When the question was considered at Sydney University, the Professorial Board determined that in multi-professor departments, the most senior professor carried responsibility for all courses.⁹⁸ It is significant that they thought

⁹⁵ James Franklin, *Corrupting the Youth: A History of Philosophy in Australia* (Sydney: Macleay Press, 2003), 281–312.

⁹⁶ Arguments supporting the individuality of student knowledge construction were underpinned by emerging educational theory derived from psychological analyses of child development. In particular, Jean Piaget and Lev Vygotsky had posited new theories of cognitive development earlier in the twentieth century, emphasising the personal and contextual character of knowledge construction. See Jean Piaget, *The Origins of Intelligence in Children*, translated by Margaret Cook (New York: International Universities Press, 1952). L.S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge, Massachusetts: Harvard University Press, 1978).

⁹⁷ Barbara Caine, ‘The Department in the 1970s’, in Barbara Caine, et al. (eds), *History at Sydney, 1891- 1991: Centenary Reflections* (Sydney: Sydney Studies in History, 1992). Serle, ‘God-Professors and Their Juniors.’

⁹⁸ Report of the Subcommittee on the Roles of Professors and Non-Professorial Staff, *Minutes of the Professorial Board*, 18 December 1972 (Sydney: University of Sydney Archives, 1972).

someone must have sole authority. And for some professors, in particular David Armstrong, this was a cherished responsibility.

Armstrong's authority – and indeed professorial authority in general – was challenged in 1973 when postgraduate students Liz Jacka and Jean Curthoys proposed a senior elective course in feminist philosophy. Although the Head of Department role had rotated away from him and the Sydney philosophy department had recently elected to experiment with participatory democracy, Armstrong still felt (as the Professorial Board had affirmed) that all courses were his ultimate responsibility.⁹⁹ So when the department and then the Faculty of Arts approved 'Philosophical Aspects of Feminist Thought' he did not hesitate to call the Deputy Vice-Chancellor, William O'Neil, to discuss the problem. In response, O'Neil refused to sign over funding for the course. When members of the department protested, O'Neil referred the matter to the Professorial Board.¹⁰⁰

Once in the hands of the Professorial Board there was a problem: what did this almost all male body of professors know about feminism? By what authority did they evaluate it? In an open letter, Jacka and Curthoys argued, 'Professor O'Neil has made it clear that he believes the best decisions can only be made by those with the highest rank.'¹⁰¹ They informed the Professorial Board, 'in our case at least, your high rank in no way qualified you to judge the issue', since feminist thinking was 'an area which is entirely new':

⁹⁹ Ibid.

¹⁰⁰ University of Sydney, *Minutes of the Professorial Board*, 6 June 1973 (Sydney: University of Sydney Archives, 1973).

¹⁰¹ Elizabeth Jacka and Jean Curthoys, Open Letter to Professors Taylor and O'Neil, *Minutes of the Professorial Board*, 6 June 1973 (Sydney: University of Sydney Archives, 1973).

It is the nature of the case that we don't have a long history in the subject. There are no established, recognised authorities to whom we can appeal.¹⁰²

Feminist philosophy challenged university-based knowledge. Instead of building upon the expertise of academic masters, it undermined the very idea of mastery itself.

Feminism revealed, according to Readings, that 'no individual professor can embody the university', for each body was gendered and therefore not universal.¹⁰³ It exposed the self-justifying structure of the professorial system, demonstrating that university professors were both creators and arbiters of knowledge.¹⁰⁴ Collectively, professors need answer to no academic authority but their own and it was their own ideas that they were often asked to defend. In this way, professorial authority was exposed as a kind of mastery understood in its other sense, as dominance, rather than as command of expertise. For this reason, Jacka and Curthoys argued, professors constituted an illegitimate authority:

The kinds of things that bodies like yours usually consider, don't apply in this case. This, of course is not to argue that whether or not we are competent is unimportant or undecidable, but rather that you aren't the proper people to decide it.¹⁰⁵

What they announced next was revolutionary. Referring to the women students of the Faculty of Arts and the students and staff of the philosophy department, they said:

¹⁰² Ibid.

¹⁰³ Readings, *The University in Ruins*, 10.

¹⁰⁴ This incestuous legitimacy is a theme of Herman Hesse's 1943 novel, *The Glass Bead Game*, see Herman Hesse, *The Glass Bead Game* (London: Vintage, 1970). In his speech awarding Hesse the Nobel Prize for literature in 1946, Anders Österling said of *The Glass Bead Game*: 'In a period of collapse it is a precious task to preserve the cultural tradition. But civilization cannot be permanently kept alive by turning it into a cult for the few'. It bears a striking similarity to Habermas's claims for democratisation of the university. See Anders Österling, 'Presentation Speech for Nobel Prize in Literature', Elsevier Publishing Company, http://nobelprize.org/nobel_prizes/literature/laureates/1946/press.html Retrieved 14 December 2011. See Jürgen Habermas, *Toward a Rational Society: Student Protest, Science and Politics*, trans. Jeremy J Shapiro (Boston: Beacon Press, 1968).

¹⁰⁵ Elizabeth Jacka and Jean Curthoys, Open Letter to Professors Taylor and O'Neil, *Minutes of the Professorial Board*, 6 June 1973 (Sydney: University of Sydney Archives, 1973).

We feel, then, that those who are in a position to judge our competence have already done so.

This week we will be asking these people to demand of Professor O'Neil that we are immediately appointed.¹⁰⁶

Students, not professors, they claimed, were the legitimate adjudicators of university knowledge. They were, as Lyotard put it in a different context, 'sounding the knell of the age of the Professor', as the connection between the recognition universities granted and authority over knowledge was drawn into question.¹⁰⁷

This threatened more than the Professorial Board. The role of the university itself was to protect and validate reliable knowledge – the Professorial Board, along with examination, was the instrument by which reliability was authenticated. The Board took its job seriously. Despite approval at Faculty and department level, professors felt no compulsion to rubber-stamp such a decision. Vociferous debate ensued, with professors discussing the intellectual validity of feminism and the correctness of it being taught by two postgraduate students.¹⁰⁸

In the end it was the question of objectivity that swayed the group. Jacka and Curthoys had been interviewed on ABC radio. Having heard this broadcast, David Armstrong requested the transcript, assuring the ABC that despite its contents he was opposed to the very idea of libel laws and would not sue.¹⁰⁹ But the copy in Armstrong's papers in Canberra, especially prepared by him for reading to the Professorial Board, show that his interest was not in insults. The ABC interviewer had asked if the course was 'propaganda'. The women, laughing, confirmed that they

¹⁰⁶ Ibid.

¹⁰⁷ Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), 53.

¹⁰⁸ University of Sydney, *Minutes of the Professorial Board*, 6 June 1973 (Sydney: University of Sydney Archives, 1973).

¹⁰⁹ D.M. Armstrong, Philosophy Strike File *David Armstrong Papers* NL/MS9363/6/16 (Canberra: National Library of Australia, 1973).

were not 'unbiased'.¹¹⁰ This gave a 'different complexion' to the course, Armstrong argued to his fellow professors, than the one conveyed in the course proposal.¹¹¹ The Professorial Board agreed. They rejected employment of Jacka and Curthoys by thirty-nine votes to seven with the explicit goal of preventing them from teaching feminist philosophy.¹¹²

The month-long strike that resulted attracted the attention of the unions and the media as the Sydney left flocked to support feminism. A 'women's tent embassy' became a fixture in the Main Quad, the Builders Labourers Federation put a 'green ban' on the university (refusing to participate in any building) and the media turned its gaze to the issue.¹¹³ Under pressure, the University Senate appointed Justice R.M. Hope to investigate and make a recommendation about whether the course should proceed. He interviewed all interested parties and collected submissions from many members of the university.¹¹⁴ When he recommended that Jean Curthoys and Liz Jacka be appointed and that the course go ahead, students celebrated.¹¹⁵ But for universities across Australia, such events drew the public's attention to the widespread changes to higher education that were a consequence of student radicalism. Conservative critics

¹¹⁰ Transcript of Interview with Jacka and Curthoys, Broadcast on PM, ABC Radio, 4 June 1973, *David Armstrong Papers* NL/MS9363/6/16 (Canberra: National Library of Australia, 1973).

¹¹¹ David Malet Armstrong, Statement to the Professorial Board 18 June 1973, *David Armstrong Papers* NL/MS9363/6/16 (Canberra: National Library of Australia, 1973).

¹¹² University of Sydney, *Minutes of the Professorial Board*, 6 June 1973 (Sydney: University of Sydney Archives, 1973).

¹¹³ Alison Bashford, 'The Return of the Repressed: Feminism in the Quad', *Australian Feminist Studies* 13 (27), 1998, 49.

¹¹⁴ *Ibid.* University of Sydney, *Minutes of the Special Meeting of Senate* 20 July 1973 (Sydney: University of Sydney Archives, 1973).

¹¹⁵ David McKnight, Tribune Supplement News Clipping 31 July – 6 August 1973, *John Burnheim Papers* (Sydney: In the possession of Alison Bashford, History Department, University of Sydney, 1973).

were assembling: Peter Wetmore wrote in *Quadrant* that radical influences in the universities ‘will have serious adverse consequences for the nation’.¹¹⁶

Leonie Kramer acted to alert the public, hoping to garner support to oppose the growing strength of the student voice. She was the only female professor at Sydney University at that time, Professor of Australian Literature and a close friend of both David Armstrong and the Vice-Chancellor, Bruce Williams. Kramer insisted that, in the Senate’s minutes on the outcome of the philosophy dispute, her own position on the philosophy strike be recorded.¹¹⁷ She stated that while a majority of philosophy academics employed at Sydney University had supported the course, a majority of those of *professorial* rank were opposed to it. The authority of professors, she argued, was being ignored in the university.¹¹⁸ The message this sent to the public was that the university habitually acquiesced to the demands of student ‘ratbags’. One newspaper opinion piece read:

How absurd to give such a course, how presumptuous of two women graduates to suggest that they could give it! That’s what you get if you allow professors to have no more than one vote among many.¹¹⁹

There were members of the public who still respected the rank of professor, believing it to reflect significant expertise. To them, the claims of students seemed spurious. More importantly, if the public could not rely upon the very people the university itself declared to be their most expert members, then what did this say about the quality and value of what the university taught and claimed?

¹¹⁶ Peter Wetmore, ‘The Strike at Sydney University’, *Quadrant* 17 (6-7), 1973, 23–9.

¹¹⁷ University of Sydney, *Minutes of the Special Meeting of Senate* 20 July 1973 (Sydney: University of Sydney Archives, 1973).

¹¹⁸ Leonie Kramer, ‘Comments on the Report of the Senate Committee Concerning Philosophy Course Proposals’ *Sydney University News* 5 (11), 1973.

¹¹⁹ D. Jenkyn, ‘Aborting Abortionists’, *Nation Review*, 16-22 March 1973.

Twenty-five years after the philosophy strike, just as John Howard's government was introducing full fees for domestic students in the Australian higher education market, Jean Curthoys expressed sorrow:

This liberal conception of the university no longer has currency...I have no time here to defend this liberal conception and so I shall simply say that my deep regrets about the strike concern the extent to which it opened the floodgates for its rejection.¹²⁰

In exposing the ideological foundation of university knowledge, students destabilized the structure that enabled society to trust professorial – and thus university – authority. 'Clearly', stated a *News Weekly* journalist, 'standards in certain areas within universities are declining'.¹²¹

Students and Society

Student protest may have horrified many, but it also earned the admiration of others. Some sought to capitalise on this campus ferment. The New Left voice could be increasingly heard in the rhetoric of Labor politicians in State and Federal parliaments.¹²² In Federal parliament in 1969, then leader of the opposition, Gough Whitlam said:

Many organised and orderly student demonstrations have been highly effective. The Australian conscience would not have been so stirred over Aboriginal conditions and the discreditable White Australia policy if it had not been for our students.¹²³

Student protest suggested to the left that university students might occupy a new and valuable civic function.

¹²⁰ Jean Curthoys, 'Memoirs of a Feminist Dinosaur', *Australian Feminist Studies* 13 (27), 1998, 57.

¹²¹ News Weekly Clipping, 1 August 1973, *David Armstrong Papers* NL/MS9363/6/16 (Canberra: National Library of Australia, 1973).

¹²² Horne, *Time of Hope: Australia 1966-72*, 169–71, 175–9. Nick Dyrenfurth and Frank Bongiorno, *A Little History of the Labor Party* (Sydney: UNSW Press, 2011), 128–47. Eg. CPD (HoR), 10 March 1970: hereafter CPD (HoR). CPD (HoR), 20 April 1971.

¹²³ CPD (HoR), 27 May 1969.

In Britain, Eric Ashby and Mary Anderson called them the ‘student estate’, an effort to legitimise young university scholars as a valuable part of any vibrant democracy.¹²⁴ This role separated students from the institutional protectionism and pragmatic preoccupations of the first and second estates and even from the adult worries of the third.¹²⁵ ‘The universities’, argued Hannah Arendt, ‘make it possible for young people over a number of years *to stand outside all social groups and obligations*, to be truly free’.¹²⁶ In university students, such approaches suggested, a new relationship between education and democracy was forged. Rather than preparing the informed citizen and the useful expert, a university education was increasingly seen as providing a group of *dissenting* voices: democracy, it was argued, needed dissent to assure the diversity of opinion that would offer the public sufficient political choice. The tendency of education to reproduce sameness would be offset, proponents of the student estate argued, by this tertiary educated class.¹²⁷

Emerging as a self-conscious, separate class of the Australian population, university students gained the support of the new Prime Minister, Gough Whitlam, elected in 1972. In that election the age of majority and the right to vote was lowered from twenty-one to eighteen, literally granting a new civic role for many university-age people.¹²⁸ The idea that universal primary and secondary education was necessary for citizenship was augmented, in 1970s Labor policy, by a commitment to equality of

¹²⁴ Eric Ashby and Mary Anderson, *The Rise of the Student Estate in Britain* (London: Macmillan, 1970).

¹²⁵ Ashby was referring to the French *Ancien Régime* in which the clergy, the nobility and the people were considered to be the first, second and third estates respectively.

¹²⁶ Hannah Arendt, *Crises of the Republic* (New York: Harcourt Brace Jovanich, 1969), 208. Italics in the original.

¹²⁷ Richard Gordon (ed.). *The Australian New Left: Critical Essays and Strategy* (Melbourne: William Heinemann Australia, 1970), 4.

¹²⁸ Whitlam had been the first, in 1968, to propose lowering the voting age from twenty-one to eighteen. While this was unsuccessful, by 1969, both Labor and the Liberal-National coalition agreed that the age of majority should be generally lowered to eighteen. This was not fully achieved until Whitlam’s 1972 election. See Irving, Maunders, and Sherington, *Youth in Australia: Policy Administration and Politics*, 146–53.

educational opportunity. Many in Labor saw education as a way to engineer greater social and cultural, as well as economic, egalitarianism. Despite that, as Simon Marginson points out, there were also some on the left who saw meritocratic rule as the better of two evils: educational elitism was an improvement on elitism constructed by birth and wealth.¹²⁹

Whitlam focused on equality of choice: equal citizens in a democratic nation should have equal access to choices in education. This was different from Dedman's population-based view in the 1940s. His approach was to slowly but systematically restructure access to education, prioritising merit over wealth. Whitlam's vision was more focused on the individual. Citizens held an inalienable right to vote for whom they wished. Consumers possessed individual freedom to purchase the products they chose. So Australian youth should be free to choose from a suite of educational products. For this to be a genuine choice, education had to be free.¹³⁰

Free education was the cornerstone of an accessible and increasingly equitable system, according to Whitlam's Labor government. This would ensure more active and vocal – but fundamentally individual – democratic participation. As Peter Karmel pointed out, the discourse informing higher education policy in the 1970s was that every citizen held the right to an education that matched her or his capability.¹³¹

Gough Whitlam announced:

¹²⁹ Simon Marginson, 'The Whitlam Government and Education', in Jenny Hocking and Colleen Lewis (eds), *It's Time Again. Whitlam and Modern Labor* (Melbourne: Circa, 2003), 251–3.

¹³⁰ *Ibid.*, 180.

¹³¹ Peter Karmel, *Interview with Professor Peter Karmel – Interviewer, Tony Ryan* (Canberra: Australian College of Education and the National Library of Australia, 1995).

Everybody in Australia is entitled, without cost to the individual, to the same educational facilities, whether it be in respect of education at the kindergarten or tertiary stage or the post-graduate stage.¹³²

In the three years of Whitlam's short term in government, participation in higher education increased by nearly thirty percent, from 211,045 to 273,137 students, two-thirds of whom received income support while none paid fees.¹³³

In reality, free education did not assist as many students as might be imagined, for it replaced a very substantial Commonwealth scholarship scheme that had enabled many to enter university in effect without paying fees. The increase was in part carried by the substantial growth in funding for universities that allowed them to take more students and soak up even more of the baby boomer demographic bubble.¹³⁴

Whitlam's impact was less in what actually happened in universities than in a significant change in the *idea* of accessible higher education, symbolically (as well as actually) expressed in the absence of fees. It was not the mass higher education that was to come, but it opened that possibility.

While Whitlam fostered the student estate, conservative citizens and politicians were increasingly dissatisfied with the behaviour of university students and the responses of the universities that hosted them. Student radicalism was often portrayed in the press and parliament as the shenanigans of a spoiled, ungrateful youth culture. Sydney Vice Chancellor Bruce Williams was not alone in blaming the misbehaviour of members the youthful baby boomer generation on their indulged upbringing,

¹³² Gough Whitlam, *The Whitlam Government 1972-1975* (Melbourne: Viking, 1985), 293.

¹³³ Marginson, 'The Whitlam Government and Education', 263.

¹³⁴ Marginson, 'The Whitlam Government and Education', 251-3.

informed, he claimed, by Dr Spock's famous book on childrearing.¹³⁵ In the Victorian parliament, when the resources of La Trobe University had been redirected to 'the revolution', Liberal member Max Crellin said:

I, and no doubt every other responsible person, am wondering how long the State must put up with this type of occurrence. It is fair to say that the rank and file population of the State who are not blessed with the opportunity to attend a university are wondering what type of person – [interrupted].¹³⁶

His attitude was indeed representative of many. Court judges described university student behaviour as 'contemptible'.¹³⁷ Newspapers reported 'riots' in the universities and said that students were 'baiting' university administrations with frivolous misbehaviour.¹³⁸ Parliaments noted that it was in the humanities that students rebelled the most, less so in science or engineering.¹³⁹ Despite that, protests on campus, for many, tainted the sense of *all* students' usefulness to society. 'I am getting sick and tired', said Victorian Premier Henry Bolte in 1971, 'of the taxpayer carrying a lot of no-hopers'.¹⁴⁰ What was the good of higher education when its students – and therefore graduates – were useless, spoiled and took the education society funded for granted?

Resentment over the public's contribution to the education of these students heightened when public money became scarce. The effects of global inflation as a result of the 1973 Organisation of the Petroleum Exporting Countries (OPEC) oil crisis were felt from 1974. The Whitlam government, along with its support of the

¹³⁵ Bruce Williams, *Making and Breaking Universities: Memoirs of Academic Life in Australia and Britain 1936-2004* (Sydney: Macleay Press, 2005), 86.

¹³⁶ State of Victoria Parliamentary Debates (Legislative Assembly), 13 April 1972.

¹³⁷ *The Australian*, 26 March 1970.

¹³⁸ *The Australian*, 12 March 1970.

¹³⁹ State of Victoria Parliamentary Debates (Legislative Assembly), 1 October 1969.

¹⁴⁰ 'Uni Head and Staff Locked in. Student Blockade', *The Sun* May 7, 1971.

student estate, was dismissed at the end of 1975.¹⁴¹ Despite the former strength and appeal of student life, participation in higher education began to decline. This was partly demographic: the last of the baby boomers trickled through the universities and colleges. Some decline in student supply was inevitable. This, however, did not fully explain it. As unemployment increased in the second half of the 1970s, the desire for tertiary qualifications declined, even though it was free. Universities (more than Colleges of Advanced Education) had acquired a reputation for irrelevance during the period of student radicalism.¹⁴² But this irrelevance was no longer that of a rarefied knowledge. In public discourse, it was irrelevance for the workplace.¹⁴³

When students started to graduate in larger numbers in a period of high unemployment, they could not all secure the prestigious jobs that university-educated employees had previously enjoyed. In the 1970s, technological development continued but a new economy requiring quantities of tertiary educated labour had not yet fully formed. Graduates were left feeling that they had studied for, but been denied, the right to elite employment. To those graduates, their university or college degree seemed as irrelevant as radical student protesters had declared, though it was a different kind of irrelevance.¹⁴⁴ Educationalists and university administrators, led by the University of California's Clark Kerr, started to discuss ways to demonstrate that tertiary degrees would be useful in a wider range of occupations.

'There can no longer be', argued Kerr, 'a one-to-one relationship between university attendance and employment in a "university-type" job. The job market will need to be

¹⁴¹ Marginson, 'The Whitlam Government and Education', 270.

¹⁴² G.S. Harman and C. Selby Smith (eds), *Australian Higher Education: Problems of a Developing System* (Sydney: Angus & Robertson, 1972), xvii.

¹⁴³ Edward Gross and John S. Western, *The End of a Golden Age: Higher Education in a Steady State* (St. Lucia: University of Queensland Press, 1981), 1–9.

¹⁴⁴ *Ibid.*, 5.

democratised'.¹⁴⁵ He claimed that society needed to encourage more workplaces to consider the benefits of university-educated staff who would think differently about their business. The knowledge-based economy would emerge in this iterative way: as tertiary educated young people entered workplaces, they would change the nature of the work – and vice-versa.¹⁴⁶ In the mid-1970s, this transformation was only just beginning, but it led Kerr to anticipate that universities would soon be even more fundamental to society.

Despite the later emergence of the 'knowledge economy' that Kerr predicted, his optimism that universities would grow in importance was not borne out in the late 1970s. Complaints about the irrelevance of higher education were not confined to those who graduated and had difficulty securing a good job. Despite the close connections between universities, government and industry since the Second World War, employers declared, as they would repeatedly over the next two decades, 'our educational systems have developed out of touch with the requirements of industry and the community'.¹⁴⁷ Pessimism about the tertiary sector set in: perhaps the age of the university was past? 'I do not see', proclaimed Ian Spicer, then director of Victorian Employers' Federation, 'the future of higher education in Australia holding the dominant position in education that it has had in the past'.¹⁴⁸

¹⁴⁵ Clark Kerr, 'The Speed of Change', in Robert McCaig (ed.), *Policy and Planning in Higher Education* (St. Lucia: University of Queensland Press, 1972), 170.

¹⁴⁶ Clark Kerr, *The Uses of the University – with a Postscript* (Cambridge M.A.: Harvard University Press, 1972), 87–91. Kerr, 'The Speed of Change', 167–75.

¹⁴⁷ Ian Spicer, 'An Employer's View', in Terry Hore Russell D. Linke, and Leo H.T. West (eds), *The Future of Higher Education in Australia* (Melbourne: Monash University Press, 1978), 103.

¹⁴⁸ *Ibid.*, 105.

Conclusion

The past to which Ian Spicer referred was not that long ago. In the mid-1960s, in the aftermath of the Murray and Martin reports, the universities and Colleges of Advanced Education seemed to embody the best of what a democracy could offer its people. Researchers explored ideas that would benefit Australia's technological development, underpin its social and economic progress and assure its political stability. With scholarships aplenty, higher education was open to talented students, regardless of their social background, although such a conclusion masked the inequalities built into the school system, which favoured the academic results purchased through access to private schools. Colleges of Advanced Education, however, offered a cost-effective way of making education available to more students, with a focus on professional skills that would assure economic prosperity for the nation as well as for graduates.

Radical students and academics, however, argued that an ideological apparatus underpinned this utopia, destabilising the public's faith in the inherent goodness of higher education and the absolute reliability of university research. They claimed that university knowledge was controlled and deployed for the benefit of an elite. They showed knowledge to be a kind of power and that teaching and examination gave academic staff an authority that could be exploitative. Education in its established form encouraged conformity, bolstering social structures that privileged some sections of society over others. Student revolutionary movements encouraged new ways of thinking about those structures, so that universities became sites for the growth of feminism, indigenous rights and other movements for social reform. As

well as transforming many aspects of university life, however, they also encouraged the public to question and challenge the university's right to control knowledge.

Those unconvinced by student radicalism – often people who also broadly derided the youth movement, with its 'outlandish' fashion, politics and new ways of speaking – felt that the universities were mistaken in capitulating to student demands. And yet, issue by issue, capitulate they did, often in very public arenas. Professorial authority was diminished, raising questions about the value of the expertise the university itself proclaimed. Vocal and disruptive students, on the other hand, were granted a respect and responsibility that they denied their seniors. What sort of employees would they one day make?

Hopes that a new generation of students and a restructured higher education sector would develop into a source of social and economic reform proved illusive.

Ironically, despite radical opposition to the financial inequalities that resulted from higher degrees, this was because education that made students, through their dissenting views, useful citizens did not, in the new economic environment, secure for them the level of financial success they had been led to expect. A university education seemed less useful and relevant than it had a decade earlier. Despite the popularity of Whitlam's education reforms, by the time of the dismissal, public sentiment was turning. If higher education was not there to support social and economic progress, what was its purpose?

Chapter Four: Knowledge Economy 1975 - 1989

Higher education delegates from all of the Organisation for Economic Co-operation and Development (OECD) countries gathered in Paris in October 1981. They pondered what they felt to be their most perplexing question: what had happened to the respect academics used to command? New values derived from 1960s and 1970s radicalism had undermined many aspects of the old stratified structure within the universities, reducing the prominence and status of the professoriate. It was a change most considered to be appropriate. But the welcome inclusivity was transforming into something new. The delegates struggled to put their collective finger on it. Perhaps the expansion of the 1960s was to blame:

It may be that with so many admitted into the temple, the mystery is gone, the secrets are out and former respect and awe have given way to a more cynical view of the virtues and vices of the priesthood.¹

Certainly, student movements of the 1960s and 1970s had exposed the characteristics of the academic ‘priesthood.’ Universities were no longer places in which unquestioned respect and awe were automatically associated with expertise. This was creating difficulties, however, for those academic leaders who still relied on established hierarchies to assert the university’s authority and importance in society.

The OECD delegates admitted that the late 1970s had been challenging in other ways as well. Demographic changes (in Australia, for instance, they had finished educating the last of the baby boomers) led to an income plateau for universities that, over the

¹ OECD, *Policies for Higher Education in the 1980s. Proceedings of the Intergovernmental Conference of the OECD, October 1981* (Paris: OECD, 1983), 8.

previous two decades had become accustomed to growth.² Moreover, when the Organisation of Petroleum Exporting Countries (OPEC) cut production and tripled the price of oil, high inflation globally meant government financial resources, essential for funding public institutions such as universities, were severely straitened.³ Delegates from many member countries reported that their governments, forced to make ruthless decisions about funding priorities, publicly questioned if higher education had genuine value to the nation. There was a ‘real danger’, they agreed, that if the current crisis in public confidence in higher education continued, the university ‘could be seriously and perhaps irretrievably compromised’.⁴

In Australia, the OPEC oil crisis and the 1975 dismissal of the Whitlam government prompted a re-evaluation of traditional economic strategies – Keynesian economics seemed to offer no solution to the then unique combination of high inflation (leading to high wages) and low productivity (leading to high unemployment), a situation that became known as ‘stagflation’.⁵ Liberal Prime Minister Malcolm Fraser, who had long believed that Australia needed to be weaned from its ‘handout mentality’, argued that government could not spend its way out of recession.⁶ Lowering inflation, Fraser maintained, was the government’s key economic target. His priority, then, was to cut public expenditure, particularly where it was not currently contributing to the nation’s

² Edward Gross and John S. Western, *The End of a Golden Age: Higher Education in a Steady State* (St. Lucia: University of Queensland Press, 1981), 1–9.

³ W.M. Corden, ‘Framework for Analysing the Implications of the Rise in Oil Prices’, and Harry G Johnson, ‘Higher Oil Prices and the International Monetary System’, in T.M. Rybczynski (ed.), *The Economics of the Oil Crisis* (London: Macmillan, 1976), 23–4, 163.

⁴ OECD, *Policies for Higher Education in the 1980s*, 8.

⁵ Martin Shanahan, ‘Economic Policy of the Hawke Years’, in Gerry Bloustien, Barbara Comber, and Alison Mackinnon (eds), *The Hawke Legacy* (Adelaide: Wakefield Press, 2009), 168. Stuart Macintyre, *A Concise History of Australia (Third Edition)* (Melbourne: Cambridge University Press, 2009), 240.

⁶ Patrick Weller, *Malcolm Fraser: A Study in Prime-Ministerial Power in Australia* (Melbourne: Penguin, 1989), 219.

economic productivity.⁷ As a result, higher education investment under Fraser was contingent, he announced, on its positive contribution to the Australian economy.⁸

The Liberal Fraser government's actions to align higher education to economic goals had a lasting impact in setting the terms of the debate that would follow, even though Fraser struggled to implement the full set of his proposed reforms. The election of the Labor Hawke government in 1983, however, did not turn back the tide of liberal economic reform. In fact, it accelerated it, with profound consequences for universities. Keen to shed their association with Whitlam's reputation for poor economic management, members of the Hawke government concentrated on fiscal responsibility and economic reform. In December 1983, Hawke floated the dollar, formally connecting, through international market evaluation of Australian currency, domestic industry to the global economy. It was essential to Hawke's plans that structural transformations in the Australian economy be achieved rapidly to ensure that Australia adapted to changes in international trade. Australia, Labor argued, needed to diversify exports and protect itself from international price fluctuations in agricultural products and minerals. Increased productivity was required to lower both inflation and unemployment. Australian industry and commerce needed to adapt to an international marketplace. In this context, the Hawke government sought changes to higher education that would support Australian businesses to modernise and flourish in a global economy.⁹

⁷ Ibid., 221–31.

⁸ Commonwealth Parliamentary Debates (House of Representatives), 22 March 1979: hereafter CPD (HoR).

⁹ Shanahan, 'Economic Policy of the Hawke Years', and Ian Davey and Ianto Ware, 'Equity, Globalisation and Higher Education', in Gerry Bloustien, Barbara Comber, and Alison Mackinnon (eds), *The Hawke Legacy* (Adelaide: Wakefield Press, 2009), 169–72. John Dawkins, *Skills for Australia*, DEET (Canberra: AGPS, 1987), 3.

In this environment of economic reform, university leaders were confronted with significant challenges. Sustaining their sense of independence and protecting cherished academic traditions were increasingly difficult when higher education was becoming a subject for scrutiny and debate, with conclusions that were often far from favourable. Public criticisms found a new vehicle in Rupert Murdoch's *Higher Education Supplement*, added weekly to *The Australian* newspaper in 1980.¹⁰ 'More scholar for the dollar' was the headline emblazoned in that publication, a catch-phrase for the decade that captured a widespread belief that universities should increase their efficiency and their worth to the public.¹¹

Staff in universities, Colleges of Advanced Education and Institutes of Technology were not immune to this public debate. While higher education's connections to economic growth had been mounting for decades, now was the time, academics and institutional administrators found, to settle on the appropriate type of relationship universities and these other institutions should have to the national economy. Opinion across the academic community, however, was divergent. While an increasing number were persuaded that universities needed to take a more market-oriented approach, teaching and producing research that had tangible commercial value, others sought to retain Whitlam's policies of free education and academic and institutional autonomy.¹² The issues were debated and published by university leaders, staff and students in the media and in a growing number of scholarly works that focused on

¹⁰ Michelle Ferguson, 'More Scholar for the Dollar', *The Australian Higher Education Supplement (HES)*, 26 August 1981.

¹¹ For example, William Hamilton, 'The Challenge Is to Do Better with Less', *HES*, 2 April 1980. 'A Bigger Bang out of Every Buck', *HES*, 25 June 1980. John Bremer, 'Britain Facing an End to Enlightenment', *HES*, 17 February 1982. Stephen Johnson, 'Academics Far Too "Selfish"', *HES*, 12 May 1982.

¹² Simon Marginson *Education and Public Policy in Australia* (Cambridge: Cambridge University Press, 1993), 23–7, 61.

higher education. Libraries bulge with their reports, reviews, comments and responses as all segments of the tertiary sector grappled with an era of reform.

Subsequent reflections and analyses of university and political decisions in transforming higher education in the 1980s focus on the growth of market values in university decision structures. Peter Karmel – a ‘godfather’ of higher education policy, contributing to every review between Murray’s in 1957 and Bradley’s in 2008, the last submission just months before his death – considered, on reflection, the installation of market forces did not go far enough to justify the loss of institutional autonomy. Karmel strongly criticised increased government control of higher education, but on the other hand, he thought that the university system would improve if it was regulated by student choice in a market, though he hoped student fees would be paid in the form of government-subsidised vouchers.¹³

Simon Marginson is one of the most prominent scholarly critics of the shift towards the market that occurred in this period. During the 1980s he was employed as a research officer for the Federation of Australian University Staff Associations (FAUSA) and his submissions and letters appeared regularly in the *Higher Education Supplement*.¹⁴ In the 1990s, Marginson published several critiques of education policy in Australia, particularly focused on the reforms of the 1980s. He described structural

¹³ Peter Karmel, ‘Education and the Economic Paradigm: The Cunningham Lecture’, in Brian Crittenden (ed.), *Confusion Worse Confounded: Australian Education in the 1990s. Occasional Paper Series 1/1995* (Canberra: Academy of the Social Sciences in Australia, 1995), 10–12. On Peter Karmel: Simon Marginson and Mark Considine, *The Enterprise University: Power, Governance and Reinvention in Australia* (Cambridge: Cambridge University Press, 2000), 31. P.H. Karmel, ‘Submission to Review of Australian Higher Education’, Department of Education, Employment and Workplace Relations, <http://www.deewr.gov.au/HigherEducation/Review/Pages/ReviewofAustralianHigherEducationSubmissions1-100.aspx> Retrieved 3 September 2010.

¹⁴ For example, Simon Marginson, ‘Home Truths More Valuable Than Overseas Comparisons’, *HES*, 2 August 1989.

transformations, resulting from new government policy, which shifted higher education's perceived value away from public good towards private gain.¹⁵ Government priorities increasingly influenced university structures, he later argued with Mark Considine. In response to the Labor government's economic liberalism, senior administrators sought to mirror the values that government expounded by making changes to their management and decision systems, establishing small executive teams that were more flexible and responsive to change.¹⁶ This approach, Marginson and Considine argue, undermined the collegial constitution of the academic community.¹⁷ Instead, academic staff behaviour was increasingly regulated by executive and budgetary power.¹⁸

Marginson and Considine attribute the entry of market values into the universities to the growing influence of neoliberalism in public policy and debate.¹⁹ A small number of neoliberal thinkers such as Friedrich Hayek and Milton Friedman had for decades, in the face of Keynesian orthodoxy, promoted the market as the ideal basis for the economy and society, provided it was unimpeded by government regulation.²⁰ Friedman embarked on an active mission of political and economic reform through public relations, political networking and through the reputedly substantial influence

¹⁵ Marginson, *Education and Public Policy in Australia*, 181–2.

¹⁶ Marginson and Considine, *The Enterprise University*, 68–95.

¹⁷ *Ibid.* See also Stuart Macintyre, *The Poor Relation: A History of the Social Sciences in Australia* (Melbourne: Melbourne University Press, 2010), 329.

¹⁸ Marginson and Considine, *The Enterprise University*, 68–95.

¹⁹ *Ibid.*, 27–30.

²⁰ Simon Marginson, *The Free Market: A Study of Hayek, Friedman and Buchanan and Their Effects on the Public Good* (Sydney: Public Sector Research Centre, 1992), 1–8.

of the many hundreds of free market economists who graduated from the University of Chicago's School of Economics, where Friedman taught.²¹

In particular, Friedman attacked the notion of the 'public interest', challenging claims that politicians and public servants could act in any but their own interest. Since the public interest was a myth, according to Friedman, the assertion of self-interest, through the market, must be the foundation of a politically and economically free society.²² The failure of Keynesian economics to address the consequences of the 1970s oil 'shocks' gave Friedman's ideas a new relevance, leading to their rapid acceptance in government policy internationally.²³ Embraced by Margaret Thatcher's British government in 1979 and by United States President Ronald Reagan in 1980, neoliberalism was also propagated through the growing number of 'think-tanks' in Australia and around the world.²⁴ Friedman's book *Free to Choose*, published in 1980, was highly influential in popular debate, followed as it was by the opportunity, as his wife described it, to 'preach the doctrine of human freedom' in a ten-episode television series.²⁵

In this environment – where old ideas of public good seemed to offer few contributions of value to the new suite of economic problems – universities became increasingly focused on their own self-interest. The 'entrepreneurial university', Michael Gallagher argued from his position in the Department of Education, Training

²¹ Lanny Ebenstein, *Milton Friedman: A Biography* (New York: Palgrave, 2007), 169–83. Graduates of the Chicago School of Economics, for example, formed the backbone of Augusto Pinochet's economic management in Chile. Juan Gabriel Valdés, *Pinochet's Economists: The Chicago School in Chile* (Cambridge: Cambridge University Press, 1995).

²² Simon Marginson, *The Free Market*, 42–3.

²³ David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005), 12.

²⁴ *Ibid.*, 40. Marginson, *The Free Market*, 1.

²⁵ Ebenstein, *Milton Friedman: A Biography*, 182. Milton Friedman, 'Free to Choose (Television Series)', <http://miltonfriedman.blogspot.com/> Retrieved 24 October 2011.

and Youth Affairs, was only partly a result of government policy. Market ‘pull’ also lured university leaders who saw advantages in a shift in priorities towards the market.²⁶ There is some question, Gallagher’s analysis suggests, about whether university leaders were pushed into an entrepreneurial world, or whether they jumped into it voluntarily. The question is paralleled by ambivalence among scholarly accounts about the role of government in forcing economic deregulation and market responsiveness, for the reforms of the period also resulted in a considerable, indeed often meticulously detailed, increase in government control of higher education.²⁷ To a number of scholars, this seemed contradictory. For both Anthony Welch and Simon Marginson, for example, government ‘centrism’, or the centralised and increasingly close regulation of higher education that resulted from Labor policy, was not commensurate with the government’s apparent desire, informed by free market economics, for a deregulated ‘market’ for education and research.²⁸ The confluence of government control and market deregulation points to a potential distinction in government policy between the university and knowledge in which government sought increased control over institutions and their research priorities, but at the same time encouraged them to trade the products of their work in a free and open marketplace.

²⁶ Marginson and Considine, *The Enterprise University*, 14–67. Michael Gallagher, *The Emergence of Entrepreneurial Public Universities in Australia*, DETYA (Canberra: AGPS, 2000), 7.

²⁷ Marginson and Considine, *The Enterprise University*, 99.

²⁸ Anthony Welch, *Australian Education: Reform or Crisis?* (Sydney: Allen & Unwin, 1996), 5. Marginson and Considine, *The Enterprise University*, 27–30. Marginson and Considine firmly describe the Dawkins reforms as neoliberal, though Marginson later interprets them in the opposite way, as ‘centrist rather than neoliberal’ see Simon Marginson, ‘Education and Human Capital’, in Peter Saunders and James Walter (eds), *Ideas and Influence: Social Science and Public Policy in Australia* (Sydney: UNSW Press, 2005), 79.

1975-1983: The Fraser Response

After the 1975 election of the Liberal-National coalition led by Malcolm Fraser, a review of higher education was commissioned to consider how the government might reform universities to encourage research and teaching of greater economic utility.

University of Sydney Vice-Chancellor and academic economist Bruce Williams chaired the committee, which reported in 1979. Minister for Education John Carrick praised this review, declaring:

The comprehensive report of the Committee will be a source of substantial influence over developments in education and its interaction with the world of work for the remainder of the 20th century.²⁹

Despite this claim, the Williams report is hardly remembered, neglected even in its author's autobiography.³⁰ This bulky, two-volume review of Australian education was nevertheless influential for, while it did not advocate radical change, instead reinforcing many of the conclusions of the 1965 Martin Report, it provided the government with the data and analysis it needed to address connections between higher education and the economy.³¹

The most urgent issue, given the economic environment, was that higher education seemed too costly. Student demand had plummeted. Growth of eight to nine percent had been the norm, but in 1979 it had dropped to just over two percent and was to fall even further in the 1980s.³² In response, many believed there to be too many universities. Some critics argued that Griffith, Murdoch and Deakin universities should never have been established, but Williams pointed out that there had been no

²⁹ CPD (HoR), 22 November 1979. The report had been tabled in March.

³⁰ Bruce Williams, *Making and Breaking Universities: Memoirs of Academic Life in Australia and Britain 1936-2004* (Sydney: Macleay Press, 2005).

³¹ Bruce Williams, *Report of the Committee of Inquiry into Education and Training (Williams Committee), February 1979*, DET (Canberra: AGPS, 1979).

³² DETYA, *Time Series Report* (Canberra: AGPS, 2000). Growth peaked at twenty-two percent in 1973, but this anomaly is a result of also counting pre-service teachers for the first time.

way of knowing that, soon after they were built, both the economy and student demand would fall. Williams's evaluation of the need for constraint was offset by his long-term vision – Australia might have too many universities *right now*, he argued, but with projected growth in student participation in the 1980s and 1990s they would soon be required.³³ His approach demonstrates a shift in the government's way of evaluating educational need. Policy, even after the Martin Review, had for the previous fifteen years considered higher education to be a right possessed by the individual citizen. Williams, by contrast, made it a question of economic and demographic trends. This tightening of the connection between higher education and the economy initiated a new type of public debate about universities. Increasingly, Australian politicians began to argue that higher education had two primary purposes: workforce planning and economic growth. While thus reflecting the government's desire for instrumentalism, in relying on the category of growing student demand, the Williams report nevertheless still considered higher education an investment in nation-building.

The Liberal Fraser government agreed with Williams that higher education was central to national development. John Carrick applauded Williams's vision:

[It is] the most comprehensive examination ever undertaken in Australia into the provision of education facilities and services for individual development and into the relationship between the education system and the labour market.³⁴

Despite the powerful argument for linking universities to economic growth, Prime Minister Malcolm Fraser discussed the Williams report in language that demonstrated a preoccupation, in the immediate post-Whitlam period, with short-term financial thrift. Government would not support broad increased participation in higher

³³ *Ibid.*, 190.

³⁴ CPD (HoR), 22 November 1979.

education, Fraser suggested, declaring that ‘plans for growth in the number of students should be related to prospective growth in gross domestic product’.³⁵

Growth, however, needed to be balanced against other trends in the employment market, according to the Williams Report. High unemployment and large numbers of graduates had led to ‘credentialism’: jobs that did not ‘really’ need tertiary qualifications now required them.³⁶ Clark Kerr, President of the University of California and author of the widely read *The Uses of the University* had argued that this needed to happen, that society and economies would be transformed (producing the ‘knowledge economy’) as degree-holders moved into previously less educated fields.³⁷ But with less public money on hand, now such change seemed wasteful. Free education should be made more sparingly available. Students, Williams argued, should receive only socially necessary education, not the surplus education possible in times of affluence.³⁸ Nevertheless, a modest increase in student participation would be necessary to assure economic growth.³⁹ New students should be recruited only to skill areas required by the struggling economy, not in traditional disciplines like Arts and Science.⁴⁰

From this perspective, efficiency was key. Fraser’s strategy was to plan for constrained growth, using Menzies’ binary framework to this end:

³⁵ CPD (HoR), 22 March 1979.

³⁶ Williams, *Report of Williams Committee*, February 1979, v.

³⁷ Clark Kerr, *The Uses of the University – with a Postscript* (Cambridge M.A.: Harvard University Press, 1972), 109–23. Clark Kerr, ‘The Speed of Change’, in Robert McCaig (ed.), *Policy and Planning in Higher Education* (St. Lucia: University of Queensland Press, 1972), 169–70.

³⁸ Williams, *Report of the Williams Committee*, 156, 461–77. See Commonwealth Parliamentary Debates (Senate), 4 April 1979: hereafter CPD (Senate).

³⁹ *Ibid.*, 42–4.

⁴⁰ *Ibid.*, 667–704.

Most of the expansion in numbers in the Committee's projection - which is based on an assumed two per cent annual growth in productivity - should be accommodated in colleges of advanced education and technical and further education.⁴¹

The critical question, given the overall Federal budget situation, was how to fund even small increases in enrolments. Fraser intended to offset that expansion, to the consternation of many members of the public, by reintroducing student fees.⁴²

In addition to increased efficiency, Fraser also sought to cut expenditure. Reducing operating costs would, alongside new student fees, facilitate the modest expansion the Williams report predicted without straining the government's financial resources. The government reduced recurrent funding and restructured the Colleges of Advanced Education, forcing them to amalgamate, believing a smaller number of larger institutions would be more efficient.⁴³

This complemented Fraser's third approach, which was to seek new efficiencies in the system. Tenure (the security of continuing academic employment) was now a target for reform. New employment structures, free of tenure, dozens of conservative voices thundered, would encourage increased efficiencies.⁴⁴ Three separate inquiries into tenure took place between 1979 and 1983. Rational choice theory, one of the key tenets of neoliberalism, was growing in popularity as a means for explaining both human behaviour and economic patterns.⁴⁵ This theory insisted that when

⁴¹ CPD (HoR), 22 March 1979.

⁴² CPD (Senate), 4 April 1979.

⁴³ John Bremer, 'Razor Rule: Fraser's Cuts Put TEC in Jeopardy', *HES*, 6 May 1981. Michael Pollack, 'Razor Gang "Guilty of Misuse of Power"', *HES*, 3 June 1981. Madeleine Mattarozzi Laming, 'Seven Key Turning Points in Australian Higher Education Policy, 1943-1999', *Postscript 2* (2), 2001, 239-73.

⁴⁴ For example, Stephen Johnson, 'No Tenure for Profs CTEC Tells Hearing', *HES*, 24 February 1982. 'Emy the Tenure Villain Hits Back', *HES*, 31 March 1982. Stephen Johnson, 'Moves for Academic Social Contract', *HES*, 30 June 1982. 'Overseas Job Models Praised', *HES*, 6 July 1983.

⁴⁵ Marginson, *The Free Market*, 45-58.

employment was secure, the only rational choice was to do as little as possible.⁴⁶

None of the enquiries, however, affirmed the theory. Abolishing tenure would ‘not solve the problems of incompetent, lazy or disaffected staff’, found the 1982 Standing Committee on the Tenure of Academics. Its members were impressed with academics, despite rumours:

The one point I would like to make is that the various accusations that were made that a lot of academics are bludgers was not proved to my satisfaction in any form.⁴⁷

Belief in rational choice theory, however, was taking such hold that another inquiry was initiated within the year.

The academic staff associations, goaded by the threat to Whitlam’s education policies, took action. As a result of the expansion in higher education in the 1960s, staff unions now had many more members than when they had tackled the Ward and Orr cases.

Now, large numbers of academics protested the ‘razor rule’ of Fraser’s forced amalgamations and funding cuts, threatening that universities would refuse to collect fees if government imposed them.⁴⁸ Student unions joined staff to demonstrate. Vice-Chancellors (‘among the least militant members of the community’, Labor politician Peter Milton pointed out in parliament) actively supported these demonstrations.⁴⁹

Protest was effective. Whitlam was gone, but for many in the community the principles of free education were now considered sacrosanct, fuelling resistance to Fraser’s reform attempts.

⁴⁶ See Guy Redden ‘Publish and Flourish, or Perish: RAE, ERA, RQF, and other Acronyms for Infinite Human Resourcefulness.’ *M/C Journal* 11 (4), 2008, 34–6.

⁴⁷ Robert Ray, ‘The Report of the Senate Standing Committee on Education and the Arts on the Tenure of Academics’, CPD (Senate), 21 October 1982.

⁴⁸ Di Coutts, ‘Anti-Razor Rule Rally Fires First Shot’, *HES*, 17 June 1981. Stephen Johnson, ‘Call for a Boycott on Fees’, *HES*, 8 July 1981.

⁴⁹ Peter Milton, ‘States Grants (Tertiary Education Assistance) Bill 1981 – Second Reading’, CPD (HoR), 21 October 1981.

1983-1987: Susan Ryan's Approach

In 1983 Australians elected a new Federal Labor government, led by Prime Minister Bob Hawke. Hawke sought immediately to assure the nation of his credentials as an economic manager and to depict his party as reformers, with a focus on economic adjustment.⁵⁰ Hawke and his Treasurer, Paul Keating, presented themselves as modernisers, bringing economic policy to the forefront of government business to reassure the public, particularly the business community, that their economic management would lead to tangible financial benefits. To achieve this, they were convinced that they needed to distance themselves from the public perception of fiscal irresponsibility associated with the Whitlam period. As most of Hawke's ministry had been in parliament during the Whitlam years, the 'dismissal' was an ever present scar they were desperate to heal. 'As a matter of style as well as substance', explained the new Minister for Education, Senator Susan Ryan, 'Cabinet was determined to reject anything that smacked of Whitlamism'.⁵¹

Fiscal restraint was thus a priority, but for Ryan and her Labor colleagues the greater concern was the long-term economic challenge.⁵² Refocusing universities towards national priorities, Labor believed, was crucial. Higher education could only expect growth, warned Ryan, if it helped support government goals.⁵³ In seeking to direct the attention of universities to the nation, Ryan commissioned a review of Australian-

⁵⁰ Nick Dyrenfurth and Frank Bongiorno, *A Little History of the Labor Party* (Sydney: UNSW Press, 2011), 146–8.

⁵¹ Susan Ryan, *Catching the Waves: Life in and out of Politics* (Sydney: Harper Collins, 1999), 250.

⁵² Ibid. Marie Brennan and Alan Reid, 'Education, Equity and the Hawke Government', in Gerry Bloustien, Barbara Comber, and Alison Mackinnon (eds), *The Hawke Legacy* (Adelaide: Wakefield Press, 2009), 59.

⁵³ Fia Cumming, 'Ryan Tips Modest Growth if Institutions Fit Government Aims', *HES*, 23 March 1983.

focused content across all institutions.⁵⁴ This was a radical step, given the traditional character of Australian university education. Australian universities, until the 1970s, had been ‘oriented to Britain’.⁵⁵ Many staff had originated or been trained there. This, and earlier tendencies to identify England as the source of culture, had led Australian academics to see British universities as the benchmark for quality curricula.⁵⁶ It was time, Ryan’s review argued, for Australian universities to teach what was relevant to Australia.⁵⁷ The fact that this aligned with Ryan’s personal interest in Australian literature was, for her, a bonus.⁵⁸ There was indeed a boom – in hindsight short-lived – in Australian Studies in the 1980s and 1990s, although as Ann Curthoys noted, it is difficult to evaluate how much of that change is attributable to the report itself.⁵⁹

Demands for increased relevance in universities, however, could not be met just by Australianising existing curricula. Since Australian industry and commerce needed to adjust to the demands of its connection to the global economy, critics argued that it was more important for the system to address the needs of Australian business.⁶⁰

Business and economics graduates would be needed to do the analysis and planning structural adjustment required. Science and technology would assure industrial competitiveness.⁶¹ Research was the substance that would underpin the needed productivity increases, though university research was not the only answer. Senator

John Button, the Federal Minister for Industry and Commerce, put in place incentives

⁵⁴ V.K. Daniels, B.H. Bennett, and H. McQueen, ‘Windows onto Worlds: Studying Australia at Tertiary Level. Report of the Committee to Review Australian Studies in Tertiary Education’, DETYA (Canberra: AGPS, 1987), 13–4.

⁵⁵ Ann Curthoys, ‘Windows onto Worlds: Studying Australia at Tertiary Level (1987): A Reconsideration’, in David Carter, Kate Darian-Smith, and Gus Worby (eds), *Thinking Australian Studies: Teaching across Cultures* (St Lucia: University of Queensland Press, 2004), 61.

⁵⁶ Ibid. Susan Ryan, ‘The Challenge of Australian Studies’, *Journal of Australian Studies* 8 (15), 1984, 3–9.

⁵⁷ Daniels, Bennett, and McQueen, ‘Windows onto Worlds’, 229–32.

⁵⁸ Ryan, *Catching the Waves*, 75.

⁵⁹ Curthoys, ‘Windows onto Worlds: A Reconsideration’, 68.

⁶⁰ For example, ‘Respond to Community Needs, Says Principal’, *HES*, 23 April 1980.

⁶¹ CPD (HoR), 16 May 1985.

for industrial research and development, which helped quell the critics of Australian universities who argued that higher education was ill-equipped for research that would support economic goals.⁶² The sector's irrelevance to business, argued its would-be reformers, was a result of the kind of staff the system supported: elite scholars pursuing useless topics. The *Higher Education Supplement* focused on rumours of lazy, layabout dons who spent now scarce public funds conducting 'hobby' research.⁶³

'Hobby' research became the subject of political scrutiny. In 1986 the Federal opposition enacted a 'waste watch committee' that among other things targeted apparently profligate research projects approved under the Australian Research Grants Scheme. In parliament, academic research became the object of ridicule:

The Waste Watch Committee... pointed out last week a large number of grants which it suggested may well be inappropriate at a time when Australia is in such an economic crisis. These grants [included] matters of immediate moment such as motherhood in ancient Rome.⁶⁴

The academic response sometimes reinforced suspicions held by politicians that scholars looked down on them, claiming public money as a right rather than a privilege to be repaid through advances in knowledge and useful inventions. As the committee explained:

Members of the Waste Watch Committee were attacked as being philistines for daring to suggest that the academic community might well have imposed upon it the same restraint in financial terms that the rest of society is being obliged to bear.⁶⁵

⁶² Jane Ford, 'Science No Panacea to Industry: Button', *HES*, 29 November 1985. Senator John Button 'Industry Research and Development Bill', CPD (Senate), 6 June 1986.

⁶³ For example, Hamilton, 'The Challenge Is to Do Better with Less' *HES*, 2 April 1980. 'A Bigger Bang out of Every Buck' *HES*, 25 June 1980. Bremer, 'Britain Facing an End to Enlightenment', *HES*, 17 February 1982. Johnson, 'Academics Far Too "Selfish"', *HES*, 12 May 1982.

⁶⁴ Senator Michael Baume, 'Australian Research Grants Scheme: Report on Grants Approved for 1987.' CPD (Senate), 18 March 1987.

Both sides of parliament agreed that government funding should no longer be a blank cheque to support whatever research academics felt inclined to pursue. Research, they believed, should have an observable impact. Even if academics were doing more than pursuing ‘hobbies’, in straitened circumstances they should be willing to prioritise their work for the benefit of the nation and if not, funding bodies should clearly do so. ‘There is no reason at all’, said one Liberal Senator, ‘why...the academic community should be in any way exempt from bearing its share of the burden...[of] restraint in government expenditure. That restraint is accepted by the Government and the Opposition alike.’⁶⁶

Financial restraint was not, at that time, commensurate with universities’ reputations. Academics had become associated with the worst of public service inefficiencies.⁶⁷ This struck a chord with a deeper public disaffection with those whose livelihood was funded through the public purse. Disdain for the performance of the public service, derived from Milton Friedman’s criticisms internationally, was affirmed in popular culture through such media as the BBC series *Yes, Minister*, which exposed a public service that was self-serving, inward looking and wasteful.⁶⁸

The public needed to be reassured that government would take such apparent wastefulness seriously. Susan Ryan was pressured, she later recounted, to make widespread market-based reforms to higher education, but she remained ambivalent.⁶⁹ Nonetheless, the pressure was mounting and she asked Hugh Hudson, then chair of the Commonwealth Tertiary Education Commission, to conduct a review of

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ See, for example, Michelle Ferguson, ‘Research Funds Being Wasted’, *HES*, 14 October 1981.

⁶⁸ *Yes Minister* website <http://www.yes-minister.com/episodes.htm> Retrieved 30 July 2010. Marginson, *The Free Market*, 42–3.

⁶⁹ Ryan, *Catching the Waves*, 251–3.

efficiency and effectiveness in higher education. Released at the end of 1986, for would-be reformers, the report was a disappointment.⁷⁰ Instead of affirming their conviction that Whitlam's policies had made the universities fat and indolent, the report said:

There have been substantial improvements in the efficiency and effectiveness of higher education over the last decade. On the other hand, the scale and rate of change, coupled with the pressure on resources have also had its effect. To some extent, morale has been affected and standards reduced.⁷¹

The report seemed a symptom of the system's disease, not a diagnosis. Susan Ryan and the Commonwealth Tertiary Education Commission, it was whispered in the corridors of public service buildings across Canberra, were altogether too cosy with the universities.⁷²

These approaches led Labor powerbrokers to identify Ryan as an 'unreconstructed Whitlam supporter', an indication of her too-soft approach to the universities and her unwillingness to move on to the harder, economic-rationalist policies of the government.⁷³ Struggling to sustain her position, she joined then Minister for Trade, John Dawkins, in implementing a recommendation recently released by the Department of Foreign Affairs: the universities were invited to offer fee-paying courses to international students.⁷⁴ The goal was to convert higher education from a

⁷⁰ Robert H.T. Smith, *Interview with Robert H.T. Smith – Interviewer Hannah Forsyth, 15 June 2010* (Recording in possession of the author). Macintyre, *The Poor Relation*, 238.

⁷¹ H.R. Hudson et al., *Review of Efficiency and Effectiveness in Higher Education* CTEC (Canberra: AGPS, 1986), 18.

⁷² G.A. Mawer, *Interview with Allen Mawer – Interviewer: Rodney Cavalier*. NBEET Oral History Project (Canberra: National Library of Australia, 1993). Don Aitkin, *Interview with Don Aitkin – Interviewer Hannah Forsyth, 3 May 2010* (Recording in possession of the author).

⁷³ John Cain and John Hewitt, *Off Course: From Public Place to Marketplace at Melbourne University* (Melbourne: Scribe Publications, 2004), 41. Despite that, true to Labor tradition, Susan Ryan did attack the universities as 'bastions of privilege' at one point, see Geoff Stokes and Angus Edmonds, 'Dawkins and the Labor Tradition: Instrumentalism and Centralism in Federal ALP Higher Education Policy 1942-88', *Australian Journal of Political Science* 25 (1), 1990, 15.

⁷⁴ Ryan, *Catching the Waves*, 236.

public liability to a publicly owned asset by establishing an export market for university education. If higher education could become a key exporter, argued Australian National University economist Helen Hughes, a prominent supporter of the scheme, it would improve both the national balance of trade and the perceived economic contribution of Australian universities.⁷⁵ As well as supporting the economy through relevant teaching and research, higher education would help diversify exports by becoming one themselves.⁷⁶ Moreover, by tying university income to international student demand, universities would become more responsive to global economic trends.⁷⁷

Helen Trinca, editor of the *Higher Education Supplement*, reflected widespread opinion within the universities by describing the policy as an ‘experiment in privatisation’:

It is something of an off shore coup for the free-marketeers in higher education, a dry-run for deregulation, if you like, that could well spill over to the domestic system.⁷⁸

Susan Ryan was uncomfortable with the proposal, but hoped it was a compromise that would prevent fees spreading like a contagion through the rest of the system.⁷⁹ What she found especially irksome about discussion around establishing an international export market was that it added volume to the privatisation lobby. Privatisation was becoming a popular preoccupation: ‘It seemed that the tag ‘private’ could justify

⁷⁵ Helen Hughes, ‘Education as an Export Industry’, in David R. Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1988), 217–46.

⁷⁶ Davey and Ware, ‘Equity, Globalisation and Higher Education’, 72–3.

⁷⁷ Gallagher, *The Emergence of Entrepreneurial Public Universities in Australia*, 9.

⁷⁸ Helen Trinca, ‘Higher Education Approaches an Exciting Frontier: Comment’, *HES*, 4 September 1985.

⁷⁹ Ryan, *Catching the Waves*, 252–3.

almost any inefficiency’, Ryan reflected in the 1990s, ‘publicly funded had to mean inefficient, unaffordable, low standard’.⁸⁰

Free Market Critics

Don Watts, Director of the Western Australian Institute for Technology, enthusiastically advocated privatisation in higher education. ‘Education in Australia, in the absence of even a modest fee, provides no real contractor-customer relationship’, he argued.⁸¹ ‘The institutions simply are not accountable to a market. Students, the real market, have no incentive to question institutional performance.’⁸²

Watts was the most prominent of the neoliberal lobby in higher education. His position was based on his belief in a connection between exchange value and the public value of education:

In commercially-minded societies almost everything has a price and thus a value. There is clear evidence that the Australian society does not understand the value of education. This is not surprising. Goods obtained by gift are difficult to place in an ordered system of values.⁸³

In enhancing public perception of the value of higher education by equating it to a personal financial cost, its actual value would also be enhanced, according to Watts. Competition between institutions for fee income would compel them to produce courses that were higher in quality and more relevant to the workforce.⁸⁴

⁸⁰ Ibid., 238.

⁸¹ Don Watts, ‘The Private Potential of Australian Higher Education’, in David R. Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1987), 35.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Don Watts, *Higher Education in Australia: A Way Forward* (Perth: Australian Institute for Public Policy, 1986), 28–9.

He was not alone in believing that a lack of competition was no good for university quality. ‘The universities are essentially large-scale worker-cooperatives funded by the state’, proclaimed prominent free market advocates Richard Blandy and Judith Sloane at the Monash Centre for Policy Studies: ‘sheltered workshops for intellectuals.’⁸⁵ An increasing number of voices like Blandy’s and Sloane’s, both inside and outside the universities were at the forefront of new ideas, caught up in the global momentum of neoliberal thinking. On the basis of Friedman’s claim that public institutions would always behave in self-interested ways, neoliberal theory claimed that quality and efficiency would only result from their widespread deregulation, subjecting them to the rigours of competition and consumer demand.⁸⁶ Rather than centralised government planning, neoliberals argued that the public would be better to put their trust in private property, open markets and free trade, securing higher productivity and assuring the best possible performance in the economy.⁸⁷ Higher education might be good for the public, they argued, but public subsidisation interfered with the value system that a market economy would supply, a system they believed would better regulate quality.⁸⁸

Stories highlighted in the *Higher Education Supplement* drew sustenance from neoliberal theory. The *Supplement* idealised a more entrepreneurial academic, a new breed that would meet the challenges of the late twentieth century. ‘Professor Michael Porter’, for example, ‘sees himself as very much outside the mould of your average academic. He adopts the entrepreneur’s approach to research and seems to revel in the

⁸⁵ Richard Blandy and Judith Sloan, ‘In Search of Excellence and Efficiency in Australian Higher Education’, in G.R. Hogbin (ed.), *Withering Heights: The State of Higher Education in Australia* (Sydney: Allen & Unwin, 1988), 76–7.

⁸⁶ G.R. Hogbin, ‘Introduction’, in G.R. Hogbin (ed.), *In Search of Excellence and Efficiency in Australian Higher Education* (Sydney: Allen & Unwin, 1988), 6.

⁸⁷ Harvey, *A Brief History of Neoliberalism*, 2.

⁸⁸ Hogbin, *In Search of Excellence and Efficiency*, 6.

pursuit of commissioned research funds'.⁸⁹ In the *Supplement*'s pages, a contrast was subtly evoked between the staid, aristocratic bumbling of an antique, cloistered and (perhaps worst of all) British tradition of scholarship and the fast-paced, can-do innovation deemed to be characteristic of the American universities.⁹⁰ This new-world scholar actively sought links to (and funding from) industry, focusing their research to the needs of markets.⁹¹ In the United States, *Supplement* articles repeatedly argued, less tenure made academics 'more competitive and aggressive', attributes not traditionally associated with scholarship, but necessary, the Murdoch press contended, for the next phase of university history.⁹²

In the pages of the *Higher Education Supplement*, the entrepreneurial academic was shown battling against the bureaucratic traditionalism of universities. Science journalist Jane Ford wrote of one 'rebel professor' who was leaving the university system for a 'lucrative' position in pharmaceuticals – though not, she wrote, because it paid better:

'The system is dead', he says, 'there is no vision, no management competence, no measure of performance, no original thought and no realisation of the needs of the real world.' The basic problems were a lack of reward for performance, the destructive effect of the tenure system, the lack of interest in technology transfer and an aversion to becoming involved with industry.⁹³

Like that rebel professor, neoliberal economists felt that they struggled to have their arguments heard. Frustrated, academic economist Jon Stanford declared in 1986 that

⁸⁹ Helen Trinca, 'Professor Finds an Entrepreneurial Approach Pays Off', *HES*, 11 January 1984.

⁹⁰ *Ibid.* 'Overseas Job Models Praised', *HES*, 6 July 1983.

⁹¹ Jane Ford, 'National Scheme to Improve University Links with Industry', *HES*, 17 August 1983.

Jane Howard, 'Reliance on Government Funding "Unhealthy"', *HES*, 24 August 1983.

⁹² 'Overseas Job Models Praised', *HES*, 6 July 1983. Trinca, 'Professor Finds an Entrepreneurial Approach Pays Off', *HES*, 11 January 1984.

⁹³ Jane Ford, 'Rebel Professor Attacks "Dead System" in NSW', *HES*, 20 June 1984. 'A Parting Shot at "Mediocre" Universities', *HES*, 1 August 1984.

‘education *is* an economic commodity and should be treated as such’.⁹⁴ Helen Hughes considered hers to be a campaign against organised resistance. She was convinced that using the market to regulate universities would enhance quality, but that it would do so by compelling academics to work harder:

Those whose interests were at risk were mobilising their defences [she said], because they were protecting past privilege. They were well organised, highly articulate and literate.⁹⁵

Cosseted by tenure, a shift toward an educational free market was a hard reality she believed academics resisted out of self-interest.

A willingness to embrace the market thus demonstrated confidence in one’s academic and institutional performance, according to neoliberal logic. Accepting financial incentives rather than government control, argued Don Watts, was to commit to a more efficient university. Under such a system, universities would engage more effectively with society and address urgent economic imperatives. To this end, Watts lobbied for the creation of a private sector in higher education. The success of Australia’s private schools in attracting the children of parents willing to pay for quality schooling convinced him that such a strategy would also succeed at tertiary level.⁹⁶

Susan Ryan was opposed to privatisation on the basis of her commitment to equity.⁹⁷

Furthermore, along with her Labor colleagues, she also believed privatisation added no new value to the tertiary system. If private funding was to enter higher education,

⁹⁴ Jon Stanford, ‘International Trade in Education’, in Roselyn R. Gillespie and Colin B. Collins (eds), *Education as an International Commodity Volume 1* (St Lucia: Australia and New Zealand Comparative and International Education Society, 1986), 47.

⁹⁵ Christopher Dawson, ‘Education Exports: Academic Warns of Missing the Boat’, *HES*, 3 July 1985.

⁹⁶ Watts, ‘The Private Potential of Australian Higher Education’, 29–44.

⁹⁷ Ryan, *Catching the Waves*, 236–8.

she argued, it should go to public universities, relieving the treasury.⁹⁸ For this reason, Labor did not support Australia's first private university, named after notorious 1980s entrepreneur, Alan Bond.⁹⁹ Bond Corporation proposed the university in mid-1986, committing \$125 million to stage one, with a view to enrolling 800 to 1000 students in 1989. Don Watts was to be its first vice-chancellor.¹⁰⁰ Susan Ryan spoke against it:

The stated aims of the Bond proposal are to attract private money in higher education, to bring industry and education into a profitable partnership and to tap the market for wealthy overseas students. All of these things can be done, and are being done, by our public institutions....The Bond proposal offers nothing new or constructive in these areas.¹⁰¹

Bond, however, like every other university outside Canberra, was created by an Act of the State government (in this case Queensland), and the objections of Federal politicians did not prevent its existence.¹⁰²

The practice of privatisation, however, was more troubled than it was in theory. Commercial income did not easily offset the expense of establishing a world-class university overnight. Bond's poorly stocked library would scrape by on interlibrary loan agreements, but undergraduate science had to be cancelled at the last minute, due to insufficient equipment.¹⁰³ Attracting students, amidst talk that Bond was for the rich and stupid, proved difficult. Watts was placed in the awkward position of

⁹⁸ Susan Ryan, 'Address on Privacy', in David R Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1987), 14. See also Christopher Dawson, 'Private Funding Should Go to Public Universities: Ryan', *HES*, 6 August 1986.

⁹⁹ Joe Poprzeczny, 'Era of Hope Emerging, Says Outspoken Watts', *HES*, 14 January 1987.

¹⁰⁰ John T. Ford and Donald W. Watts, 'Initial Plans for an Internationally Significant Private University', in David R Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1987), 75–96.

¹⁰¹ Ryan, 'Address on Privacy', 14. See also Dawson, 'Private Funding Should Go to Public Universities: Ryan', *HES*, 6 August 1986.

¹⁰² Marginson, *Education and Public Policy in Australia*, 221. John Dawkins, *Higher Education: A Policy Statement*. DEET (Canberra: AGPS, 1988). The objections of Federal politicians did prevent its existence in Western Australia, which was Bond University's first proposed location. That state preferred not to move forward without Commonwealth support. Queensland's Premier, Joh Bjelke-Petersen, decided Commonwealth support was not necessary. Ryan, *Catching the Waves*, 237.

¹⁰³ Greg Sheridan, 'Bond's Great Juggling Act', *HES*, 24 May 1989.

claiming that student income support, even in a private university, was a civic right. This position, at least on the surface, seemed to contradict his vocal stance on tuition fees.¹⁰⁴ Despite the struggles, Bond University managed to open its doors in May 1989, with around three hundred students.

Simultaneously, Watts announced that the university was having short-term difficulties meeting its operating costs. He arranged an \$80 million bridging loan in anticipation of a \$200 million, fourteen-year loan, relinquishing the original plan to break even within four years. In August 1989 Bond University ‘promised to pay its bills’.¹⁰⁵ This was more than its patron would achieve. By October, Alan Bond’s \$1.6 billion of debt was exposed, a portent of Bond Corporation’s collapse and Alan Bond’s eventual imprisonment.¹⁰⁶ While the university did better than the man, it was some time before Bond University could extricate itself from difficulties.¹⁰⁷ Shortly after being labelled ‘Captain of the Titanic’ – he was still saying that everything was fine – Watts resigned from Bond University, in 1990.¹⁰⁸

Bond University had been unable to live up to its own fanfare.¹⁰⁹ Watts had certainly talked it up. ‘A degree from Harvard opens doors. In just a few years a degree from

¹⁰⁴ William West, ‘Austudy a Right, Says Watts’, *HES*, 7 June 1989. Watts was completely opposed to government-funded tertiary places, but had actually long claimed income support should be publicly funded, even before it became essential to attracting students to Bond University. He had previously argued that even the wealthy should receive it, so that ‘happy families’ might not be destroyed by lack of student independence. Watts, *Higher Education in Australia: A Way Forward*, 32.

¹⁰⁵ Helen Meredith, ‘Bond Overcoming Setbacks to Face Future with Confidence’, *HES*, 23 August 1989.

¹⁰⁶ Mark Skulley, ‘Bond Losses Hit Record \$1.6bn: Directors Pledge Return to Profits’, *Sydney Morning Herald*, 21 October 1989. ‘Guilty Bond Faces Five Years’ Jail’, *Sydney Morning Herald*, 29 May 1992.

¹⁰⁷ Stuart McArthur, ‘Bond to Make a Second Urgent Loan Approach’, *HES*, 27 September 1989.

¹⁰⁸ Christopher Dawson, ‘Private Bond Investigates Public Money’, *HES*, 6 June 1990. Joe Poprzeczny, ‘Smart Job Takes Watts to Darwin’, *HES*, 19 September 1990.

¹⁰⁹ Sheridan, ‘Bond’s Great Juggling Act’, *HES*, 24 May 1989.

Bond University will do the same’, read the university’s first advertisements.¹¹⁰ Never again would Bond use this strategy, based as it was on Watts’s faith that the cost of education would be universally associated with its worth. The public university tradition in Australia was strongly ingrained. Potential students who did not think of themselves as consumers had not yet learned to connect price to value.

Other privatisation initiatives met with mixed success. Competition from the partially privatised Melbourne business school under Vice-Chancellor David Penington led to the failure of the private Tasman University.¹¹¹ Melbourne University Private, an initiative of a later Vice-Chancellor, lasted only seven years after inflicting substantial financial losses on its public parent.¹¹² An Australian version of the large American private Catholic university, Notre Dame, was given a grant of land in the 1980s, but it struggled financially through the 1990s, finally succeeding through the generosity of the Catholic community and, like Bond University, receiving Commonwealth-subsidised enrolments. This removed its reliance on tuition fees – and much of its financial distinction from public universities.¹¹³ Other private initiatives in the 1980s, such as William E. Simon University, failed, or struggled to the point of failure or near-failure in subsequent decades.¹¹⁴

¹¹⁰ ‘Advertisement for Bond University’, *The Australian Careers and Education Supplement*, 11 January 1989.

¹¹¹ Marginson, *Education and Public Policy in Australia*, 223.

¹¹² Cain and Hewitt, *Off Course*, 149–76, 209.

¹¹³ Marginson, *Education and Public Policy in Australia*, 222–3. Peter Tannock, ‘History of Notre Dame – University Website’, <http://www.nd.edu.au/university/history.shtml> Retrieved 29 July 2011.

¹¹⁴ Marginson, *Education and Public Policy in Australia*, 222–3. Joe Poprzeczny, ‘Privatisation Plan Aimed at Creating “Free Market”’, *HES*, 18 January 1989. Joe Poprzeczny and William West, ‘Lawrence Attacks Canberra’, *HES*, 9 August 1989. Christopher Dawson, ‘Private Uni Planned for WA’, *The Australian Graduate ’89 Special Supplement*, 19 July 1989. Marginson and Considine, *The Enterprise University*, 187. William West, ‘NSW Private Uni Given Go-Ahead’, *HES*, 17 May 1989. William West, ‘Simon Sets a Bait for Top Students’, *HES*, 31 May 1989. William West, ‘Simon at Centre of Bitter Debate on Tax-Exempt University Status’, *HES*, 24 May 1989. William West, ‘No (\$10m) Deal, Monash Tells Tasman’, *HES*, 29 November 1989.

Privatisation was still in its early stages when government policy changed direction. Susan Ryan had repeatedly showed herself unwilling to fully embrace calls for student fees, deregulation, managerial reform or competitive funding. While the system had been opened to fee-paying international students, Ryan's reluctance to implement full-scale reform cost her politically. After the 1987 election she was moved sideways. The new minister, John Dawkins, took over an expanded portfolio that included education, training and industrial relations.

The Dawkins Revolution

Seven people received phone calls or visits from Dawkins or one of his senior staff members shortly after he was made minister, seeking their opinion on higher education reform. 'I knew every one of them', political scientist Don Aitkin said: they had a lot in common. Dawkins was keen to by-pass traditional avenues of advice. 'If he'd asked for advice on research' in the normal way, according to Aitkin, 'he'd get it from eight different areas and they'd all disagree. What's the use of that?'¹¹⁵

Hugh Hudson, suddenly finding that he and his efficiency and effectiveness report had been marginalised in Canberra, 'outed them', scoffing at Dawkins's 'Purple Circle': a name that stuck.¹¹⁶ Helen Hughes and Don Watts joined Don Aitkin from the Australian National University, Robert H.T. Smith from the University of Western Australia, Mal Logan from Monash, Jack Barker from Ballarat College of Advanced Education and Brian Smith from the Royal Melbourne Institute of Technology over dinner to plan the reform of Australia's higher education sector.¹¹⁷ Red wine flowed,

¹¹⁵ Don Aitkin, *Interview*.

¹¹⁶ Robert H.T Smith, *Interview*.

¹¹⁷ No one seems to be able to remember how many dinners there were. Aitkin said two, Smith said three and Dawkins told John Cain and John Hewitt there were four to six. The list of Purple Circle

fuelling conversation. Don Watts – still yet to suffer the launch of Bond University – was as irrepressible in person as he had long been on paper: discussion was lively in any room he inhabited. Dawkins’s staff member Paul Hickey abstained, taking the notes that would become the Green Paper. Drafts of it were circulated on more sober days, when there was time to reflect. When everyone agreed, it was released.¹¹⁸

The publication of the Dawkins Green and White papers and their reception by the universities, Colleges of Advanced Education, Institutes of Technology and the staff associations is well known.¹¹⁹ The moment of the Dawkins reforms and their consequences are recounted and memorialised by the higher education sector like a kind of perverted Bastille Day. The key reforms were designed to facilitate a shift in Australia’s economic foundations towards ‘human resources and labour force skills’, assuring success in the international marketplace.¹²⁰ Only then would Australia be a ‘clever country’, an aspiration that Dawkins claimed he fed to Bob Hawke.¹²¹

To achieve this, Dawkins initiated development of a much larger sector, educating many more undergraduate students in a model that resembled Clark Kerr’s anticipated foundation for the knowledge economy.¹²² To make this expansion towards a mass system of higher education affordable, he also compelled institutions to pursue

members is from interviews with both Aitkin and Smith: it is also in Marginson and Considine, *The Enterprise University*, 31.

¹¹⁸ Details of the Purple Circle are from Robert H.T. Smith, *Interview*. Don Aitkin, *Interview*.

¹¹⁹ Marginson and Considine, *The Enterprise University*, 31. Welch, ‘Introduction’, *The Professoriate: Profile of a Profession*, 1–15. Cain and Hewitt, *Off Course*. Stokes and Edmonds, ‘Dawkins and the Labor Tradition.’ Judith Bessant, ‘Dawkins’ Higher Education Reforms and How Metaphors Work in Policy Making’, *Journal of Higher Education Policy and Management* 24 (1), 2002, 87–99. Simon Cooper, ‘Academic Darwinism: The (Logical) End of the Dawkins Era’, *Arena* 28, 2007, 107–17. Ian R. Dobson, ‘Uneven Development: The Disjointed Growth of University Staffing since Dawkins’, *People and Place* 18 (1), 2010, 31–8.

¹²⁰ Richard Robison and Gary Rodan, ‘Economic Restructuring and the Reform of the Higher Education System’, *Australian Journal of Political Science* 25 (1), 1990, 22.

¹²¹ Cain and Hewitt, *Off Course*, 41.

¹²² Kerr, *The Uses of the University*, 109–23.

economies of scale.¹²³ Ending the binary system, Dawkins forced smaller institutions to amalgamate, creating the capacity for expansion in participation while at the same time increasing the number of universities in Australia by sixteen, to a total of thirty-four.¹²⁴ Student growth was rapid. Whereas in 1987 higher education institutions enrolled 393,734 students (less than 4,000 more than in the previous year), in 1988 there were 420,850 growing to 534,510 by 1991 and 634,094 by 1996.¹²⁵

Such expansion, according to the government's funding priorities, could not be supplied solely from the public purse. A new system of tertiary fees was created, known as the Higher Education Contribution Scheme. The scheme, designed by Bruce Chapman for the Wran Committee on higher education funding, was essentially a graduate tax. The fee was Commonwealth-subsidised and state regulated and would only be repaid at a rate deemed reasonable to a graduate's earnings – and never at all if they did not reach the income threshold or if they moved permanently overseas.¹²⁶ The staff associations were disappointed for, unlike Labor, they had retained an insistence on free education.¹²⁷ Many in Labor, by contrast, had for some time been concerned that public funding of university degrees drew on the taxes of all to systematise financial and social privilege for the university educated. In 1988 they removed free tertiary education from the party platform, supporting the implementation of tuition fees, moderated by equity measures.¹²⁸ Despite having lobbied for tuition fees for some time, Don Watts was disappointed with the scheme:

¹²³ Dawkins, *Higher Education: A Policy Statement*, 41–52.

¹²⁴ Marginson and Considine, *The Enterprise University*, 23–33.

¹²⁵ DETYA, *Time Series Report* (Canberra: Australian Government Publishing, 2000).

¹²⁶ Neville Wran et al., *Report of the Committee on Higher Education Funding*, Department of Employment Education and Training (Canberra: AGPS, 1988).

¹²⁷ Marginson, *Education and Public Policy in Australia*, 182.

¹²⁸ Bruce Chapman, 'Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education', *The Economic Journal* 107 (442), 1997, 738–51. Marginson, *Education and Public Policy in Australia*, 182.

Thinking parents will surely make sacrifices now rather than allow their children to inherit a tax liability.¹²⁹

Even without the contractor-customer relationship that Watts sought, Dawkins nevertheless anticipated that in a more competitive environment, institutions would diversify their course offerings and escalate their efforts to attract students. After the end of the binary system, they would do so, he hoped, on a level playing field, responding to market signals derived from student perception of the job market, improving their performance in providing quality, relevant and useful education.¹³⁰

Further incentives to respond to market signals were embedded in the deregulation of postgraduate coursework. Universities were already increasingly responsive to international trends through their growing reliance on international fee income.¹³¹

But in seeking new fee income from postgraduate coursework, universities would expand their professional training, upgrading the skills of the existing educated workforce.¹³² In so doing, they would assist in the restructure of the Australian economy towards a system based on innovation and resourcefulness. This would lead to a more flexible workforce, Dawkins argued, augmenting the nation's capacity to respond creatively to global economic changes, rather than being paralysed by its threat.¹³³

Structuring universities' responsiveness by connecting their viability to market trends would, according to neoliberal philosophy, also require that higher education be

¹²⁹ Don Watts, 'Graduate Tax Is Political Dishonesty: Letter', *HES*, 9 March 1988.

¹³⁰ Dawkins, *Higher Education: A Policy Statement*, 28.

¹³¹ Gallagher, *The Emergence of Entrepreneurial Public Universities in Australia*, 7–12.

¹³² R. James and K. Beattie, 'Postgraduate Coursework Beyond the Classroom: Issues in Implementing Flexible Delivery', *Distance Education* 17 (2), 1996, 355–68.

¹³³ Dawkins, *Skills for Australia*. See also Australian Science and Technology Council, *Education and National Needs* (Canberra: AGPS, 1987), 5.

separated from government regulation.¹³⁴ It seemed consistent with the dissolution of the Commonwealth Tertiary Education Commission, which had been established by Whitlam to facilitate the expanded role of the Federal government in tertiary funding.¹³⁵ The Tertiary Education Commission, however, like the Australian Universities Commission that it replaced, was seen by those in higher education (particularly Peter Karmel) as a buffer between government and higher education, assuring the universities' relative autonomy.¹³⁶ The new National Board of Employment, Education and Training was instead explicitly minister-controlled.¹³⁷ It was this that Peter Karmel most decried, describing the government's act to take control of higher education as nothing short of a revolution.¹³⁸

The final reform of the Dawkins scheme was a realignment of university research to government and market priorities. A system of allocating government research funds on a competitive basis was developed in the hope that competition would also encourage higher quality research.¹³⁹ This competitive research funding was obtained through a clawback of \$65 million of recurrent university income, reallocating it to the whole system (now including the former colleges) on a competitive basis, evaluated by their relevance to 'national needs'. The Australian Research Council was established to administer it, led by Don Aitkin, Purple Circle member who had for

¹³⁴ Marginson, *The Free Market*, 42–4.

¹³⁵ Grant Harman and V. Lynn Meek, 'Introduction', in Grant Harman and V. Lynn Meek (eds), *Australian Higher Education Reconstructed? Analysis of the Proposals and Assumptions of the Dawkins Green Paper* (Armidale: Department of Administrative and Higher Education Studies, University of New England, 1988), 5.

¹³⁶ P.H. Karmel, *Reflections on a Revolution: Australian Higher Education in 1989* (Canberra: AVCC, 1989).

¹³⁷ Dawkins, *Higher Education: A Policy Statement*, 12.

¹³⁸ Karmel, *Reflections on a Revolution: Australian Higher Education in 1989*.

¹³⁹ Dawkins, *Higher Education: A Policy Statement*, 10–11, 27–9, 91–5.

some years advocated research funding reform.¹⁴⁰ It had started with his ‘road to Damascus’ moment:

I was beginning to react as a political scientist to the notion that I found everywhere in the universities that this was their money. It’s not. It actually comes from taxpayers. There has been an agreement that some of the taxpayer’s money will go to research because - we’re excellent? No! Because it is in their interest...it will lead to, in some tangible, definable way, a better Australia, a better society for them.¹⁴¹

Aitkin’s belief in the specific and tangible civic role of university research shaped his contributions to the Dawkins green paper. National priorities to inform research decisions were related to his idea that academic work should become more professionalised and less dependent on the vagaries of the independent scholar.¹⁴²

Some years working with the Australian Research Grants Committee had led Aitkin to believe that research funding was ‘spread too far, too thinly’.¹⁴³ Competitive allocation, he was certain, would enable the ‘best people’ to be funded ‘properly’.¹⁴⁴ This addressed the concerns of a number of leading researchers. One was Professor Ivan Oliver at the University of Western Australia. He was a biochemist and a member of the University’s research committee. He was quoted in the *Higher Education Supplement*:

¹⁴⁰ CPD (HoR), ‘Ministerial Statement John Dawkins’ (22 September 1987). National Board of Employment Education and Training, *The Transfer of Operating Grant Funds to Competitive Schemes after 1991: Advice of the NBEET and its ARC and HEC*, National Board of Employment Education and Training (Canberra: Government Publishing 1990). Don Aitkin, ‘The Australian Research Grants Committee: An Account of the Way Things Were’, *Prometheus* 14 (2), 1996, 179–94.

¹⁴¹ Don Aitkin, *Interview*.

¹⁴² CPD (HoR), ‘Ministerial Statement John Dawkins’ (22 September 1987). Aitkin, ‘The Australian Research Grants Committee: An Account of the Way Things Were.’ 179–83. Don Aitkin, ‘Axioms for the Academic Profession’, in Peter Chapman (ed.), *40 Years of FAUSA: 1952-1992 Four Decades of Representing University Staff* (Melbourne: National Tertiary Education Union, 1993), 12–3.

¹⁴³ Jane Ford, ‘Frittered Funding Could Leave Us in Backwater’, *HES*, 25 July 1984. William West, ‘Research: Balancing the Baskets’, *HES*, 27 January 1988.

¹⁴⁴ Don Aitkin, ‘Trends in Funding Arrangements’, *Higher Education Quarterly* 42 (2), 1988, 144–51. Aitkin, ‘The Australian Research Grants Committee: An Account of the Way Things Were.’

‘When I tell them [US-based academics] we fund 65 per cent of all applications they say we didn’t realise Australian scientists were so good’, Professor Oliver says. ‘But they have a grin on their faces when they say it, because in America you have to be in the top 25 per cent to get your money.’¹⁴⁵

Of the sixty-five percent of grants awarded, Oliver simply said, ‘we’re not that good’, referring to Australian scientists collectively. Funding levels were starting to function as a signifier of the quality and value of university research. Fewer grants at a higher value, he felt, would ensure Australia could ‘search out excellence’.¹⁴⁶

It was an idea that resonated with the place of financial worth in free market economics as the measure of other kinds of value. How could you tell which research was ‘best’ if everyone was funded equally? Excellent research must have a higher exchange value, according to the emerging logic. For government, this suggested that funding fewer projects at a higher monetary value exhibited a system dedicated to quality.¹⁴⁷ Those who opposed increasing the stakes in competitive research funding were simply, according to free market commentators like Richard Blandy and Judith Sloan, ‘not confident of their capacity to compete’.¹⁴⁸ Scholars like Oliver who were willing to suggest funding fewer projects was evidence, the article implied, of confidence in the quality of their research. This placed a bind on university and government responses alike. Universities – particularly the former Colleges of Advanced Education, compelled to prove their worth to their peers in the older and more esteemed institutions – would be reluctant to describe their research as anything

¹⁴⁵ Carol Simmonds, ‘Too Many Get Easy Research Grants Says WA Professor’, *HES*, 2 November 1983.

¹⁴⁶ *Ibid.*

¹⁴⁷ Ford, ‘Frittered Funding Could Leave Us in Backwater’, *HES* 25 July 1984. See Carol Rose, *Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership* (Boulder, Colorado: Westview Press, 1994), 3.

¹⁴⁸ See Blandy and Sloan, ‘In Search of Excellence and Efficiency’, 63.

less than ‘excellent’.¹⁴⁹ Government too would wish to avoid the implication that, in funding a larger number of projects, they fostered mediocrity. Moreover, it was a useful development for a government obliged to exercise fiscal constraint, for competition pushed the problem of scarcity from government to individual academics, so that policies leading to financial shortages were internalised, in the academic community, as inadequacy.¹⁵⁰

The University Response

For universities, the not-so-secret Purple Circle signalled that change was on its way. ‘I deliberately made it a bit mysterious’, Dawkins later said.¹⁵¹ Releasing revolutionary plans after a nervous wait set Dawkins up as higher education’s bogeyman, triggering widespread, and at times rushed reforms.¹⁵² They were changes that, as Dawkins himself observed, went a long way beyond what was in his power to instate.¹⁵³ Although some vice-chancellors made Dawkins a scapegoat for problems within their institutions, there were others who eagerly took the opportunities reform offered.¹⁵⁴ Whether it was because they agreed with Dawkins or they felt they had little choice, few vice-chancellors opposed the new reforms.¹⁵⁵ Peter Karmel was shocked by their complicity, particularly their willingness to relinquish their autonomy, allowing Canberra to make them ‘agents of government policy’.¹⁵⁶

¹⁴⁹ William West, ‘Tuesday Group Seeks Elitist Return to Dark Ages’, *HES*, 27 September 1989.

¹⁵⁰ Arie Rip, ‘The Republic of Science in the 1990s’, in Fiona Q. Wood and V. Lynn Meek (eds), *Research Grants Management and Funding* (Canberra: Bibliotech, 1993), 1.

¹⁵¹ Cited in Cain and Hewitt, *Off Course*, 45.

¹⁵² Marginson, *Education and Public Policy in Australia*, 122–3. Marginson and Considine, *The Enterprise University*, 30. Karmel, ‘Education and the Economic Paradigm’, 3.

¹⁵³ Dawkins cited in Cain and Hewitt, *Off Course*, 46.

¹⁵⁴ See, for example, Marginson’s account of Mal Logan at Monash, in Simon Marginson, *Monash: Remaking the University* (St Leonards: Allen & Unwin, 2000).

¹⁵⁵ ‘Green Paper Hits Optimistic Reactions’, *HES*, 23 December 1987.

¹⁵⁶ Karmel, ‘Education and the Economic Paradigm’, 3–4.

The context for this complicity is revealing. Faced with growing salary bills and diminishing income, vice-chancellors confronted some difficult choices. Stemming the decline in student numbers was a priority that had led the University of Sydney, for example, around 1980, to start advertising. With so many new universities to compete with, it highlighted its advantages of age and reputation.¹⁵⁷ Members of other universities across the sector were outraged: it was a breach of faith, a betrayal of principles. University members warned that ‘selling themselves like soap powder’ would devalue the work universities did.¹⁵⁸ Once advertising was employed to attract students, it was openly acknowledged that a marketplace was established, positioning students as consumers.¹⁵⁹ One year later most universities were doing it. By 1982, advertising to attract students was described by the press as ‘commonplace’.¹⁶⁰ It symbolised a shift in focus. University leaders were now making unprecedented compromises to shore up their seemingly shaky financial situation.

In addition to seeking new income sources, university leaders looked for ways to produce more research and teach more students with fewer resources. The imperative of ‘more scholar for the dollar’ led vice-chancellors to seek productivity growth by increasing institutional oversight of academic staff workloads and implementing corporate-style performance management schemes.¹⁶¹ Despite adjustments to the style and substance of university leadership towards more corporate, market-focused techniques, change had not gone far enough for John Dawkins. ‘Ossified bodies incapable of adaptation’ was how Dawkins saw the universities, especially the older

¹⁵⁷ Gross and Western, *The End of a Golden Age*, 1–9. ‘Problems of Campus Promotion’, *HES*, 16 April 1980.

¹⁵⁸ ‘Problems of Campus Promotion’, *HES*, 16 April 1980.

¹⁵⁹ ‘Competing for Student Advantage’, *HES*, 27 January 1982. ‘Rationalisation Could Be Irrational’, *HES*, 7 May 1980.

¹⁶⁰ ‘Competing for Student Advantage’, *HES*, 27 January 1982.

¹⁶¹ Hudson et al., *Review of Efficiency and Effectiveness in Higher Education*, 159–90.

institutions.¹⁶² The Green and White papers demonstrated that Dawkins was prepared to use government funding to force the institutions to change.¹⁶³ Melbourne Vice-Chancellor David Penington, who opposed the Dawkins reforms, believed that, for this reason, other vice-chancellors considered outright opposition to be unwise.¹⁶⁴

Penington's perception of the fearfulness of vice-chancellors may have been a result of a conversation he had early in the process. Attempting to garner support for his opposition to government reform, Penington approached his counterpart at Sydney, John Manning Ward. He suggested that together the two universities politely reject Dawkins's invitation to join his National Unified System.¹⁶⁵ Ward refused, however, since membership was requisite to research funding.¹⁶⁶ Penington still believes that had they done so, the Dawkins reforms would have collapsed even before they were implemented.¹⁶⁷ With the instatement of the National Unified System, he also believes that the University of Melbourne suffered as a consequence of his outspoken stance.¹⁶⁸

The unwillingness of vice-chancellors to oppose Dawkins was not the only effect of government use of funding to assert influence over university decisions. Marginson and Considine found that it also led university leaders to take active steps to change key aspects of the university. One of the primary targets, for Dawkins, was university

¹⁶² Stokes and Edmonds, 'Dawkins and the Labor Tradition', 17.

¹⁶³ Marginson and Considine, *The Enterprise University*, 31.

¹⁶⁴ Helen Verlander, 'The Cutting Edge of Penington', *HES*, 4 October 1989.

¹⁶⁵ Christopher Dawson, 'Movement to Opt Out of Unified National System', *The Australian Higher Education*, 10 August 1988.

¹⁶⁶ John Dawkins, 'More Opportunities, Greater Equity. A Summary of the White Paper on Higher Education Released Yesterday', *HES*, 27 July 1988. David Penington, *Interview with David Penington – Interviewer Hannah Forsyth, 1 June 2010*, (Recording in possession of the author).

¹⁶⁷ David Penington, *Interview*.

¹⁶⁸ *Ibid.*

management, although it was technically beyond his control.¹⁶⁹ He offered the universities additional funding to review their management practices.¹⁷⁰ Penington declared that offer to be ‘thirty pieces of silver’ that he hoped universities would never touch, arguing that their traditional collegial approach was better.¹⁷¹ Penington’s actual position on management reform was less clear than his determined opposition to Dawkins might suggest, however: he had in fact already conducted a review of management at Melbourne and implemented a corporate-style staff performance and development scheme.¹⁷²

In response to criticisms from Dawkins and others, collegial mechanisms of decision making were broadly out of favour among vice-chancellors and indeed, many other staff (especially women academics) who had in the past been excluded from the ‘networks of god-professors dispensing grace and favour’ that collegiality had sometimes fostered.¹⁷³ Older collegial structures gave way to smaller, semi-official executive teams who could respond more decisively and flexibly to government and commercial demands. In Marginson and Considine’s study, all administrators they interviewed contrasted the transparency and good organisation of the changes to the inefficiencies they had replaced.¹⁷⁴

¹⁶⁹ Cain and Hewitt, *Off Course*, 45.

¹⁷⁰ John Dawkins, *Higher Education: A Policy Discussion Paper*, DEET (Canberra: AGPS, 1987), 47–54. Marginson and Considine, *The Enterprise University*, 59. R.B. Cullen, ‘The Management Implications of Change’, in Grant Harman and V. Lynn Meek (eds), *Australian Higher Education Reconstructed? Analysis of the Proposals and Assumptions of the Dawkins Green Paper* (Armidale: Department of Administrative and Higher Education Studies, University of New England, 1988), 147–56.

¹⁷¹ David Penington and John Daley, ‘Collegial Yes, Corporate, No’, *HES*, 7 February 1990.

¹⁷² *Ibid.* William West, ‘Perform or Perish Plan Is a Recipe for Rebellion’, *HES*, 11 April 1990.

¹⁷³ Marginson and Considine, *The Enterprise University*, 116.

¹⁷⁴ *Ibid.*, 65, 79.

Marginson and Considine argue that the shift away from collegial decision-making was a direct response to the new relationship of universities to government.¹⁷⁵ Each university's standing with the government and its probable level of funding seemed to be based on how successfully its leaders persuaded Dawkins of their capacity to modernise. So when, for example, Dawkins made a sarcastic remark about the practice of electing Deans, universities scrambled to put a stop to it, seeking instead to select senior Faculty leaders in a manner that more closely resembled corporate recruitment practices.¹⁷⁶ After the Dawkins reforms, Marginson and Considine found, the corporate sector – or, more accurately, an imagined corporate ideal – was the benchmark against which university decision structures were evaluated.¹⁷⁷ By the end of the 1980s, most would agree that 'universities are now being expected to take a more business-like approach to their operations'.¹⁷⁸

This drift away from collegial decision-making slowly widened the gap between vice-chancellors and their staff. One symbol of this shift was union membership. Early in the 1980s, most vice-chancellors were members of the staff associations, according to Robert Smith, Vice-Chancellor of the University of Western Australia and member of Dawkins's Purple Circle:

John Scott, who was a lovely man, Chair of the AVCC at the time, used to proudly say he was a member of FAUSA. I remember one of my earlier meetings of AVCC, they had a show of hands for who is a member of the union. Everyone put their hands up.¹⁷⁹

The membership-based collectivity of the FAUSA functioned as a signifier for the community of scholars. Membership enabled the vice-chancellors to identify

¹⁷⁵ Ibid., 59–61, 71.

¹⁷⁶ Ibid., 71.

¹⁷⁷ Ibid., 61.

¹⁷⁸ J.W. Morphet, 'Equitable Access and Fees the Point of Transfers: Letter', *HES*, 7 February 1990.

¹⁷⁹ Robert H.T. Smith, *Interview*.

themselves as *primus inter pares* – first among equals, but fundamentally inseparable from their staff. Robert Smith had returned to Australia from Canada where, he said, things were different. He thought they were mad: ‘now I know I am in cloud cuckoo-land...I mean, you’re either management or you’re union’. Towards the end of the decade he was right: vice-chancellors *were* management and few were able to maintain that sense of membership.¹⁸⁰

Even though David Penington was as keen as Dawkins to modernise the management of his university, he did not see that he should also accept Dawkins’s plans for research. Penington agreed with many aspects of the Dawkins proposals, but considered the government’s proposed adjustments to research funding to be a fundamental assault on the idea of the university.¹⁸¹ Since 1965, the key distinction of the universities from the Colleges of Advanced Education was that government funded them to conduct research. In the twenty years since the Martin review, the idea of the university in Australia had become attached to that research enterprise. As a result, research funding now seemed central to the identity of the oldest of Australian universities, whose standing in the community, their leaders believed, was based on their high profile discoveries.¹⁸² Penington’s experience of the impact of medical discoveries in particular informed his sense of the importance of research: in fact, in his autobiography Penington argues that the reason John Ward rejected his proposal

¹⁸⁰ Ibid.

¹⁸¹ David Penington, *Interview*.

¹⁸² Julia Horne and Geoffrey Sherington, *Sydney: The Making of a Public University* (Melbourne: Miegunyah Press, 2012, in press).

that the two universities opt out of the Dawkins system was that ‘as a historian, he [Ward] had no real interest in my concerns over research’.¹⁸³

In an attempt to protect Melbourne’s research capacity, Penington targeted his criticisms at the Australian Research Council. Articulate witticisms, cutting remarks and damning speeches were Penington’s weapons, wielded in every forum he could find, often targeting Don Aitkin, as head of the Council, personally.¹⁸⁴ A media war between the two men resulted, leading to pressures on each that they continue to feel.¹⁸⁵ Their conflict mirrored fissures opening across the higher education sector.

Penington’s argument that research funding should remain concentrated in the older institutions was met, by leaders and staff in the former colleges, with anger and disbelief. Describing his arguments as elitist, Penington’s position appeared to demean their newly won status as universities, suggesting that they were lower in quality, a view they were anxious to rebut.¹⁸⁶ This conflict between older and newer universities was augmented by a growing unease about the priorities that would result from competitive funding. Some, like Penington, saw the implementation of national priorities as short-term vision:

Research policies controlled from Canberra, he [Penington] says, run the risk of being short-term and politically motivated. Had the Dawkins policies been in place during the polio epidemics, research funds would have gone into creating better iron lungs. The discovery of the

¹⁸³ David Penington, *Making Waves: Medicine, Public Health, Universities and Beyond* (Melbourne: Melbourne University Press, 2010), 249.

¹⁸⁴ Christopher Dawson, ‘Quality Is the Key: Penington’, *HES*, 29 March 1989. Verlander, ‘The Cutting Edge of Penington’, *HES*, 4 October 1989. He was not entirely alone. Aitkin had a wowser’s view of research, new University of Sydney Vice-Chancellor Don Nicol argued: if it was pleasurable, it must be bad. See William West, ‘Attack on Researchers Branded as Wowserism’, *HES*, 6 June 1990.

¹⁸⁵ David Penington, *Interview*. Don Aitkin, *Critical Mass: Politics, Research and Higher Education in Australia* (Canberra: Don Aitkin personal unpublished manuscript, 1993).

¹⁸⁶ West, ‘Tuesday Group Seeks Elitist Return to Dark Ages’, *HES*, 27 September 1989.

Salk and Sabine vaccines which eradicated polio were the result of simple curiosity. It is impossible, he says, to dictate creativity.¹⁸⁷

The Australian Research Council, according to Penington, would fundamentally change the kinds of things society would know. It would encourage a focus on research that would have outcomes achievable in a designated, fundable, period of time.¹⁸⁸ This meant that scholars would be more likely to work towards outcomes that they already knew they could achieve. The unknowableness of curiosity-based research, he argued, was central to the mission of the university and the quality of science. Politicians, both Labor and Liberal, were nevertheless persuaded that research funding needed to be spent more strategically. Public money was tight and curiosity seemed idle.

Scholars in the humanities and social sciences were particularly concerned.¹⁸⁹ Given Labor's rhetoric and policy focus on skill development rather than liberal education, evident throughout Dawkins's approach to the universities, many felt that support for the humanities and social sciences would be severely restricted.¹⁹⁰ It seemed reasonable to expect that the government's research priorities would focus on disciplines that government narrowly understood to be 'useful', like applied science and engineering. These fears appeared to be confirmed at a strained public meeting in 1988. A beleaguered Don Aitkin, asked why science was getting a better deal, replied that it was because they had 'fewer wankers'.¹⁹¹ Aitkin regretted the comment, which was held up across the sector as evidence – supported by earlier 'waste-watch' jibes –

¹⁸⁷ Verlander, 'The Cutting Edge of Penington', *HES*, 4 October 1989.

¹⁸⁸ See also John Sutcliffe, 'Research Segregation a Misguided Threat: Comment', *HES*, 1 November 1989.

¹⁸⁹ Stuart Macintyre gives a detailed account of the sources of these concerns in Macintyre, *The Poor Relation*, 253–90.

¹⁹⁰ Stokes and Edmonds, 'Dawkins and the Labor Tradition', 12. David Penington, *Interview*.

¹⁹¹ Christopher Dawson, 'Bitter Exchange Spells Out Conflict over Govt Policy', *HES*, 12 October 1988.

of the disdain Canberra held for the humanities.¹⁹² Old divisions between science and the humanities re-surfaced: ‘Science claims victory in the battle for ARC’, read the *Higher Education Supplement* headline.¹⁹³ Given disciplinary competition for control of research funding priorities and tensions between older universities and the former colleges, the academic community was far from united. Penington described it as Dawkins’s ‘Henry VIII’ strategy: conquer the system while it squabbles amongst itself, scrambling for scraps.¹⁹⁴

It was in this context that the National Tertiary Education Union was formed. It grew out of the academic staff associations of the universities and former colleges.¹⁹⁵ It also resolved a longstanding tension in the staff associations, which had for decades embodied a contradiction. On the one hand, they operated in the tradition of trade unions, battling university leadership for employee rights. On the other, they were also gentlemen’s clubs, a vehicle for the voice and activities of the university’s collegial membership. The tension was more than a matter of class allegiance, though ‘gentlemanly’ rightly signifies the tenor and tone of the early associations. Indeed, the word ‘association’ itself betrays the ambivalence of ‘gentlemen’ academics in forming a group to press collective claims.¹⁹⁶ FAUSA had gained power at Federal level by its objection in the Orr case to the master-servant relationship (discussed in Chapter Two). But the staff associations had changed since the 1950s.

¹⁹² Aitkin, *Critical Mass*, 13.

¹⁹³ Mark Ragg, ‘Science Claims Victory in the Battle for ARC’, *HES*, 1 July 1987.

¹⁹⁴ Verlander, ‘The Cutting Edge of Penington’, *HES*, 4 October 1989.

¹⁹⁵ Andrew Spaul, *The Australian Education Union: From Federal Registration to National Reconciliation* (Melbourne: Australian Council for Educational Research, 2000), 42. There were also associations and unions formed by general staff. While undoubtedly important for the staff they represented, they are not discussed in this thesis.

¹⁹⁶ See Sybil M. Jack, *History of the Sydney Association of University Teachers 1943-1993* (Sydney: University of Sydney Printing Service, 1994), 120–5.

Since 1973, when an academic salaries tribunal was established, staff association leaders sought formal union registration, hoping to strengthen their voice in arguing for pay and conditions.¹⁹⁷ This move became urgent in 1978 when they found that since they were not registered as a union, they were not permitted to lodge the objections that would prevent university staff from moving to rival unions.¹⁹⁸ To the frustration of its leaders, the majority of staff association members were not persuaded, voting against the proposal in 1981.¹⁹⁹ Advocates of unionisation tried to argue that the industrial relations model was not as adversarial as its opponents maintained:

A move into the industrial arena does not imply any radical change in universities. Despite what the scare-mongers say, staff and university representatives can still sit down together and work things out. The existence of such an option may of itself encourage greater consultation in the future – indeed we believe the art of industrial relations is to avoid rather than encourage confrontation-arbitration.²⁰⁰

It was the structural relationship that was at stake, however, not just a spirit of conciliation and co-operation. Even when it was civil and co-operative, the ‘gentlemanly’ camp argued, the industrial relations model required negotiation by opposing parties, forging a transactional, rather than collegial relationship: salary in exchange for academic services.²⁰¹

¹⁹⁷ ‘Consultation or Confrontation’, *FAUSA Newsletter*, 15 May 1979, in *S. Murray Smith Papers: FAUSA* (Melbourne: University of Melbourne Archives, 1979).

¹⁹⁸ FAUSA, Industrial Registration NBA/Z239/FAUSA/61/1 Carton 29, in *Federation of Australian University Staff Associations Papers, 1952-1989* (Canberra: Noel Butlin Archives, Australian National University 1978-1981).

¹⁹⁹ Jack, *History of the Sydney Association of University Teachers*, 120–5.

²⁰⁰ ‘Consultation or Confrontation’, *FAUSA Newsletter*, 15 May 1979, in *S. Murray Smith Papers: FAUSA* (Melbourne: University of Melbourne Archives, 1979).

²⁰¹ Jack, *History of the Sydney Association of University Teachers*, 120. David Penington, ‘Collegiality and Unions: Article for the Journal of Tertiary Administration’, in *David Penington's Personal Files*, Copy in the author's possession. (Melbourne: David Penington, 1991). Olssen and Peters, ‘Neoliberalism, Higher Education and the Knowledge Economy’, 313–45.

Between 1987 and 1989, however, several changes converged, making the debate obsolete. Bolstered by the Dawkins reforms, executive authority in the universities strengthened, posing new threats to the collective power of staff in the institutions.²⁰² Added to that, the Australian Council of Trade Unions restructured. A decline in union membership across all Australian industries prompted them to reorganise, amalgamating smaller unions into larger bodies that would represent whole sectors.²⁰³ An education union was a part of that plan.²⁰⁴ Academics insisted that their problems were sufficiently unique to be differentiated from school teachers.²⁰⁵ In this context, FAUSA merged with its counterpart from the Colleges of Advanced Education to become the National Tertiary Education Union.²⁰⁶ As scholars unionised formally, however, they also solidified the widening gap between academic staff and their institutional leaders. This helped fix them into the very master and servant, employer and employee relationship which, in the 1950s, FAUSA had resisted.

As a result of the structural changes to the university and the increased unionised structure of staff organisations, Don Aitkin saw academics, as they entered the 1990s, finally professionalising. In exchange for their salaries, they were beginning to offer a more tangible, definable service, as was appropriate, he argued.²⁰⁷ The old approaches were disintegrating so that universities resembled less antique colleges of peers

²⁰² Marginson and Considine, *The Enterprise University*, 35–6, 76, 92.

²⁰³ Spaul, *The Australian Education Union*, 40–2.

²⁰⁴ Australian Council of Trade Unions and Australian Trade Development Council, *Australia Reconstructed: ACTU/TDC Mission to Western Europe: A Report* (Canberra: AGPS, 1987).

²⁰⁵ Spaul, *The Australian Education Union*, 41–2.

²⁰⁶ *Ibid.*

²⁰⁷ Aitkin, ‘Axioms for the Academic Profession.’

accountable only to themselves and were inching closer to the modern, streamlined organisations Dawkins anticipated they would become.²⁰⁸

Conclusion

What the government sought from higher education in the 1980s was, on the surface, not vastly different from its goals in earlier decades. The Commonwealth had funded higher education and research since the 1940s, for the purpose of supporting economic growth and workforce planning. In the 1980s, however, those aims seemed particularly urgent and specific. Australian industry and manufacturing needed inventors and skilled workers to design, manage, maintain and organise the technologies and techniques that would make the nation competitive internationally, based on research and education conducted in Australian universities. Businesses needed tertiary educated, creative thinkers who would plan, analyse, calculate and enact strategies that were flexible enough to cope with new economic challenges now that Australia's economy was more directly connected to global trends. In the government's view, the 'modernisation' of the economy that Hawke sought when Labor floated the dollar needed to be coupled with the renewal of Australian higher education.

The modernisation of the universities tended, in the 1980s, to be measured by their similarity to the commercial sector. The influence of neoliberalism on debates surrounding the public university in Australia led to a large number of previously unimaginable transformations. Collegial structures, where hierarchical power was associated with academic standing, gave way to more executive control, so that authority instead lay more often with those who controlled the budget. Approaches to

²⁰⁸ Dawkins, *Higher Education: A Policy Statement*, 8–12.

students changed, too. Instead of considering admission a privilege to be conferred on worthy applicants, potential students were now sought through advertising. Research performance, in addition to the traditional peer evaluation, could now also be evaluated in dollars as the universities began to self-identify with commercial language and corporate techniques.

What all these reforms had in common was their restructuring of agency in relation to funding. Universities had been relatively passive recipients of Federal funding since the Murray review of 1957 and, to an even larger degree, since 1974 when they were fully funded under Whitlam. Now, universities were discouraged from placing the blame for insufficient income on any agency other than themselves. Declining student numbers were to be met with new marketing techniques. Reduced government funding was to be offset by active measures to attract fee-paying international and postgraduate students. More and more government funding was now allocated competitively according to merit, so that the quality of universities could, in a real and tangible way, be measured by their financial worth.

Ironically, this partial deregulation gave government more influence. Now that funding was less certain and potentially changeable within short timeframes, university compliance to government priorities was the key to assuring financial viability and standing in the community. The university's capacity to adapt to the combination of government demands and international market forces was evidence, according to the new market-efficiency political rhetoric, of its effectiveness. Failure to change – in fact, failure even to agree with the propounded benefits of reforms – exposed universities and their staff to accusations of inefficiency and public-service laziness. Claims for older university values that encouraged government to consider

higher education to be protecting more than the nation's financial wealth were easily dismissed. What Ian Clunies Ross would have called 'civilisation', economists had started to call 'positive externalities'.²⁰⁹ Knowledge as a public good had lost its persuasive power in Canberra.

By positioning itself as the key supplier of competitive and sometimes uncertain funding, government relinquished its former benign patronage of the universities, instead selecting more forceful instruments of control. The Hawke government believed that universities could not be trusted to offer their services to the nation voluntarily, as they had during the Second World War. The radical demonstrations of the 1960s and 1970s had undermined any faith that universities would naturally serve the nation. Abolishing the structures that university leaders believed protected the universities from state interference, Dawkins tightened government control over funding to compel a shift in the priorities of the nation's scholarly experts. No longer guardians of an independent body of knowledge, for Dawkins, universities would become public instrumentalities, controlled by the state.

University leaders were, to Peter Karmel's dismay, for the most part Dawkins's compatriots in this revolution. And yet they did not entirely relinquish their autonomy. In adapting to changing expectations, universities had developed a taste for entrepreneurship. Increasing their body of customers, university leaders started to see, might also force government into a consumer role – and ideally, they would be just one customer among many.

²⁰⁹ One such economist was Stanford, 'International Trade in Education.'

Chapter Five: Knowledge and Property 1986-1996

In 1979, the University of Wollongong approved a Patent Policy, which claimed:

Although university research is not directed specifically towards patentable inventions, there can arise in the course of research, inventions which in the interests of the public, the University and the inventor/s, should be patented.¹

Sometimes a patent was the best way of making research available. A decade later, however, Wollongong University replaced that policy. Their new Intellectual Property Policy expressed a different set of values:

Council has an obligation, under government policy, to seek reimbursement for costs which have been incurred in research and development leading to a discovery from which profit may be derived, and also to direct some of the profit (if any) to purposes for which the University has been established.²

From the mid-1980s, using policies like this, leaders of Australian universities chose to move from protecting a limited portfolio of patents to claiming ownership over all aspects of academic work. This chapter traces the growing interest in establishing and regulating intellectual property rights over the work of staff and students and conflicts around this effort.

The focus of universities had shifted from fulfilling the potential of research to its exploitation for profit. Across higher education the idea of 'intellectual property' was deployed in a new way to try to capture the imperative to commercial exchange.

Intellectual property, by the late 1980s and early 1990s, expressed an ideal for university administrators: funding that reflected, in financial terms, the worth of what universities taught and discovered. They were told this might be substantial. In 1993,

¹ University of Wollongong (UoW), Patents Policy, *Intellectual Property File* (Wollongong: UoW Archives, 1979).

² UoW, Intellectual Property Policy, *Intellectual Property File* (Wollongong: UoW Archives, 1988).

the Prime Minister's Science and Engineering Council informed government and the universities that the 'world intellectual property market represents \$600 billion of industrial products and processes annually'.³

The worth of the global intellectual property market was the subject of scrutiny as economists and businesses shifted their attention to the 'knowledge economy'. They developed strategies that would nurture innovation and creative thinking, activities that were increasingly underpinning competitive advantage.⁴ In the 'post-Fordist' global economy that had emerged since the 1970s, many believed that the efficiency of mass production had reached its limit in fuelling growth. Profitability was now more reliant on flexible responsiveness to the market – a system that depended on constant analysis, innovation and knowledge development.⁵

The universities were far from excluded from this, as political and university leaders sought a place for higher education in the global shift towards an economic reliance on knowledge. Intellectual property, the key commodity of the knowledge economy, refers to a set of monopoly rights temporarily granted to enable commercial exploitation of particular kinds of products of intellectual labour. There are several types of intellectual property, each quite different. Copyright in literary works differs to that invested in computer software, works of art or pieces of music, and in turn these are considerably different from patented inventions, registered trademarks and trade secrets. Unlike other forms of intellectual property, ownership of copyright

³ Prime Minister's Science and Engineering Council, *The Role of Intellectual Property in Innovation. Volume One: Strategic Overview*, Department of Prime Minister and Cabinet Office of the Chief Scientist (Canberra: AGPS, 1993), 9.

⁴ Olssen and Peters, 'Neoliberalism, Higher Education and the Knowledge Economy: From the Free Market to Knowledge Capitalism', 330.

⁵ Ray Kiely, 'Globalisation, Post-Fordism and the Contemporary Context of Development', *International Sociology* 13 (1), 1998, 95–115.

offers more than mere financial exploitation: it also grants the right to decide where (and if) a work should be published, the right to edit or transform it, or to use it to create something new.⁶

What the different types have in common is the metaphor of property. Jill McKeogh and Andrew Stewart point out that this has often led to a widespread conceptual error:

The principal danger...lies in forgetting that the term 'property' is merely a conclusory statement and in falling into the trap of assuming that any identifiable 'thing' must belong to someone. In the present context this translates into the erroneous belief that all fruits of intellectual activity have some intrinsic claim to be treated as property.⁷

For McKeogh and Stewart, not everything could be turned into intellectual property. In the 1990s, however, university leaders tried to stretch the concept further than they had before in order to address the challenge of creating new revenue streams for the sector. In the process, universities also struggled to retain their superiority in the world of knowledge production, for they were not alone in seeking a prominent place in the changing economy.

The emergence of intellectual property

The decision by universities in the late 1980s to use the category of 'property' indicates a shift in their way of thinking about knowledge ownership and regulation. It was informed by a long history. The character of modern intellectual property was shaped, in seventeenth century Britain, by the conceptual landscape around the emergence of the idea of copyright, notably in the work of philosopher John Locke.

Locke's claim that labour – and therefore its product – was 'naturally' the property of

⁶ Jill McKeogh and Andrew Stewart, *Intellectual Property in Australia* (Chatswood NSW: LexisNexus Butterworths, 2004), 3. Staniforth Ricketson, *The Law of Intellectual Property* (North Ryde: The Law Book Company, 1984), 3–5.

⁷ McKeogh and Stewart, *Intellectual Property in Australia*, 19.

the labourer was used to resolve a longstanding dispute between authors and booksellers, investing copyright in the author.⁸ According to Mark Rose, in that period, the heroic individual author was constructed as a parallel to the individual political subject as a means of asserting economic dominance.⁹ Contemporary structures of intellectual property, Ramon Lobato claims, also assert economic dominance, since they tend to privilege certain types of cultural and technological production – and thus certain national economies – in the global marketplace.¹⁰ Disputes over intellectual property express more complex power relations in universities, argues Corynne McSherry, in her analysis of the ownership of academic work in higher education in the United States. She suggests that academic claims to intellectual property in America simultaneously represent compliance with a higher education market and resistance against those who would dominate it.¹¹

The growth of intellectual property policies in the universities in Australia, then, is an important moment for understanding the impact of the growth of a market for education and research. The earliest policy that explicitly deployed the phrase ‘intellectual property’ was in the Australian National University in 1986. The latest was from the University of Western Australia in 1996.¹² These policies represent the period for development of intellectual property as a central plank of university reform.

⁸ Ronan Deazley, *Rethinking Copyright: History, Theory, Language* (Cheltenham: Edward Elgar, 2006), 5.

⁹ Mark Rose, *Authors and Owners: The Invention of Copyright* (Cambridge M.A.: Harvard University Press, 1993).

¹⁰ Ramon Lobato, ‘The Six Faces of Piracy: Global Media Distribution from Below’, in R. Sickels (ed.), *The Business of Entertainment, Volume 1: The Movies* (Westport: Praeger, 2008), 15–36.

¹¹ Corynne, McSherry, *Who Owns Academic Work? Battling for Control of Intellectual Property* (Cambridge M.A.: Harvard University Press, 2001), 19.

¹² Access to their first Intellectual Property policies was granted by Adelaide University, Australian National University, Macquarie University, Monash University, Royal Melbourne Institute of Technology, University of New England and University of Wollongong (also representing a range of university types in Australia). The University of Western Australia’s policy is available as an attachment to the publicly available case of UWA v Gray. Some details about the University of Melbourne’s policy development process were included in the files at Monash University, for reasons that will be discussed.

It is quite a specific set of dates, suggesting new policies were triggered by particular events, requiring analysis of the government policy framework. Ann Monotti and Sam Ricketson, authors of *Universities and Intellectual Property: Ownership and Exploitation*, maintain that it was in this period that all Australian universities had discovered that intellectual property was important to them. It was like finding one has ‘been speaking prose for over forty years without realising it’, they argue.¹³ Their assumption that the development of intellectual property policies in Australian universities was more a kind of legal awakening than actual change points to a significant question: did intellectual property represent a new way of *talking* about university knowledge or did it indicate the emergence of something new in higher education?

The change underpinning university intellectual property, Monotti and Ricketson claim, was the development, globally, of new patterns of research. These new research relationships were analysed by Michael Gibbons and colleagues in the Netherlands.¹⁴ Gibbons and others describe a shift from traditional flows of knowledge where basic research had led to commercial use along a single conveyor belt of discovery and application. This linear connection was a result of scientific norms that had perpetuated a hierarchy of disciplines. ‘Pure’, or experiment-based discovery, was structured as the necessary antecedent to application and commercial development.¹⁵

¹³ Ann Louise Monotti and Sam Ricketson, *Universities and Intellectual Property* (Oxford: Oxford University Press, 2003), 9–10.

¹⁴ Helga Nowotny, Peter Scott, and Michael Gibbons, ‘Introduction: ‘Mode 2’ Revisited: The New Production of Knowledge’, *Minerva* 41, 2003, 179.

¹⁵ Michael Gibbons et al., *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies* (London: Sage, 1994), 32–3.

This stratified system of research was collapsing, Gibbons and his colleagues argue, giving way to research where industrial and academic problems were encountered and tackled in more integrated and collaborative ways. The past fetish of ‘pure’ inquiry was based on academic self-importance, they claimed, and by sustaining rarefied knowledge, university and community interests had stayed artificially separated – a separation that universities controlled. Now, the previously distinct spheres of university and workplace knowledge were merging.¹⁶

Unlike subsequent work by another group of Dutch scholars led by Henry Etzkowitz, it was not the intention of Gibbons and his colleagues to promote a commercial purpose for university research. Their political agenda was derived from the 1960s New Left: they sought to break down the barrier between scholarship and other kinds of knowledge, which they believed the university traditionally and wrongfully excluded.¹⁷ Nevertheless, their widely read book was grasped eagerly by politicians and bureaucrats seeking justification for new commercial linkages between science and industry.¹⁸ Those linkages were not without consequence, however. As the separation between university and workplace knowledge disintegrated, Gibbons and colleagues found, so did the separation of their financial stake: universities and the commercial bodies with whom they collaborated might, in this new pattern, both have a legitimate claim to intellectual property. The result was uncertainty around who owned intellectual property rights.¹⁹ Monotti and Ricketson conclude that universities, in this environment, were compelled to develop policies regulating their intellectual

¹⁶ Ibid., 19–26.

¹⁷ Terry Shinn, ‘The Triple Helix and New Production of Knowledge: Prepackaged Thinking on Science and Technology’, *Social Studies of Science* 32, 2002, 599–614.

¹⁸ Nowotny, Scott, and Gibbons, ‘Introduction: ‘Mode 2’ Revisited’, 180.

¹⁹ Gibbons et al., *The New Production of Knowledge*, 84–9.

property.²⁰ While connecting intellectual property policy to the changing research environment is useful, Monotti and Ricketson's analysis, however, as this chapter will argue, is not wholly borne out by the policies themselves. An historical, rather than legal, approach to the process of intellectual policy development in Australian universities raises new questions about the motives and concerns of university policy makers.

It is not clear in Australian university intellectual property policies that the struggle for control of intellectual property was between universities and commercial organisations. The Commonwealth government, academic staff and university students (particularly postgraduate researchers), also had a stake in the ownership of research and any income it produced. The public, too, had a vested interest in university research and teaching, which had been funded by taxpayers for decades. The public interest has been the focus of academic concern. Scholars of both higher education and intellectual property have often advocated public ownership of the products of intellectual labour, even within a marketised system of intellectual property trade.²¹ Simon Marginson describes the knowledge that universities produce as 'public goods', meaning publicly owned commodities.²² As discussed in the Introduction, although Marginson's argument is intended to assure knowledge is excluded from the market economy, it also fixes knowledge to the market-derived ideal that all intellectual labour produces a form of alienable property. While seeking

²⁰ Monotti and Ricketson, *Universities and Intellectual Property*, 9–10.

²¹ Ronan Deazley, for example, argues that collective public good, far from being overthrown by the emergence of copyright, was instead its key consideration. Deazley, *Rethinking Copyright*, 22–3.

²² Simon Marginson, 'The "Public" Contribution of Universities in an Increasingly Global World', in Brian Pusser, et al. (eds), *Universities and the Public Sphere: Knowledge Creation and State Building in the Era of Globalisation* (New York: Routledge, 2012), 7–25.

to assure that university knowledge is considered to be a shared public possession, his argument also shores up its status as a commodity.

Similar concern for public possession of university research has often been expressed in ethical terms. Should biotechnologists patent the genes they identify?²³ What responsibility do developers of pharmaceuticals have to the public on the one hand and to investors on the other?²⁴ While these questions focus on the ethical consequences of commercialisation of university-produced intellectual property, at their core they are about the ownership of knowledge. Who *owns* genes and other objects of scientific discovery and observation? What right to medical advances in public universities should the public expect to have and how does that weigh against intellectual property claims by corporations who have paid for the research?

Arguments that seek an ethical foundation for public ownership of intellectual property are based on a claim, most prominently asserted by Yochai Benkler and Lawrence Lessig, that the world is richer when knowledge is shared.²⁵ They, like Gibbons and colleagues, promote a ‘knowledge economy’ in which knowledge, produced in collaborative networks often funded from a variety of sources, both public and private, is no longer the possession of an individual, all-powerful originator, author or institution.

²³ Annabelle Lever, ‘Is It Ethical to Patent Human Genes?’, in Axel Gosseries, Alain Marciano, and Alain Strowel (eds), *Intellectual Property and Theories of Justice* (London: Palgrave Macmillan, 2008), 246–64.

²⁴ International Intellectual Property Institute, ‘Patent Protection and Access to HIV/AIDS Pharmaceuticals in Sub-Saharan Africa’, Institute http://www.wipo.int/about-ip/en/studies/pdf/iipi_hiv.pdf (Washington DC: International Intellectual Property, 2000), Retrieved 8 September 2010.

²⁵ See Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven: Yale University Press, 2006). Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World* (New York: Random House, 2001).

Those arguments that endeavour to problematise the political economics of intellectual property are informed by re-considerations of authorship that emerged from continental philosophy in the 1960s and 1970s. In a work that has had a significant influence on critical legal approaches to intellectual property, Michel Foucault explored the historical roots of the construction of modern individual authorship, identifying authorship as a seventeenth century instrument of surveillance; the ability to locate an individual to blame for a transgressive text.²⁶ Historicising the author in that way opened the possibility for other ways of thinking about the production and regulation of knowledge. In 1967, Roland Barthes disputed the romantic pre-eminence of authorship in the construction of knowledge, emphasising instead the sustained and organic agency of the reader:

The Author, when believed in, is always conceived of as the past of his own book: book and author stand automatically on a single line divided into a *before* and an *after*. The Author is...in the same relation of antecedence to his work as a father is to his child.²⁷

The author's antecedence gave her or him an authority over knowledge that Barthes considered undeserved.

The kind of shared construction of meaning that Barthes claimed was the task of author and reader together resonated in educational thinking. Student-centred, 'neo-progressive' pedagogies, which had their roots in 1960s and 1970s student protest movements, altered dominant scholarly practices in universities worldwide towards the end of the twentieth century. Learning was increasingly seen as an active act of knowledge construction mediated by social context rather than the passive receipt of

²⁶ Michel Foucault, 'What Is an Author', in *Language, Counter-Memory, Practice: Selected Essays and Interviews* (Ithaca, New York: Cornell University Press, 1977), 205–17.

²⁷ Roland Barthes, 'The Death of the Author', in *Image Music Text* (London: Haroer Collins, 1977), 145.

truth.²⁸ Collaborative problem solving grew in importance in university curricula, slowly supplementing individual achievement as the mechanism of learning.²⁹ The mind was understood to be influenced by its community, more like a participant in a network than the detached individual idealised by earlier scholarly traditions.³⁰ Indeed, knowledge was inseparable, some educational theorists claimed, from its environment.³¹ In the context of such epistemological and pedagogical shifts, the Lockean connection between intellectual labour and intellectual property ownership was becoming increasingly ambiguous: if originators were the ‘natural’ owners of intellectual property as the product of their labour, exactly who the originators were, was becoming very difficult to identify.

These complex and changing ideas about learning and research had a substantial influence on the debates that emerged about intellectual property policies in Australia and internationally. Authorship in particular was a target. It was attached to the intellectually autonomous scholar, the figure whose right to publish was a central tenet of academic freedom. It was this author figure in particular that the American Association of University Professors sought to protect from United States universities which tried to claim ownership of academic copyright. Universities had granted scholars the financial proceeds of their publications, but had claimed the copyright as the possession of the institution as part of a larger claim to intellectual property. The

²⁸ Jean Piaget, *The Origins of Intelligence in Children*, translated by Margaret Cook (New York: International Universities Press, 1952). L.S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge, Massachusetts: Harvard University Press, 1978).

²⁹ A. Sfard, ‘On Two Metaphors for Learning and the Dangers of Choosing Just One’, *Educational Researcher* 27 (2), 1998, 4–13. See also Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), 52–3.

³⁰ M. Young, ‘An Ecological Psychology of Instructional Design: Learning and Thinking by Perceiving - Acting Systems’, in D. H. Jonassen (ed.), *Handbook of Research on Educational Communication and Technology* (Mahwah, NJ: Lawrence Erlbaum, 2004), 169–78.

³¹ B. S. Allen, Otto, R. G., Hoffman, B., ‘Media as Lived Environments: The Ecological Perspective of Educational Technology’, in D. H. Jonassen (ed.), *Handbook of Research on Educational Communication and Technology* (Mahwah, N.J., Lawrence Erlbaum, 2004), 215–42.

American Association of University Professors took exception, arguing that an academic author's ownership of copyright, since that was attached to the right to publish, edit or derive new work from it, went to the core of the scholarly pursuit.³²

How the Australian universities navigated these complex tensions was distinct from the American case. Lacking the imperative that the Bayh-Dole Act gave universities in the United States, Australian institutions developed intellectual property policies in more uneven ways.³³ It took around a decade for all universities to have policies and each institution chose from a wide selection of legal and commercial positions. These academic and institutional approaches to intellectual property, and the government policies that informed them, are revealing of changes in university values and priorities towards the end of the twentieth century. To grasp these, it is necessary to first consider the specific government policy environment in Australia in the 1980s.

Research Policy after Dawkins

Australian higher education, as Chapter Four discussed, was transformed, in the late 1980s, by the Dawkins reforms. Research policy in particular was directed towards a strengthening of the relationship between university research and the national economy. The government was keen to support useful research that would have observable economic benefits. Research commercialisation was one way of achieving that goal.³⁴ Research policy was a specific and complex aspect of reform, however, which needed close scrutiny to assure the right funding priorities were achieved. The

³² McSherry, *Who Owns Academic Work?*, 109–10.

³³ The Bayh-Dole Act, enacted in 1980, required American universities to protect and try to commercialise federally-funded research. Daniel S. Greenberg, *Science for Sale: The Perils, Rewards and Delusions of Campus Capitalism* (Chicago: University of Chicago Press, 2007), 51–81.

³⁴ William West, 'Melbourne Reviews Management Style', *The Australian Higher Education Supplement (HES)*, 20 July 1988. Morphett, 'Equitable Access and Fees the Point of Transfers: Letter', *HES*, 7 February 1990. John Dawkins, *Higher Education: A Policy Statement*, DEET (Canberra: AGPS, 1988).

details of Dawkins's plans for research were considered by a committee chaired by Purple Circle member Robert H.T. Smith, former Vice-Chancellor of the University of Western Australia who became, by 1989, head of the National Board of Employment, Education and Training. This committee was given the broad task of reviewing higher education research policy, producing a report that would shape the environment in which universities now approached research.³⁵

Three members of that committee, Robert Smith, David Penington and Don Aitkin, understood Dawkins's aims in a different way. Smith claimed that Dawkins needed a solution beyond the binary system – how would research funding work when former colleges were all now universities? Smith was passionate about this issue. Some lesser-known institutions were doing very good research that was neither acknowledged nor funded. For Smith this was an injustice, an egalitarian outlook that extended to a broad concern for academics denied research opportunities.³⁶ Moreover, if the national economy was to thrive, the best researchers, wherever they were, had to be supported, not just those who had by luck, circumstance or connection secured a position in a particular institution.

Penington took a very different, and considerably more malign, view of Dawkins's aims. Penington's opposition to the Dawkins agenda, described in Chapter Four, focused on the need for concentration of research funding in older institutions that had stronger research traditions.³⁷ According to Penington, the Smith committee was

³⁵ NBEET, *Report of the Committee to Review Higher Education Research Policy* (Canberra: AGPS, 1989).

³⁶ Robert H.T. Smith, *Interview with Robert H.T. Smith – Interviewer Hannah Forsyth, 15 June 2010* (Recording in possession of the author). Robert H.T. Smith, Personal Communication (Email) to Hannah Forsyth, 17 June 2010.

³⁷ Verlander, 'The Cutting Edge of Penington', *HES*, 4 October 1989. West, 'Tuesday Group Seeks Elitist Return to Dark Ages', *HES*, 27 September 1989.

established in response to his public condemnation of government reforms, an attempt by Dawkins to keep him quiet. In a private meeting with Dawkins, Penington agreed that, for the duration of the review, his criticisms of the government would cease.³⁸

Don Aitkin's perspective was informed by his close knowledge of Canberra's political machinery. According to Aitkin, Prime Minister Bob Hawke had been unexpectedly heckled over research at the opening of a Science centre. Embarrassed that he did not understand the problem, Hawke asked for a review of research policy. Without that, Aitkin maintained, the review would never have taken place.³⁹ To conduct it, Dawkins assembled those with the highest stake in research to hammer out their differences. Smith, Aitkin and Penington each felt they got what they wanted. Aitkin and Smith achieved structural changes to government research funding, but Penington's reward was increased income for the University of Melbourne specifically.⁴⁰ The report itself, despite the varying aims of the Smith committee's members, focused on enhancing university performance. It asked universities to establish and strengthen links with industry. It sought increased and measurable research output. In short, it reflected government priorities.⁴¹

³⁸ David Penington, *Interview with David Penington – Interviewer Hannah Forsyth, 1 June 2010* (Recording in the possession of the author). David Penington, *Making Waves: Medicine, Public Health, Universities and Beyond* (Melbourne: Melbourne University Press, 2010), 249.

³⁹ Don Aitkin, *Interview with Don Aitkin – Interviewer Hannah Forsyth, 3 May 2010* (Recording in the possession of the author).

⁴⁰ NBEET, *Report of the Committee to Review Higher Education Research Policy*. See Penington, *Making Waves*., 253. See Aitkin, *Critical Mass*.

⁴¹ When I pointed this out, Smith seemed surprised. He had a copy with him and flicked through it, saying 'I can see how you'd draw that conclusion'. The committee was likely intended to address several problems and each recall the issue of most significance to them. Robert H.T. Smith, *Interview*. Government priorities were established in the Australian Science and Technology Council's 1985 review of research performance in the universities in 1985, articulated in the 1987 publication Australian Science and Technology Council, *Improving the Research Performance of Australia's University and Other Higher Education Institutions* (Canberra: AGPS, 1987).

The Smith Committee, however, was not the only research review that year. In June 1989, the Australian Research Council released a report, *On the Public Funding of Research*, recommending a review of the whole system of innovation to identify any gaps in the process of converting basic research to industrial products.⁴² The Australian Science and Technology Council was simultaneously commissioned to report on ways that ‘Australia’s research effort will best support the Government’s national policy objectives’.⁴³ This report argued that research was not the creative and serendipitous process academics had claimed. For the Australian Science and Technology Council, research could be, indeed should be, channelled to specific ends, not driven by mere curiosity. They made a case for increased government intervention in research planning:

There has been a significant rethinking of the long-held belief that discoveries are essentially unpredictable... Globally there is now much greater awareness that there must be conscious decision-making about where to put the national emphasis in research.⁴⁴

Competitive allocation of research funding through the Australian Research Council was by now the government’s accepted way of achieving this outcome. In May 1990, a National Board of Employment, Education and Training committee chaired by Don Aitkin suggested that even more of the research funding for universities should be funnelled through the Australian Research Council.⁴⁵

The subject continued to demand attention, leading to more reports. In 1991, the Department of Industry, Technology and Commerce, which by then held the research portfolio, released the *Report of a Task Force* chaired by private sector economist,

⁴² Australian Research Council, *On the Public Funding of Research*, DEET (Canberra: AGPS, 1989).

⁴³ Australian Science and Technology Council, *Setting Directions for Australian Research*, National Board of Employment Education and Training (Canberra: AGPS, 1990), iii.

⁴⁴ *Ibid.*, xi.

⁴⁵ NBEET, *The Transfer of Operating Grant Funds to Competitive Schemes*.

Ray Block, on the commercialisation of research. The Block Report advocated a market-driven focus, claiming market-pull, rather than technology-push, was a more successful strategy for research commercialisation. This was not just a preferred business methodology for the task force members, but also a subtle argument about how the market might drive national research priorities:

The task force believes that Australia cannot afford to let technology drive our business direction; rather, the market must drive the direction of our business growth and innovation behaviour... unless research has relevance to a market it will have no commercial potential. Indeed, the task is perhaps more aptly described as how to bring the market to bear on research rather than how to commercialise research.⁴⁶

The Block Report demonstrates that government and industry both sought control of research priorities, each deploying the logic that Nugget Coombs predicted decades earlier (see Chapter One): research directions should be decided by those who paid for it and not the academics who produced it.

These public reports and debates about university research focused anxieties concerning the future of academic freedom. Such fears, arising as a result of the Dawkins reforms, had already prompted the universities to ask for an Academic Freedom Charter – an idea they abandoned when the relevant committee found it likely that a charter would limit, rather than assure, academic freedom.⁴⁷ In a further threat to academic freedom, the shift away from recurrent funding as a result of the Australian Research Council was beginning to impact tenure. This is evident in the discussions about how many academics with the security of tenure to conduct research, free from interference, would be ideal for the intellectual health of

⁴⁶ Department of Industry, Technology and Commerce, *Bringing the Market to Bear on Research. Report of the Task Force on the Commercialisation on Research* (Canberra: AGPS, 1991).

⁴⁷ William West, 'Charter Could Undo Government Reforms', *HES*, 25 April 1990. William West, 'Freedom Charter "Just Slavery in Disguise"', *HES*, 25 April 1990. William West, 'Dawkins Academic Charter 'Doomed'', *HES*, 16 May 1990. Jane Ford, 'Charter Bites the Dust', *HES*, 23 May 1990.

Australian higher education. In the 1970s, the academic salaries tribunal had formulated a 'sixty percent rule', meaning they had determined that the ideal balance of tenured and untenured staff was three fifths to two fifths. The Dawkins reforms, however, made this untenable. The Industrial Relations Commission eventually found the rule was no longer enforceable, since non-recurrent research funding made it impossible to appoint the same proportion of continuing positions as universities could prior to the reforms. The percentage of tenured positions did fall steadily, though only by a total of four percent between 1988 and 1995.⁴⁸

Acknowledging the tensions over academic freedom, the Australian Research Council commented in a reassuring spirit on the Block Report and a similar document on the commercialisation of medical research, known as the Coghlan Report. The Australian Research Council argued:

Universities should be free to determine the extent of their links with industry, again acknowledging that, in most instances, this [Block Report recommendation] target level of commitment would already be exceeded.⁴⁹

The Australian Research Council preferred financial incentives to regulatory controls. This enabled them to indicate their support for institutional autonomy and academic freedom. As they did so, the Australian Research Council gave universities choice in the level of engagement with industry, but using funding structures, the Council also limited the space in which they could choose. Recurrent funding was reallocated to competitive funding through the Research Council. Small grants of up to \$15,000 to \$25,000 were administered by the institutions themselves, though this allocation was

⁴⁸ See Justice Munro, Senior Deputy President Watson, and Commissioner Smith, 'Decision Higher Education General and Salaried Award; Higher Education Workers Victoria Award Universities; and Post Compulsory Academic Conditions Award', in *DEC 978/97 Print P4083*, Australian Industrial Relations Commission (1997).

⁴⁹ NBEET, *Commercialisation of Research: Advice of the National Board of Employment, Education and Training and its Australian Research Council* (Canberra: AGPS, 1992), 2.

based on an assessment of ‘performance’. This relative autonomy, however, was offset by the larger grants, which made up eighty percent of the Australian Research Council’s funding. Those were not only assessed by their ‘excellence’ but also by their relevance to national priorities, which included ‘commercial potential or utility’.⁵⁰ Moreover, if universities sought other avenues of research funding, which they were encouraged to do, the most likely source, as the Australian Research Council acknowledged, was industry. The Australian Research Council particularly supported externally funded professorships:

Encouragement of further such liaison [appointment of industry-funded chairs] was supported by the board, which emphasised, however, that specific institutional appointments should not be dictated by government.⁵¹

Despite being nominally hands-off, in this way, funding nevertheless functioned as a form of regulation, compelling increased links with industry and with commercial goals.

It took nearly two years for the universities to feel the influence of the new funding schemes with respect to intellectual property policy. Established in 1988, the Australian Research Council released its first advice to applicants in January 1989 for grants for 1990. In this advice, the Council required that if an ‘invention or process improvement’ arises, either the grant recipient or their university must protect the ‘industrial property in that invention’. Then, at their own expense, they may apply for a patent, at which point they must notify the Commonwealth. A threat was embedded in the advice:

⁵⁰ Fiona Q Wood, V. Lynn Meek, and G. Harman, ‘The Research Grant Application Process Learning from Failure?’, *Higher Education* 24, 1992, 1–23.

⁵¹ *Ibid.*

If the grantee and the institution do not wish to apply for a ... Patent...the grantee and the institution shall, at the request of the Commonwealth, assign to the Commonwealth the right...and no amount will be payable by the Commonwealth for any such assignment.⁵²

The government was keen to ensure that none of the wealth they believed was buried in the universities was wasted: if universities were not planning on actively exploiting the product of their research, perhaps the government ought to do so themselves.

This clause in the Australian Research Council's instructions, more than any other single event in the 1980s and 1990s, drove the universities to develop policies to assure their ownership over intellectual property. University administrators were alarmed that the government might seek to control even more funding. Institutions were beginning to identify potential financial value in intellectual property and they worried that the Australian Research Council planned to claim the proceeds of research, just as it had already taken control of previously recurrent research funding. This compelled the universities to tighten their intellectual property policies.⁵³ At the Royal Melbourne Institute of Technology, the Intellectual Property Committee advised the university to take care:

[We recommend]...caution over the proposed introduction of intellectual property agreement requirements which could presage an increasing attempt by DEET or the ARC to control and define university intellectual property.⁵⁴

The Australian Research Council advice shows that the Council was indeed considering controlling and deriving income from intellectual property produced in the universities. Despite this statement, there is no evidence that the Council actually

⁵² Australian Research Council, *Advice and Instructions to Applicants for 1990 Research Grants*, (Canberra: AGPS, 1989), 27.

⁵³ Peter Freeman, Director, Research & Research Training Services, Office of the Deputy Vice-Chancellor (Research), Macquarie University, Personal Communication to Hannah Forsyth, 23 March 2009 (Sydney).

⁵⁴ RMIT, Intellectual Property Committee Minutes of Meeting 6/95, Friday 13 October, *Intellectual Property File* (Melbourne: RMIT Archives, 1995).

attempted to acquire intellectual property. Nor is it really possible to imagine what the Australian Research Council would have done with it if they had: they were not positioned for prototyping or development, to manage a portfolio of patents, offer courses, distribute software or any of the range of things universities could do.⁵⁵

Research Commercialisation and the Intellectual Property Market

From the early 1980s, university administrators had been conscious of untapped sources of income embedded in the university's business. They initiated research commercialisation ventures without any prompting from government, developing strategies that would deliberately and methodically seek opportunities to commercialise research.⁵⁶ On-campus business liaison offices were established, designed to both support relationships with industry and place a mediator between businesses and supposedly less-savvy academic researchers who might otherwise give away their intellectual property without realising the import of their actions.⁵⁷

Universities also leased property to businesses on or near campus in the expectation that proximity would facilitate links with industry (though the roles of universities more often resembled that of real estate agents).⁵⁸ For-profit companies were created, wholly or partly owned by the universities.⁵⁹

Little of this would have been new to Philip Baxter, given the company Unisearch, which he established at the University of New South Wales in the late 1950s. It

⁵⁵ Don Aitkin, when interviewed, seemed unable to remember any such idea. Don Aitkin, *Interview*.

⁵⁶ Christopher Dawson, 'Commercial Uni Ventures 'Not a Threat to Scholarship'', *HES*, 22 August 1984.

⁵⁷ Katelin Morris, 'Centre Helps Inventors Develop Products and Avoid Duplication', *HES*, 11 January 1984. 'Industry and University to Meet', *HES*, 5 September 1984. 'Technology Transfer Centre to Aid Industry', *HES*, 24 April 1985.

⁵⁸ Carol Simmonds, 'WA College Wants to Set up Specialised Research Park', *HES*, 11 December 1985.

⁵⁹ John Stanton, 'Research Takes Commercial Turn at University', *HES*, 24 October 1984.

facilitated connections between industry and academic research, for Baxter believed tangible economic development was the university's responsibility to society.⁶⁰

Baxter was keen to replicate his experience in industry where scientific and application questions were interrelated. He was also convinced, however, that only high levels of public funding could provide the investment in higher education that western industrial progress required.⁶¹ So when Baxter sought alliances with industry through Unisearch, his focus was not profit, it was knowledge. His patenting strategy (described in Chapter One), which sought to best support the spread and use of the research, affirmed this, a stance reproduced in the University of Wollongong's 1979 Patent Policy.

At first, the discourse on the importance of commercialisation in the 1980s sounded similar to Baxter's pioneering approach. Commercialisation advocates argued that in extending university activity into the commercial world, research would have greater impact.⁶² Academics would be able to demonstrate, in tangible terms, the relevance and usefulness of university research.⁶³ Nevertheless, there were some important differences in the new commercialisation strategies. Caught between a budget squeeze

⁶⁰ J.P. Baxter and Rupert Myers, 'Administration in a Post-War University', *The Australian University* 4, 1966, 95–115. NSW University of Technology, Minutes of the Ad Hoc Committee of Council Chaired by Philip Baxter. Minutes of the Council Meeting 11 March 1957. Statement of Receipts and Balances 1st April to 30th June 1959. in *Unisearch UNSW/CM366* (Sydney: UNSW Archives, 1957).

⁶¹ J.P. Baxter, 'The Use of Scientific Knowledge by Governments and Industry. Tenth Congress of the Universities of the Commonwealth. Report of Proceedings. Sydney August 17-23', in *Philip Baxter Papers UNSW/CN1053* (Sydney: UNSW Archives, 1968), 259.

⁶² 'Respond to Community Needs, Says Principal', *HES*, 23 April 1980. 'Turning the Campus to Industry. Article Reprinted from *The Economist*', *HES*, 19 March 1980. 'Technology Transfer Centre to Aid Industry', *HES*, 24 April 1985. Malcolm Brown, 'Academic Finds a Fresh Way to Improve Relations with Industry', *HES*, 24 April 1985. Cf. Henry Etzkowitz and Loet Leydesdorff, 'The Dynamics of Innovation: From National Systems and 'Mode 2' to a Triple Helix of University-Industry-Government Relations', *Research Policy* 29 (2), 2000, 109–23. See also Henry Etzkowitz et al., 'The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm', *Research Policy* 29 (2), 2000, 313–30, for claims that commercialisation was a part of the university's original mission.

⁶³ Helen Hughes, 'Education as an Export Industry', in David R. Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1988), 217–46.

and the kinds of demands government could make through research funding priorities, university administrators were more interested in new sources of income and greater independence, than in new knowledge for its own sake.⁶⁴ Hoping to loosen the government's grip on higher education, expand their revenue base and increase their freedom, universities were anxious to diversify their sources of income. Commercialisation of research offered the tantalising prospect of significant benefits for institutions.⁶⁵

The new *Higher Education Supplement* provided a moral justification for this commercialisation, which, to some scholars, seemed alien to university traditions. 'Companies [were] exploiting universities' ideas for next to nothing', read the Murdoch paper's headline.⁶⁶ Private sector organisations were profiting from public-sector research while the public universities struggled financially. Commercial research offered the universities an opportunity to recoup the value of their work. Government and treasury were supportive of this view – if profit was derived from publicly-funded research, it should be used to reduce the necessity of future public outlay.⁶⁷ With government encouragement, research commercialisation became an even higher priority for universities.⁶⁸

Intellectual property protection was key to assuring that universities, rather than private companies, profited from research. This required universities and government

⁶⁴ John Bremer, 'The Fundamental Problem', *HES*, 22 September 1982.

⁶⁵ Simon Marginson and Mark Considine, *The Enterprise University: Power, Governance and Reinvention in Australia* (Cambridge: Cambridge University Press, 2000), 136–44, 160–4.

⁶⁶ Helen Trinca, 'Companies Exploiting Universities' Ideas for Next to Nothing', *HES*, 12 September 1984.

⁶⁷ Susan Ryan, 'Address on Privacy', in David R Jones and John Anwyl (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1987), 13–8.

⁶⁸ 'Appointment of a Pro-Vice Chancellor (Research)', *Macquarie University News*, September 1987 (No.197).

to gain a new understanding of the global intellectual property market. The Prime Minister's Science, Engineering and Innovation Council's 1993 report *The Role of Intellectual Property in Innovation* affirmed that the lack of research income for universities was due to a failure to protect intellectual property. The report claimed that 'worthwhile participation in this market will often be determined by whether or not there is enforceable intellectual property protection'. Such protection was likened to a fence:

Laws for the protection of intellectual property...provide a protective barrier against third parties who seek to appropriate the work of the innovator and take a free ride on that work.

Without this barrier innovation is like a crop in an unfenced field, free to be grazed by competitors who have made no contribution to its cultivation.⁶⁹

The Prime Minister's Council deployed the Lockean connection between labour and property to add force to government goals. The Labor government's contention was that the private sector, which received the benefits of research, should contribute directly to its funding.⁷⁰

The government had been seeking increased industry funding for university research, with limited success, since the mid-1980s.⁷¹ Australian industries were generally uncooperative, not persuaded by the government's arguments that they had a moral obligation to pay for the research that benefited them. Government hoped intellectual property might solve the problem. The Prime Minister's Council proposed that the private sector would be compelled to invest, if only universities could be persuaded to sell their research rather than give it away.⁷² In so doing, the Prime Minister's Council repositioned the public as competitors with, rather than beneficiaries of, the

⁶⁹ Prime Minister's Science and Engineering Council, *Intellectual Property in Innovation*. Vol. 1, 7.

⁷⁰ Australian Science and Technology Council, *Improving the Research Performance of Australia's University and Other Higher Education Institutions* (Canberra: AGPS, 1987).

⁷¹ *Ibid.*

⁷² Prime Minister's Science and Engineering Council, *Intellectual Property in Innovation*. Vol. 1, 2.

university. Universities and commercial organisations began to appear to be in the same business – a trade in (intellectual) property. Sociologist of science, David Biggins, had claimed:

Universities are barely distinguishable from any other government or privately funded think-tank. They espouse the same values, do the same job, serve the same political masters.⁷³

The longstanding and, many politicians, bureaucrats and business leaders felt, elitist, separation of the university from the rest of the community was difficult to justify. Moreover, older qualms about using publicly funded research for private monopoly were difficult to maintain at a time when research commercialisation seemed to solve a multitude of problems.

Research commercialisation was not always an easy fit, however, with the economic agenda embedded in the Dawkins reforms. Dawkins had envisaged a university system that produced useful research and educated a significant proportion of Australian youth to underpin more efficient production, creative commercial initiatives and increased economic productivity. Such a plan would not be achieved unless new research was extended, in the form of the latest techniques and technologies, throughout whole industries.⁷⁴ If a single company were instead to purchase a piece of intellectual property from a university, that organisation might gain some competitive advantage over others within Australia, and this would impede the free flow of research between researchers and to a wider range of organisations. In doing so, discoveries would not have the effect of making the whole industry more productive.⁷⁵ In the opinion of Dawkins and subsequent Labor education ministers,

⁷³ David Biggins, 'The Politics of Knowledge', *Australian Society* 3 (10), 1984, 9.

⁷⁴ John Dawkins, *Higher Education: A Policy Discussion Paper*, DEET (Canberra: AGPS, 1987), 66–7.

⁷⁵ Chiara Franzoni and Giuseppe Scellat, 'Academic Patenting and the Consequences for Scientific Research', *The Australian Economic Review*, 44 (1), 2011, 95–101.

however, the past strategy of investing in research for broad economic growth had led to complacent universities. A market for intellectual property, compelling industry to either fund or reimburse universities for the research they needed and forcing universities to compete for private investment would be a better way, Labor believed, for reducing the problem of ‘hobby’ research and promoting efficient and quality work. Even if intellectual property protection initially hampered the widespread uptake of new knowledge and techniques by confining the benefits of research to its purchaser, eventually Australian competitiveness would be enhanced, since research would be higher quality and more targeted to identifiable needs.

Raising awareness about intellectual property was therefore a key priority for the Minister for Education – now Simon Crean – in 1993. What could the Australian Research Council do to encourage universities to exploit more of it?⁷⁶ Within two years, the Australian Research Council produced a report, *Maximising the Benefits: Joint ARC/HEC Advice on Intellectual Property*. In this report, the Australian Research Council claimed that universities should prioritise research that would enhance income. Commercialisation, it asserted, would not only lessen the taxpayer’s burden it would also maximise the social benefits of knowledge.⁷⁷ Fifty percent of university-based research, the report said, was classified as either ‘strategic’ or ‘applied’. Its authors were persuaded that *all* this research ‘therefore could potentially lead to commercial outcomes’.⁷⁸ They recommended that Australian Research Council grants be conditional on the possession by institutions of an intellectual

⁷⁶ NBEET, *Maximising the Benefits: Joint ARC/HEC Advice on Intellectual Property* (Canberra: AGPS, 1995).

⁷⁷ Ibid.

⁷⁸ Ibid., 2.

property policy that '[has] as one of their aims the maximisation to Australia of the benefits arising from research'.⁷⁹

These claims were met with scepticism in parts of the university sector. The Royal Melbourne Institute of Technology Intellectual Property Committee was suspicious of the motives and intentions articulated in *Maximising the Benefits*. This committee was concerned that the Australian Research Council document did not align to advice recently received from the universities' own body, the Australian Vice-Chancellors' Committee (AVCC), who they trusted to a greater extent.⁸⁰

The AVCC took a stance that balanced government interests and institutional concerns. They were assisted by the Committee's chair, Robert Smith, who had by now left the National Board of Employment, Education and Training to become Vice-Chancellor at the University of New England. The AVCC discussion paper mirrored government concern that 'financial return is obtained from activities which have potential for commercial exploitation in order to lessen the contribution from public funds'.⁸¹ Despite this alignment to government goals, the report sought primarily to secure each university's financial interests. In so doing, it refigured research as a commodified service requiring an 'appropriate return' from its beneficiaries. Labour, facilities and equipment were university expenses that should be recovered by producing research of greater financial value than its cost. Beneficiaries now needed to be identified. On one hand a key beneficiary was government; since national economic growth, population health, food safety, market reputation and political

⁷⁹ Ibid., 11.

⁸⁰ RMIT, Intellectual Property Committee Minutes of Meeting 6/95: Friday 13 October 1995, *Intellectual Property File* (Melbourne: RMIT Archives, 1995).

⁸¹ AVCC, *Ownership of Intellectual Property in Universities: A Discussion Paper* (Canberra: AVCC, 1993), 9.

decision-making relied on university research, so a good deal of public funding was justified. But where research benefited the private sector, these costs, the discussion paper claimed, should be recouped by the institution through its ownership of intellectual property. In arguing this, the AVCC sought to protect university income from the Australian Research Council's apparent desire to claim it themselves. Allowing the universities to exploit the products of their work would relieve the public purse of some of its responsibility for higher education, a benefit that would not occur if the Australian Research Council was to control intellectual property.

University failure to claim intellectual property, warned the AVCC, exposed institutions to legal threats:

It is possible for an institution to be faced with considerable liabilities in respect of intellectual property with which it is associated but over which it has not exercised a great deal of control. It may not be easy to disassociate itself if problems arise and it is suggested that it is better to exercise prudent control from the outset.⁸²

Ownership of intellectual property, according to the AVCC, was not just about claiming an institutional stake in financial rights. Rather it was necessary, they argued, to enable 'an institution to exercise control over decision-making relevant to the subject matter'.⁸³ The production of knowledge, it implied, required greater planning than was traditional:

Control is exercised over the development of intellectual property to ensure that programs of research and teaching comply with institutional policies and objectives.⁸⁴

Just as the Commonwealth claimed that university research priorities should align to national goals, so, according to the Australian Vice-Chancellors, should individual

⁸² Ibid., 29.

⁸³ Ibid.

⁸⁴ Ibid., 9.

academic research align to institutional objectives. The policy implications, for universities, were significant.

Intellectual Property Policies 1986 - 1996

In the late 1980s, universities were venturing into the new territory of intellectual property at a time of rapid and far reaching higher education reform. This was a chaotic and contested environment. Internal and external changes, many derived from the Dawkins reforms, were causing confusion. Many of the universities were in the process of amalgamating with other institutions, trying to become large enough to qualify for membership in the National Unified System. Under those conditions, administrative and governance systems needed to be re-thought, facilities and equipment re-distributed and academic cultures negotiated. At the same time, student numbers were growing as the government's 'clever country' strategy sought a mass system of higher education. Despite this growth and change, additional funding was not forthcoming: Labor, along with many members of the public, were persuaded that academics were lazy and spoiled and should learn to do more with less. As a result, all of these transformations were being managed in a financially constrained environment, forcing university administrators to seek productivity increases. Their initiatives added to the chaos, since efficiencies were typically through often times radical and disruptive restructuring of university governance. The shift in attention towards applied research and skill development was leading to the growth of commercial research as yet another reform strategy.⁸⁵

Universities found it difficult to navigate such unfamiliar waters. Intellectual property policy was often unevenly prioritised. The University of Western Australia started

⁸⁵ Marginson and Considine, *The Enterprise University*, 20–39.

discussing an intellectual property policy in 1988 but did not have one in place until 1996.⁸⁶ The University of New England did not have a policy at all between 1989 and 1995, despite possessing a patents policy before that. Their archivist speculates that the university had left policy in the hands of their new commercialisation company, UNE Partnerships, during that time.⁸⁷

Confusing as it was, universities helped each other out where they could. Those that had an easier time passed copies of their policy to those just starting out. Macquarie University's intellectual property file, for example, held a copy of the Australian National University's 1986 policy.⁸⁸ In 1992, Sam Ricketson, an academic intellectual property lawyer (later co-author of *Universities and Intellectual property* with Ann Monotti), moved from Melbourne University to a new job at Monash. The Monash University solicitor, Renn Wortley, gratefully accepted a draft policy from Ricketson, which he had previously prepared for Melbourne (but which their academic board had rejected).⁸⁹ Monash then modified and adopted it. These patterns of information exchange were common, so that university files regularly refer to approaches by other institutions.⁹⁰ Together, institutions were inching towards a regulatory regime that gave universities greater control over intellectual property.

⁸⁶ *University of Western Australia v Gray*, French, J. FCA No. 20, FCA 498 CORRIGENDUM 2 (Perth: Federal Court of Australia Western Australia District Registry, 2008).

⁸⁷ William Oates, Archivist University of New England, Personal Communication (Email) to Hannah Forsyth, 5 May 2009.

⁸⁸ Macquarie University. *Intellectual Property File MQ/P37* (Sydney: MQU Archives, 1986).

⁸⁹ As well as Ricketson, the Melbourne policy had required several external solicitors, members of the bar and then a Queen's Council. In retrospect, Penington saw this as a minor irritant, though its cost must have been substantial. R.E. Wortley, Memorandum to Professor R. Porter DVC Research. *Intellectual Property Statute MON 974/97/1617* (Melbourne: Monash University Archives, 1992). David Penington, *Interview*.

⁹⁰ Macquarie University. *Intellectual Property File MQ/P37* (Sydney: MQU Archives, 1986-1996). Monash University, *Intellectual Property Statute MON 974/97/1617* (Melbourne: Monash University Archives, 1986-1996).

Despite this tendency to share and model policy on that of other universities, not all policies were the same. The following table summarises eight sample intellectual property policies.⁹¹ Only three mentioned external collaborators: Monash and Macquarie claimed all intellectual property from externally funded research while Adelaide University negotiated each case. This raises important questions about Monotti and Ricketson's assumption that intellectual property policies arose out of the new research environment. Universities, it seems, were not initially concerned about intellectual property in their interactions with industry and the commercial world. On the contrary, their key priority, as these documents demonstrate, was to assure the ability of universities to claim the intellectual property of their own staff.

⁹¹ It is worth noting that the majority of these policies have been amended, sometimes substantially, since. The table should therefore not be taken as an indication of those universities' current practice.

University	Year	Staff	Reporting Required	Student	Visitor	Collaborator/funder
Adelaide University	1989	University claimed all IP	Unclear from the policy	Not claimed	Claimed substantial ownership	1993 policy on research contracts shows University would negotiate
Australian National University	1986	University claimed all IP	Yes	University claimed	University claimed.	Not specified
Macquarie University	1990	University claimed all IP	Yes	Claimed as condition enrolment	Not specified	University claimed all
Monash University	1992	University claimed IP that was not traditional scholarly work	Unclear from the policy	Not claimed	Not specified	University claimed all
University of New England	1995	University claimed IP that was not traditional scholarly work	Yes	Not claimed	Not specified	Not specified
Royal Melbourne Institute of Technology	1995	University claimed all IP	No, but financial incentives in place	Not claimed.	Not specified	Not specified
University of Western Australia	1996	University claimed all IP	Yes	University claimed	Not specified	Not specified
University of Wollongong	1990	University claimed all IP	Yes	University claimed	Not specified	Not specified

Table A: Intellectual Property Policies 1986-1996

Academic staff did not fail to note that intellectual property policies were primarily directed against them: they became conscious that policy change might impinge on their personal financial interests. Some aspects were particularly worrying. At the University of Melbourne, Penington sought to claim royalty income from copyright on books. Staff protested, the National Tertiary Education Union became involved and the policy was rejected by the University Council, forcing Penington to drop this section of his proposed policy.⁹² Starkly opposing interests emerged, prompting some staff to stake unexpected claims to forms of intellectual property. At the Royal Melbourne Institute of Technology, for example, there was a move for a share of income from full-fee postgraduate coursework, newly deregulated under the Dawkins reforms.

Academics at the Royal Melbourne Institute of Technology argued that fee income from postgraduate coursework should be subject to the same rules as commercial research income. Like patent dividends, they contended, thirty percent of fee income from postgraduate coursework should be granted to the staff that wrote postgraduate course material:

My personal belief is that the *only* basis for arguing that a developer of courseware should begin the negotiation on economic benefit expecting *less* than one third of net profits would be that more material (as opposed to intellectual) input is made by the university to courseware than to applied research and technology transfer. My experience is that the reverse is common.⁹³

Student fees had for a century been a key source of university income. As 1970s free education policies were abandoned and commercial language entered higher education, university members began to identify all non-government income as

⁹² R.E. Wortley, Memorandum to Professor R. Porter DVC Research. *Intellectual Property Statute* MON 974/97/1617 (Melbourne: Monash University Archives, 1992). David Penington, *Interview*.

⁹³ A. Henderson-Sellers, Intellectual Property Policy – Comments by A. Henderson-Sellers, *Intellectual Property File* (Melbourne: RMIT Archives, 1996).

profit.⁹⁴ Neither university administrators nor academic staff ceded to the other a right to one hundred percent of that profit. Each started to battle to claim their portion.

For universities to claim the products of academic labour, they needed to clarify the nature of the employer-employee relationship in the university setting. Between the institutions, policy wording was variable on this subject, highlighting ambiguities about the nature of academic work. Some universities claimed ownership of intellectual property that ‘arose’ (as if by accident) from an academic’s labour.⁹⁵

Some claimed work that was ‘produced’ by ‘originators’, using language of agency and intent.⁹⁶ But in every case, universities used their status as employers to possess the work staff produced. As an employer, however, universities were in a complicated position. Most Australian public universities had Acts that defined the university as consisting of its members, which normally meant the academic staff. Academics were likely to constitute, rather than just work for, the university.⁹⁷ This structure notwithstanding, contracts of employment, as would exist under other kinds of employers, governed the relationship between all institutions and their employees. These contracts specified employment conditions for academic staff that set broad

⁹⁴ This did not apply to fee income from HECS, since HECS places were still subsidised and administered by the Commonwealth. HECS income thus did not seem terribly different from government funding. Bruce Chapman, ‘Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education.’ *The Economic Journal* 107 (442), 1997, 738–51.

⁹⁵ Macquarie University, Intellectual Property Policy, *Intellectual Property File* (Sydney: MQU Archives, 1991). University of Adelaide, Commercial Development of the University's Intellectual Property, *University of Adelaide Handbook of Administrative Policies and Procedures* (Adelaide: University of Adelaide Archives, 1998). RMIT, Intellectual Property Policy, *Intellectual Property File* (Melbourne, RMIT Archives, 1993).

⁹⁶ University of New England, Intellectual Property Policy, in *Intellectual Property Policy File* (Armidale: UNE Archives, 1995). Australian National University, Intellectual Property Policy, *The Australian National University Finance Committee File* (Canberra: ANU Archives, 1986). University of Wollongong, Intellectual Property Policy (Wollongong: UoW Archives, 1988).

⁹⁷ See Acts of the Universities, Australasian Legal Information Institute <http://www.austlii.edu.au/> Retrieved 18 October 2011.

expectations about their workload and activities.⁹⁸ Despite the existence of such contracts, academic staff were not normally directed to do specific types of research that would result in specific types of benefit for the institution. In fact, in the tradition of academic freedom, it would be most unusual if they were. As a result, while it sounds straightforward enough for an employer to claim the work of their staff, even a cursory evaluation of the character of academic work reveals it was not.

It was an important task, then, if universities wished to claim that they owned intellectual property produced by their academic staff, to establish that intellectual property was created as a requirement of their employment. As Ann Monotti points out, no organisation can claim other people's property. Employers need to demonstrate that each item of intellectual property was explicitly created by the staff member for their employer.⁹⁹ For universities, this created a problem. The policies implying that intellectual property might be developed by accident were right: university research could be unpredictable. Despite the claims of government to the contrary, university policy makers knew that protectable intellectual property may well come about as a result of serendipity rather than intent. Moreover, any policy attempting to make the production of intellectual property a requirement of academic employment encountered a tangle of problems. Research did not look the same for every person, project, approach or discipline, so the policy descriptions were difficult to frame. The sample policies had to grapple with such awkwardness:

⁹⁸ Between 1986 and 1996, academic contracts and conditions were in a state of flux as the industrial relations as well as the higher education context was changing. Andrew Spaul, *The Australian Education Union: From Federal Registration to National Reconciliation* (Melbourne: Australian Council for Educational Research, 2000), 40–2. Michael Horsley and Greg Woodburne, *Australian Academic Salaries Time Series Project 1977-2002*, DEST (Canberra: The Australian Centre For Organisational, Vocational And Adult Learning, 2003).

⁹⁹ Ann Louise Monotti, 'Who Owns My Research and Teaching Materials – My University or Me', *Sydney Law Review* 19 (4), 1997, 425–71.

Notwithstanding subsection (a) the University may require that member of staff or student formally assign to the University his or her interest to any intellectual property.¹⁰⁰

The relevant subsection had specified that the university claimed all intellectual property produced by staff. Unsure that ownership via employment would be sufficient, the university thought it had better require some staff assign their rights individually, to be safe.

Nevertheless, some sought expansive ownership claims on the basis of the employer-employee relationship. The Australian National University, like most others (six of eight), claimed all intellectual property:

The ownership of intellectual property created in the course of employment by the University, and hence the sole right to use such intellectual property, belongs to the university.¹⁰¹

To avoid the conflict with the National Tertiary Education Union that Penington had faced, however, those that claimed one hundred percent of intellectual property waived their rights to income derived from publications.¹⁰² Unlike the American Association of University Professors, which had argued that copyright was connected to academic freedom, the Australian National Tertiary Education Union did not object to university ownership of copyright as long as academic staff retained the right to income from publications. This suggests that the Australian union did not locate academic freedom rights in copyright, as the American Association did. The American organisation had stressed that copyright expressed rights additional to the financial ones: since copyright included the right to edit, amend or suppress work, academic freedom deemed that it must be the possession of the scholar. The National Tertiary Education Union was only concerned about staff financial rights and did not

¹⁰⁰ RMIT, *Intellectual Property Policy* (Melbourne: RMIT Archives).

¹⁰¹ ANU, *Intellectual Property Policy* (Canberra: ANU Archives).

¹⁰² R.E. Wortley, Memorandum to Professor R. Porter DVC Research. *Intellectual Property Statute* MON 974/97/1617 (Melbourne: Monash University Archives, 1992).

press the issue. Of the sample policies, only staff at Monash and the University of New England owned the intellectual property attached to their publications, the rest merely received royalties.

Time, Labour and Academic Freedom

Despite an apparent lack of concern about academic freedom implications in the ownership of copyright, some Australian academics and higher education commentators were concerned about the potential for research commercialisation to actually suppress research, preventing it from spreading to the parts of society who needed it most. In 1985, *The Australian Higher Education Supplement* reported that, sometimes, commercialising research meant that its potential utility was limited. Commercial research may not reach its desired beneficiaries because the very idea of ‘beneficiary’ embedded in the commercialisation process assured that research benefited its owner, not the public. It was in the interests of business to create a monopoly over knowledge, giving them a market edge and potentially greater profit margin.¹⁰³

This presented the risk that its benefits would fail to reach the community. It also threatened traditional structures that, past academic leaders like Ashby and Clunies Ross had argued, protected the reliability of university research. Free scholarly inquiry was to be separated from financial and other interests, a freedom that was embodied in the right of an individual academic to publish their work, regardless of their findings.¹⁰⁴ Despite that tradition, five out of the eight sample Australian

¹⁰³ ‘Patent System Puts Curb on Spread of New Ideas.’ Reprinted from the Times Higher Education Supplement, *HES*, 6 February 1985. Jane Ford, ‘Contracts Keep Research Secret’, *HES*, 29 November 1985.

¹⁰⁴ Conrad Russell, *Academic Freedom* (London: Routledge, 1993), 9.

university intellectual property policies required academic staff to refrain from publishing their work until granted permission by the institution.¹⁰⁵ For example:

The staff member shall notify his/her Head of Department and the General Manager of ITC (Uniadvice) Ltd that intellectual property has been created. Where intellectual property has been created all reasonable care must be exercised by staff and students not to disclose, publish or use the property in any way which would prejudice its protection.¹⁰⁶

Under these conditions, a researcher was theoretically not allowed to discuss their research – whether privately with colleagues, publicly at conferences or in published work – without approval by the institution. By owning the intellectual property, institutions also claimed the decision to commercialise or make research publicly available.¹⁰⁷

It was not only from staff that universities sought to claim research. Half of the sample policies also claimed all intellectual property produced by students. Students, however, were not staff: they were not contracted to produce commercialisable research in a way that would grant an employer the right to claim their intellectual property. Some universities, consistent with the recommendation of the AVCC, made it a condition of student enrolment that they assign their intellectual property rights to the institution.¹⁰⁸ Macquarie University made this a requirement for all students,

¹⁰⁵ Intellectual property policies at the Australian National University, Macquarie University, the University of New England, the University of Western Australia and the University of Wollongong all required reporting of commercialisable research. The RMIT did not require reporting, but put financial incentives in place to encourage it. It is not clear from the Adelaide or Monash policies whether or not reporting was mandated.

¹⁰⁶ UoW, *Intellectual Property Policy* (Wollongong: UoW Archives, 1988).

¹⁰⁷ In recognition of academic freedom, most universities have changed this since and academics now usually own the decision to publish, if not the property. Personal communication, Sydnovate Course Convenors, Go8 IP Knowledge Transfer and Commercialisation Course, 10 June 2009. Freeman, Director, Research & Research Training Services, Office of the Deputy Vice-Chancellor (Research), Macquarie University, Personal Communication to Hannah Forsyth, 23 March 2009.

¹⁰⁸ AVCC, *Ownership of Intellectual Property in Universities*, 11.

despite written advice that to do so would infringe the legal rights of students to their own property.¹⁰⁹

There were practical, as well as legal, impediments to claiming student work. Policing the protection of intellectual property produced by students, or assuring that work that might lead to patents is not discussed outside the laboratory, was an improbable task. More common complications would be attached to the question of honours or postgraduate research students doing further study or obtaining employment at another university upon graduation and needing to use their own research.¹¹⁰

Universities have since abandoned the practice of claiming student work, opting instead, as half of those original policies did, to offer students the option to assign their intellectual property to the institution if needed – for example, if the student collaborated on a larger project dominated by academic staff or if they wished the university to assist in commercialisation.¹¹¹

These early, expansive claims, demonstrate that policy makers assumed that, in a sense similar to the books in the university library, any knowledge existing within their community belonged to the institution; thus they had the right to all intellectual property of staff and students. In attempting to articulate this belief in legally definable terms, some universities argued that it was *time* that they owned. Contracts of employment required academics work a certain number of hours: their salaries were evidence that those hours had been purchased from them. This was a problem, however. Despite the existence of Industrial Relations Commission awards that

¹⁰⁹ Macquarie University, Extract from Council Minutes of the Meeting Held on Friday 23 August 1991, *File P37 Intellectual Property* (Sydney: MQU Archives, 1991).

¹¹⁰ A problem that also attends increasingly mobile academic staff as research begun at one university is built upon at another, See, for example *University of Western Australia v Gray*, French, J.

¹¹¹ Freeman, Director, Research & Research Training Services, Office of the Deputy Vice-Chancellor (Research), Macquarie University, Personal Communication to Hannah Forsyth, 23 March 2009.

specified the number of these hours, academic time was unlikely to be constrained by them.¹¹² What if a scientist worked in their laboratory late at night? Would the university own her or his work? Demonstrating this uncertainty, the Australian National University 1986 intellectual property policy contained an unusual clause:

The whole of the professional time of an academic staff member is required to be devoted to the performance of the duties of office of that staff member. Thus, any intellectual property developed by staff members in the performance of the duties of their office belongs to the university.¹¹³

Academic staff were thus expected to have no intellectual or inventive life beyond their academic duties. This clause suggested the university could claim ownership over patent rights to an invention made in the course of an academic's hobby, even if unrelated to their academic field, since all professional time belonged to the university. Income from intellectual property, the policy suggests, was the indicator that work was 'professional' and therefore the university's.

General staff were treated differently:

In contrast to academic staff members, general staff members have fixed times of working: however, any intellectual property developed by them in the course of their employment, or using resources and facilities provided by the University, also belongs to the University.¹¹⁴

Academic work, in this framework, tended to resemble the task-oriented peasant work that E.P. Thompson described in 1967: the activity, rather than the length of the workday, was important.¹¹⁵ In academia less distinction existed between 'work' and 'life' than the Australian National University's legal team would have liked.

¹¹² In the period from 1986 to 1996, university staff were under various types of State and Federal industrial relations commission awards. Michael Horsley and Greg Woodburne found the data too inconsistent to analyse. Horsley and Woodburne, *Australian Academic Salaries Time Series Project 1977-2002*.

¹¹³ ANU, *Intellectual Property Policy* (Canberra: ANU Archives, 1986).

¹¹⁴ Ibid.

¹¹⁵ See E.P. Thompson, 'Time, Work-Discipline and Industrial Capitalism', *Past and Present* 38, 1967, 61.

Academic work was not only difficult to define by the length of the workday. Academic time, especially research time, was often spent doing one's 'own' work, pursuing knowledge in the way scholars saw fit, following untrodden and sometimes unpredictable pathways. How could an employer define it in order to claim it? The Australian Vice-Chancellors saw the problem immediately:

It is not always clear whether the activity which produces the property is one which comes within the terms of the contract of employment. It is difficult to determine whether the property is produced in the institutional employer's time or in the staff member's time.¹¹⁶

This is why universities like the Australian National University were so careful to claim everything an academic staff member ever did. If the university could claim time, according to the Australian National University's logic, they could claim anything within time.

Beyond Intellectual Property: Owning Knowledge

In claiming time, universities attempted to obtain more than staff intellectual property, they also sought ownership of its *potential*. Universities were not alone in this:

Knowledge resides in the human brain, and unlike plant and equipment or other physical means of production, knowledge is easily replicated and transferred to others. With knowledge generally equating to value, not only does it matter *who owns what is in a person's head* but also harvesting that knowledge and controlling its dissemination is critical in a competitive environment.¹¹⁷

It was easy to confuse knowledge and intellectual property. The University of Adelaide policy, for example, declared that it was 'essential that intellectual property with potential for commercial development should be appropriately protected before

¹¹⁶ AVCC, *Ownership of Intellectual Property in Universities*, 10.

¹¹⁷ Christopher M. Arena and Eduardo M. Carreras, *The Business of Intellectual Property* (Oxford: Oxford University Press, 2008), 29. Italics added for emphasis.

it is published' (that is, before it is in fact intellectual property).¹¹⁸ The language of knowledge and intellectual property were similar and they were related, since intellectual property (the rights attached to knowledge) could not exist without the underlying substance that the University of Adelaide also sought to protect. For businesses, and now universities, hoping to enter the 'knowledge economy', it was as if the pursuit of knowledge and the protection of intellectual property was only a semantic distinction.

Universities, however, had more reason than other kinds of organisations to equate knowledge and intellectual property, and to try to own what was in a person's head. Universities hoped that it would allow them to assert rights over commercialisation opportunities that arose out of serendipitous research. This was the commercial reason for needing to own what was in an academic's mind, for in a university environment, owning intellectual property was not sufficient. Staff were not directed to invent: indeed, except through broad funding priorities, research could not really be directed at all. Universities could never predict where intellectual property might suddenly appear. So university leaders became keen to own the knowledge that preceded it.

In some respects this supported institutional interests by seeming to locate intellectual property within university traditions. Claiming that knowledge and intellectual property were practically synonymous smoothed over the contradiction between its acquisition from staff and academic freedom. It made it seem that intellectual property was in fact the mission of the university. The Australian National University 2011 website suggests the potency of this formulation:

¹¹⁸ University of Adelaide, *Commercial Development of the University's Intellectual Property, Registrar's Correspondence Files* (Adelaide: University of Adelaide Archives, 1989).

Intellectual property lies at the centre of all basic, strategic and applied research conducted across Colleges and disciplines at the ANU. Put simply, IP is the ANU's core business: it's what we produce.¹¹⁹

If universities were about knowledge but called it 'intellectual property', this made commercialisation seem consonant with their traditional goals.

Forcing a fit between the individual private monopoly that characterised intellectual property with the traditional values of public universities was a challenge. Despite such difficulties, the ideal of the 'community of scholars', ironically, helped to justify institutional claims to intellectual property. Membership in the community of scholars had created the university; the university owned staff and student knowledge because staff and students did. The character of research further reflected this collegiality. Research was almost never a purely individual act, the AVCC suggested. Even if research was individually constituted, academic association with the university demonstrated their reliance on the institution to be able to conduct research. The infrastructure: 'rooms, electricity, gas, water, telephones', were just the beginning. Science relied on expensive laboratories, the humanities on expensive libraries.¹²⁰ The scholarly environment, argued Macquarie University's research management team, though intangible and unquantifiable, acted as the inspiration and enabler of quality research, validating the institution's claim to income derived from it.¹²¹

¹¹⁹ ANU, Research Office: Intellectual Property, <http://www.anu.edu.au/commercialisation/intellectual-property.php> Retrieved 25 July 2011.

¹²⁰ AVCC, *Ownership of Intellectual Property in Universities*, 10.

¹²¹ Macquarie University, Intellectual Property Policy. Macquarie University, Research Management Plan (Draft), *Intellectual Property* File P37 (Sydney: Macquarie University Archive, c1989/1990 (undated)). Freeman, Director, Research & Research Training Services, Office of the Deputy Vice-Chancellor (Research), Macquarie University, Personal Communication to Hannah Forsyth, 23 March 2009. See also AVCC, Conditions of Acceptance of Research Contracts (Draft), *Intellectual Property* File P37 (Sydney: MQU Archives, 1989).

Reliance on the research environment to strengthen intellectual property claims complicated questions of originality. In much contemporary research, the AVCC argued, it was simply ‘not possible to identify one person as the author, inventor, creator, maker or originator’.¹²² As George Eliot had said in *Middlemarch*, ‘There was no need to praise anybody for writing a book, since it was always done by somebody else’.¹²³ The AVCC were concerned that the complexity of attributing originality carried the potential for exploitation. There were many in the university with a potential interest in claiming intellectual property. The universities had the task of protecting vulnerable staff and students. Students and research assistants, in particular, the AVCC argued, might ‘have difficulty in claiming any rights if a person of comparative power is permitted to claim sole ownership or to assume control’.¹²⁴

Despite this offer of protection, the contradiction between originality, innovation and institutional support remained. The difficulties of identifying a single originator were most dramatically evident in the sciences. The images and ideals that had shaped modern authorship and copyright – the hermit-like humanities scholar scribbling in the garret – had been largely superseded by collaborative teams of scientists pouring over microscopes in laboratories. The ascendancy of science, especially since the Second World War, changed the dominant culture in universities so that towards the end of the century scholarship was rarely experienced as a singular individual endeavour. Mario Biagioli suggests that, globally, this came to a head in the 1990s. Authorship, as it was defined by intellectual property, had always been at odds with scientific discovery. In earlier centuries, however, this was effectively veiled by publication norms, which on the surface made scientific publishing seem similar to

¹²² AVCC, *Ownership of Intellectual Property in Universities*, 10.

¹²³ George Eliot, *Middlemarch* (London: Penguin, 1874), 890–1.

¹²⁴ AVCC, *Ownership of Intellectual Property in Universities*, 10.

literary work.¹²⁵ Nevertheless, towards the end of the twentieth century, large-scale multi-authored papers, sometimes listing more than one hundred contributors (a symptom of the growing size and complexity of ventures like the human genome project) exposed some fundamental problems with authorship in universities, especially in science.¹²⁶

Knowledge in the basic sciences, Biagioli demonstrates, simply could not be owned, since it described a reality that existed beyond its authors. Once large multi-disciplinary teams published discoveries to which each could only have contributed a small part, there was an increasingly apparent disjuncture between the assumptions of ‘ownership’ embedded in copyright’s construction of authorship and the realities of scientific publication.¹²⁷ The scientific community struggled with questions that seemed a reprise of the requirement for an author, as Foucault had described it, to prevent publication of transgressive texts.¹²⁸ Who took responsibility for the discovery? Who would take the blame if results were found to be fraudulent? How were the rewards of publication understood when one article might have so many authors? Was it realistic to think that they *all* contributed sufficient original knowledge to warrant authorship? How would journal editors find reviewers if nearly every expert in a field was listed as author?¹²⁹

¹²⁵ One or two scientific authors listed on an article or book do not on the surface appear any different from the literary authors copyright envisaged, Biagioli argues. He suggests that they are in fact fundamentally different and that the originality looked for under intellectual property definitions contradict the very nature of scientific discovery. Mario Biagioli, ‘Rights or Rewards?’, in Mario Biagioli and Peter Galison (eds), *Scientific Authorship: Credit and Intellectual Property in Science* (New York: Routledge, 2003), 253–80.

¹²⁶ Ibid.

¹²⁷ It would be more accurate to describe scientists as *contributors* to publication than authors, suggests Biagioli. Ibid. 264–7

¹²⁸ Foucault, ‘What Is an Author’, 205–17.

¹²⁹ Mario Biagioli, ‘The Instability of Authorship: Credit and Responsibility in Contemporary Biomedicine’, *FASEB* 12, 1998, 3–16.

University leaders, however, used this kind of uncertainty to make claims for intellectual property. The AVCC outlined the complexities around identifying an originator, encouraging universities to use the arguments they provided to demonstrate to academic staff that it would be best if the institution owned all intellectual property alone.¹³⁰ In assuming the rights of the originator (or author) in the face of difficulties identifying the responsible scholar, universities sought authority in the new research environment, not just commercial income. Now that research and innovation tended to occur in more collaborative ways with industry and the community, universities had lost the clout that had been attached to the antecedence assumed in ‘pure’ research. In other words, the reliance of society on university knowledge as the foundation for scientific, social, cultural, technological and eventually economic advancement, was collapsing as industry and universities worked together in more integrated ways. In intellectual property ownership, that antecedence, they hoped, would be returned, reasserting the university’s prominence in the knowledge economy and regaining the public support that, as Chapter Four demonstrated, had been waning since the early 1980s.¹³¹

The singularity of intellectual property ownership, however, also threatened the very structure – the university’s collectivity – the AVCC had used to claim it. University policies demonstrate the prevailing assumption that all knowledge – not just employee intellectual property rights – belonged to the university, for that which was the possession of its members also enriched the institution. Australia’s dominant tradition of public universities, defined in their Acts by their members, had been designed to assure the quality (and sometimes, as in the 1973 Philosophy Strike discussed in

¹³⁰ AVCC, *Ownership of Intellectual Property in Universities: A Discussion Paper*.

¹³¹ Ibid.

Chapter Three, the complicity) of university knowledge. Members of these collegial structures tested, evaluated and approved scholarly work. Once transformed into institutional intellectual property claims, this shared authority was undermined, investing it instead in the institution, in this case understood in its singular sense. The AVCC suggested that institutional ownership of intellectual property meant it would be managed in ‘the best interests of all concerned’, all now considered separate entities – interested parties, rather than disinterested scholars.¹³²

Conclusion

Academics, as the ‘entrepreneurial university’ emerged in Australia, regularly argued that there was something not right about emphasising the exchange value of knowledge, as intellectual property did.¹³³ This went beyond political-economic opposition to commodification: it seemed, according to many scholarly accounts, to conflict with the mission and structure of the university tradition, which was more collectively oriented than intellectual property could be.¹³⁴ The singularity of owning intellectual property was indeed a new way of structuring academic work, not just another way of describing existing knowledge practices. It contradicted the richness that was idealised in the community of scholars and expressed in the membership-based structure of most Australian public universities. Tensions between institutions and staff were exacerbated as they began to compete with one another for the financial wealth they were told was embedded in university knowledge.

¹³² Ibid.

¹³³ For example, Anthony Welch, *Australian Education: Reform or Crisis?* (Sydney: Allen & Unwin, 1996).

¹³⁴ Roger Scott, ‘Biscuits, Bicycles and BSes: The Impact of Market Forces on the Management of Publicly Funded Universities’, in David R Jones and John Anwyll (eds), *Privatizing Higher Education: A New Australian Issue* (Melbourne: Centre for the Study of Higher Education, 1987), 57–74.

As it turned out, however, the potential for wealth had been overstated. Collectively they had constructed what Elizabeth Garnsey called a ‘consensual vision’, a fantasy in which teaching and research, reconstructed as a trade in intellectual property, would solve their pressing financial problems.¹³⁵ The idea that fifty percent of university research outcomes had commercial potential shows a clear misunderstanding of the market for intellectual property – commercialisation specialists have since suggested that only a tiny proportion (as little as 0.03 percent in some estimates) of the new ideas generated within a university will ever successfully find their way to market.¹³⁶

The search for new wealth through intellectual property and research commercialisation was deemed, by its advocates, as a modernising task, reorienting the university towards contemporary society and a globalising economy. The changing priorities, however, grated against many expectations. Hands-off government investment in research and its infrastructure had come to seem central to the university tradition. As a tradition, however, it was surprisingly new. Research had not long been central to the idea of the university in Australia. Before the Second World War, while it was gaining strength in the sciences, research was not yet high among scholarly priorities. Research became the hallmark of higher education, however, as government funding forged an uneasy alliance of the university to the

¹³⁵ Elizabeth Garnsey, ‘The Entrepreneurial University: The Idea and Its Critics’, in Kaoru Nabeshima (ed.), *How Universities Promote Economic Growth* (Washington DC: The World Bank, 2007), 227–38. Christopher Newfield’s research revealed that after the costs of commercialisation are taken into account the profits, even from spectacular discoveries, constitute a very small proportion of the income of American universities. The costs of higher education are not borne by industry then, he demonstrates, leaving its burden largely with the fee-paying middle class. Christopher Newfield, *Unmaking the Public University: The Forty-Year Assault on the Middle Class* (Cambridge M.A.: Harvard University Press, 2008), 195–207.

¹³⁶ Greg A. Stevens and James Burley, ‘3,000 Raw Ideas = 1 Commercial Success!’, *Research Technology Management* 40 (3), 1997, 16–27. See also, Franzoni and Scellat, ‘Academic Patenting and the Consequences for Scientific Research’, 95.

state. Government funding of research was not granted for the purpose of pure inquiry, but for nation-building.

Despite their link to government aims, universities sought to assure their autonomy, while at the same time welcoming the additional funding that would support their work. They emphasised that the quality and reliability of university research and teaching was based on their independence from vested interests. But the principles of accountability in a government-funded system suggested to policy makers that the Commonwealth ought to have some say in university research decisions and educational priorities.

Amidst their reflections on the purpose and nature of autonomy, academics also grappled with their responsibility to society and what that meant for the types of knowledge with which they were preoccupied. Wartime leaders like Eric Ashby and Ian Clunies Ross had sought to serve society by maintaining the university's separateness and coherence. But despite their efforts, research had not stayed isolated and disinterested: researchers from Philip Baxter onwards found that some research produced more useful results when it was connected with real-world problems. Relationships with industries and professions grew. Detached scholarship was increasingly criticised by scholars themselves as the rarefied knowledge it produced seemed evidence of the university's traditional elitism.

An emerging imperative to a more inclusive approach to knowledge merged with a growing government expectation that higher education would function as a research and teaching arm of the state. There had been suggestions since the 1940s and again in association with the 1957 Murray reforms, that government might use its control of

funding to make claims on the universities. Concerns for government control, asserted in association with its financial support, however, were superseded by more immediate worries when, during the Cold War, government sent ASIO agents to observe and influence the political and ideological aspects of academic thinking.

Apart from those Cold War interventions, from a government perspective there was little need to use funding to impinge on academic freedom. Universities more often than not supported government goals, a systematic coalition of the power of government and education which earned the anger of student radicals. Student and staff radicalism in the 1960s and 1970s disrupted that alliance to the state so that by the 1980s, the universities' association with government was far less convivial.

Despite the strained relationship, government did not finally assert its latent control until the Dawkins reforms of 1987.

Changes inside the universities augmented the growing unease that resulted from Dawkins's revolutionary policies. The shock of the Dawkins reforms belies the reality that some of its transformations had been brewing for decades. Since the court's 1956 finding that the University of Tasmania and Sydney Orr were in a master-servant relationship, university staff increasingly related to their institutions in a way that reflected their sometimes-competing interests. This was strengthened when university administrators, faced with severe funding cuts, were compelled to do the government's business. In order to protect their interests, the academic staff associations became a formally registered union in 1993. The union was not the primary source of adversarial feeling, however: the tense environment was forged by scarce, competitive research funding, which began to take the place of collegial authority as the signifier of quality.

In this environment, the worth of research was now often difficult to assess except by its financial value. By pushing for independence through the trade in intellectual property, the universities enhanced, rather than challenged, that transformation. As their focus became more commercial, government began to look upon universities in a different way, despite their increased reliance on higher education for the public good. Instead of national institutions requiring public investment, university research seemed an industry, competing with others for government support and commercial income.

By the mid-1990s, deregulated student markets, intellectual property strategies, research commercialisation centres and academic incentive schemes structured the university environment so that it increasingly resembled the industry that members of the Federal government imagined it to be. At the University of Western Australia, a professor of surgery was by this time taking advantage of the commercial opportunities university employment now provided. He set in motion a sequence of events, recounted in the following Epilogue, which, over the next decade or so, rattled the academic community's confidence in the durability of the intellectual property and research commercialisation strategies they had established in the 1980s and 1990s.

Epilogue: UWA v Gray

In 1981, Dr Bruce Gray, a specialist surgeon, received the John Mitchell Crouch Fellowship, offered by the Royal Australasian College of Surgeons, to pursue research into cancer treatments.¹ His research flourished and a few years later Gray secured a professorial appointment at the University of Western Australia.

As soon as Gray began work in Western Australia in 1985, he staked out his territory: research staff were handpicked, space was negotiated and equipment purchased. Gray was working on microparticles that could target cancerous cells in the liver. Eventually, this research led to the invention of a technology Gray called microspheres.

Next, Gray navigated the uncompromising world of medical technology commercialisation. He worked hard to attract substantial external grant income. Competitive income notwithstanding, paid a university salary, using university resources, drawing on the expertise of university colleagues and trading on the status of a university professorship, Gray's work led to commercial products that were developed and sold through a publicly listed company called Sirtex. In 2010, the Australian Stock Exchange listed Sirtex as sixteenth in the top one hundred companies of the health and biotechnology sector, with shares worth \$273 million.²

¹ Royal Australasian College of Surgeons, 'Premier Surgical Science Award: John Mitchell Crouch Fellowship', *Surgical News* 10 (1), 2009. http://www.surgeons.org/media/273608/ATL_2009-06-26_JMC_SN_feature_Jan.pdf Retrieved 18 October 2011.

² Australian Stock Exchange, 'Research: Health and Biotechnology Sector', http://www.asx.com.au/documents/research/health_care_sector_factsheet.pdf Retrieved 1 March 2011.

From the early 2000s, Bruce Gray personally owned a \$75 million stake in Sirtex.³

The University of Western Australia did not receive a cent.

Leaders of the University of Western Australia tried to talk to Gray, to invite him, in a spirit of collegiality, to share the financial benefits of his research with the university.

When that did not work, the university took legal action. The legal fracas that followed was complicated. The case *UWA v Gray* included other claims and cross-claims: the University of Western Australia against Sirtex; Sirtex against Gray; Gray against the University of Western Australia; Sirtex against the University of Western Australia and Gray against a fellow researcher. The central question, however, and that which attracted the higher education sector's attention, was who owned the intellectual property in Gray's inventions – Gray or the university?

The University of Western Australia argued that, as an employee of the university, Bruce Gray's work was the property of the institution. In a judgement by Justice Robert Shenton French, the court found that, while Gray was certainly contracted to teach and conduct research, there was no requirement – or even implied expectation – that he would invent. Invention, the court found, was not what he was paid to do. If he invented, which he clearly did, he owned the intellectual property himself.

The university submitted their intellectual property policy, demonstrating they had claimed the whole of an academic's professional time. This was the source of some embarrassment. Like other universities in the complex post-Dawkins era, the process of developing the policy had been patchy, so that the responsibilities for intellectual property protection were unclear. While the new policy was developed and even

³ Rebecca Lawson, 'UWA Loses \$75m Gray Appeal', *WA Business News*, 3 September 2009.

officially adopted by the time Gray patented the microspheres, it had not been properly communicated to the university community – it had not been ‘promulgated’, as the court called it.

This did not help the university’s case. But it was not the main issue, according to Justice French. In fact, he described it as ‘the least of its difficulties in this case’.⁴ The university argued that, even if the policy was not in force at the time, ownership of intellectual property was implied in Gray’s employment contract. The policy merely demonstrated the inherent rightfulness of their claim. The court was not persuaded. Justice French found that ‘UWA cannot, by regulation, acquire property from its staff members’.⁵

The University of Western Australia pointed to Gray’s responsibilities as an employee. His ‘fiduciary obligations’ required him to protect the university’s property, university lawyers argued. But this too was a problem. Not only was Gray’s invention *not* the university’s property, the court found that there was also some doubt about Gray’s status as an employee. Gray was not really an employee, the court found – at least, not in the same sense used in other cases where employees had failed in their fiduciary obligations. Properly speaking, Gray was a *member* of the university. Gray was not under managerial direction; indeed it was necessary to the work that he controlled his research himself. Gray’s membership in the university, Justice French found, was a precondition to his academic freedom. Moreover, that academic freedom was what enabled the university to fulfil *its* legal obligations.

⁴ *University of Western Australia v Gray*, French, J. FCA No. 20, FCA 498 CORRIGENDUM 2 (Perth: Federal Court of Australia Western Australia District Registry, 2008), Paragraph 11.

⁵ Justice French’s 2008 judgment is excessively long partly because in it he offers the higher education sector a great deal of advice. Universities could not use intellectual property policies to claim automatic ownership over invention as an employer’s right, he shows, but they could, in their employment contracts, require staff to assign their intellectual property rights to the university. *Ibid.*, Paragraph 90.

Theoretically, if the purpose of the university was the commercial production of intellectual property, Gray might have some fiduciary obligation to protect it. *Was* this the purpose of the university?

It was understandable, said Justice French, that lawyers for the University of Western Australia were reluctant to discuss something as abstract and contested as the purpose of the university. French was willing to do so, however, based on the legal document defining this particular institution: the Act of Parliament that created the University of Western Australia. In examining that Act, Justice French found that the protection of the commercial value of intellectual property was clearly not a primary obligation of either the institution collectively or any of its individual members. Knowledge, not intellectual property, was the legal purpose of the university.

It was the obligation of the university – and the court – to protect the university’s capacity to foster knowledge. This required academic freedom. The university’s legal purpose was dependent on its expert members, individually and collectively, pursuing and communicating knowledge without interference or bias from the institution. If the university – as it appeared to do in the case of *UWA v Gray* – prioritised the protection of financial interests over academic freedom, it failed to accomplish its task as outlined in the Act.

Therefore, as a member of the university, Gray’s obligation to knowledge superseded any responsibility to protect the institution’s financial interests. If the university owned Gray’s research prior to the patent, theoretically the university could override Gray’s will in relation to it: they could modify, publish or suppress it. The obligation to knowledge carried by both the university and Gray therefore required Gray to own

the intellectual property in his research. As owner, he could do with it what he wished – that was his academic freedom.⁶ Choosing to use that knowledge for personal financial gain might be morally dubious – indeed, Justice French pointed out that Gray’s personality no doubt made him a difficult man to work with on a collegial basis – but it was nevertheless his legal right.⁷

To the shock of the Australian higher education sector, Justice French found, in a 544-page decision, for Bruce Gray. The \$75 million in shares were Gray’s alone. Universities were shaken, but none were as traumatised as those who had the most to lose from the decision: the sector’s intellectual property lawyers.⁸ Legal commentary declared the judge to be out of touch with the realities of the modern university. Justice French, they claimed, is imagining universities to be ivory towers. Of course universities have a commercial purpose, they declared in the media, *where have you been?*⁹

Staff of university research commercialisation offices rightly assumed that the University of Western Australia would appeal. The decision seemed so obviously erroneous that many also assumed that the university would win.¹⁰ They were wrong. The 2009 decision of the full bench of the Federal Court confirmed everything Justice

⁶ It would be quite acceptable, Justice French showed, for Gray to willingly assign his rights – or, more realistically, a portion of them – to the university. As owner, he would be just as free to gift or trade rights to the university as he is to sell or trade them in any other way. French suggested that universities would do better to look to incentive schemes that would encourage staff to do this than to try to claim ownership in a way that violates academic freedom and the mission of the university. *Ibid.*, Paragraph 14.

⁷ *Ibid.*, Paragraph 622.

⁸ Bernard Lane, ‘UWA Fails to Appeal’, *HES*, 17 February 2010.

⁹ Lawyers Weekly, ‘Universities Put on Notice over IP Rights’, http://www.lawyersweekly.com.au/blogs/top_stories/archive/2009/09/07/universities-put-on-notice-over-ip-rights.aspx. Retrieved 18 October 2011. David Bushby, ‘Friday Partner’s Lunch Audio Webcast: UWA v Gray Round Table’, News Limited, <http://www.brr.com.au/event/60552/partner/theaustralian> Retrieved 8 March 2011.

¹⁰ Bernard Lane, ‘Federal Court Backs Inventor Bruce Gray’s Intellectual Property Claim’, *HES*, 9 September 2009.

French had said. Justices Lindgren, Finn and Bennett even went further in contemplating the relationship between academic freedom and academic ownership of intellectual property. A fundamental characteristic of academic freedom, they agreed, was the right to publish.¹¹ The university's reliability was dependent on the willingness of scholars to open their work to public and collegial scrutiny through publication.¹²

Publication of research findings prior to commercialisation, however, destroys the patentability of knowledge. The criterion for a patent is that the knowledge in question is *not* in the public domain – it must necessarily be privately owned. If, under principles of academic freedom, an academic has the right to publish and thus the right to destroy the commercial potential of knowledge, the court considered this to be firm evidence that they own it. Patent attorney Rob McInnes said that the destruction of commercial potential through publication was as irresponsible as an academic taking a sledgehammer to their own laboratory. Publication in this sense was a destructive behaviour that amounted, he argued, to a waste of public money.¹³

With the Federal Court case unsuccessful, the University of Western Australia sought leave to appeal to the High Court. In a media release, the Vice-Chancellor, Alan Robson, supported their decision by invoking the collegial character of academic research:

¹¹ *The University of Western Australia v Bruce Nathaniel Gray, Wad 93 of 2008 on Appeal from a Single Judge of the Federal Court of Australia*, Lindgren, Finn, and Bennett, J.J., (Perth: Federal Court of Australia Full Court, 116, 2009).

¹² See Mario Biagioli, 'The Instability of Authorship: Credit and Responsibility in Contemporary Biomedicine', *FASEB* 12, 1998, 3–16.

¹³ Bushby, 'Friday Partner's Lunch Audio Webcast: UWA v Gray Round Table.'

Research and innovation undertaken within universities, by their very nature, builds on the work of those who have gone before. We must ensure that this research - which will almost always be done for the benefit of the broader community – is recognised as university IP.¹⁴

Robson's aim was already achievable. Justice French had outlined, in his original lengthy and detailed judgment, ways that the university would be able to claim intellectual property from staff in the future, but without violating their academic freedom. The University of Western Australia's legal position, contrary to Robson's media release, was not based on the university's ability to fulfil its mission, but rather on an insistence on Gray's status as an employee. They submitted to the high court that there should be no separate category of employment for academic staff and that the university, as an employer like any other, should own their research.¹⁵

But the court had shown that scholarly work must be directed to the purpose of the institution. Academic freedom could not be just an antiquated tradition. Rather, it was the legal responsibility of the university. The universities had for some time been behaving like commercial entities, Justice French acknowledged. But the law required that they protect knowledge first. If the universities were not going to uphold this primary purpose, the court, it seemed, would do it for them.

On 12 February 2010, the High Court of Australia, now led by Chief Justice Robert Shenton French, refused to grant the University of Western Australia permission to take the case any further.¹⁶

¹⁴ UWA Media release, 1 October 2009 <http://www.news.uwa.edu.au/200910011722/media-statements/uwa-seeks-leave-appeal-high-court-over-gray-decision> Retrieved 23 November 2011.

¹⁵ 'UWA turns grey – ownership of IP'. *Freehills*, 12 February 2010 <http://www.freehills.com/5790.aspx> Retrieved 23 November 2011.

¹⁶ High Court of Australia, *High Court of Australia Bulletin* [2010] HCAB 1 (19 February 2010), Special Leave Dismissed.

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