

THE FUTURE OF LEGAL EDUCATION IN THE 21st CENTURY

ABSTRACT

Technological progress will continue to fundamentally alter how we relate to each other and to our work, necessarily shaping the future of legal education. In considering its future direction, this article contemplates various perspectives regarding the purpose of legal education, and the pressures that may be brought to bear on pedagogical practices as a result of current and emerging technologies. Situating these considerations within the broader commentary regarding the future of work and the role of human beings in an age of automation, this article argues that the nature and type of skills taught to future lawyers, as well as the substantive knowledge relevant in the 21st century, will depend upon the irreducible value of human beings to the law and legal processes. Tasks that require creativity, complex reasoning or social intelligence (such as the ability to negotiate complex social relationships effectively) will remain the province of human beings. This must inform and shape legal education. Consequently, this article argues that the future of legal education is one that recognises lawyers will increasingly be required to attain a broad, liberal education enabling interdisciplinary insights, creativity and social intelligence.

I INTRODUCTION

In David Barker's text, *A History of Australian Legal Education*,¹ he cites as inspiration for his research a statement by the late John Merryman, a scholar from the United States, on the importance of legal education:

The examination of legal education in a society provides a window on its legal system. Here one sees the expression of basic attitudes about the law: what law is, what lawyers do, how the system operates or how it should operate. Through legal education the legal culture is transferred from generation to generation. Legal education allows us to glimpse the future of the society.²

* Associate Lecturer, Deakin Law School.

¹ David Barker, *A History of Australian Legal Education* (Federation Press, 2017) 239.

² John Henry Merryman, 'Legal Education There and Here: A Comparison' (1975) 27(3) *Stanford Law Review* 859, 859.

No more evidently is this the case than when considering the influence of eminent jurispudent and scholar Julius Stone on various members of the High Court of Australia as a consequence of their time spent at Sydney Law School as students.³ Contemplating the future of legal education in the 21st century may appear speculative. However, careful consideration of the historical development of legal education as well as the societal and technological forces shaping the 21st century may offer insights into the direction of legal education in the following decades and beyond. Speculation of this sort must be grounded in the purpose of legal education, which itself generates competing claims. Perhaps this is most poignantly captured in the title of Professor William Twining's seminal lecture, 'Pericles and the Plumber'.⁴ His lecture, and its title, are an allusion to the tension between the contrasting views that legal education is an intellectual field of study on one hand, and on the other that it is essentially practical, vocational training in preparation for legal practice.⁵ Twining rejects each of these conceptions of legal education as 'crude, over-simplified and unrealistic' but the sentiment regarding the dichotomous views as to the purpose of legal education is evident.⁶

Speculating as to the future of the legal profession and legal education can be a fraught enterprise. In the mid-1990s, Richard Susskind famously opined that email would become the dominant form by which lawyers and clients would communicate.⁷ For such apostasy, he was labelled 'dangerous' and 'possibly insane', and that he 'should not be allowed to speak in public, and that [he] certainly did not understand anything about security or confidentiality'.⁸ In the 21st century, new technological advances that change the way people relate to one another and to the very notion of work, give us pause for renewed and careful speculation. Such advances naturally pose challenges for the legal profession and legal education.⁹ The law is not immune from technological development and the risks posed by automation. Legal roles that involve repetition and pattern recognition will increasingly become automated by

³ See, eg, Michael Kirby, 'Julius Stone and the High Court of Australia' (1997) 20(1) *University of New South Wales Law Journal* 239; Nicholas Aroney, 'Julius Stone and the End of Sociological Jurisprudence: Articulating the Reasons for the Decisions on Political Communication Cases' (2008) 31(1) *University of New South Wales Law Journal* 107.

⁴ William Twining, *Law in Context: Enlarging a Discipline* (Oxford University Press, 1997).

⁵ *Ibid.*

⁶ *Ibid.* 83.

⁷ See Richard Susskind, *The Future of Law: Facing the Challenges of Information Technology* (Oxford University Press, 1996).

⁸ Richard Susskind, 'Legal Informatics: A Personal Appraisal of Context and Progress' (2010) 1(1) *European Journal of Law and Technology* <<http://ejlt.org/article/view/18/7>>.

⁹ Roman Batko and Anna Szopa, *Strategic Imperatives and Core Competencies in the Era of Robotics and Artificial Intelligence* (IGI Global, 2016).

smart and self-learning algorithms.¹⁰ In the long term, the roles humans have in the legal process will be reshaped and redefined by these forces and therefore, they must inform the future of legal education.¹¹

In addressing how these forces will inform the future of legal education, Part II of this article considers the major views regarding the purpose of legal education, which necessarily anchors considerations about possible future developments. Part III considers the nature of work and the continuing roles for human beings in the ‘Second Machine Age’ (the first being the Industrial Revolution) amidst increasing automation, arguing that insights gleaned from these developments must shape the future of legal education and of law schools. Part IV considers the future direction of the legal profession, and consequently what pressures may be brought to bear on legal education as a result. It addresses two distinct, though interrelated, issues. It considers first how technology will change pedagogical practices and delivery, and second, what substantive knowledge law students will require to remain relevant to the profession. Ultimately, I argue that the substantive knowledge relevant to law students in the 21st century is a broad, liberal legal education, invariably informed by the irreducible value human beings will continue to have to the law and legal processes.

II THE PURPOSE OF LEGAL EDUCATION

Any insight into the future of legal education must, self-evidently, be grounded in the purpose of legal education itself. This section therefore considers the major views regarding the function and purpose of legal education, which will affect how the academy generally, and law schools specifically, are likely to respond to future developments.

Barker has characterised the divergence of opinion on the purpose of legal education in Australia along similar lines as Twining some 50 years earlier.¹² Barker states that

the first and central theme is the ambiguity in the core purpose of legal education ... The main divide lies between those who regard legal education in instrumental terms, namely training individuals as future legal practitioners, and those who regard it as an academic discipline with its own intrinsic value. Among adherents to the former view, there has been a gradual evolution from a strict focus on the acquisition of legal knowledge to greater emphasis on learning skills relevant to legal practice. Among adherents of the latter, the principal concerns

¹⁰ See, eg, Cynthia Estlund, ‘What Should We Do after Work? Automation and Employment Law’ (Working Paper No 17–28, New York University School of Law, 24 September 2017) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3007972>.

¹¹ Jeremy Rifkin, *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism* (Palgrave Macmillan, 1st ed, 2014).

¹² Twining (n 4).

have revolved around legal theory and legal methodology when compared with other disciplines in the social sciences.¹³

Similarly, for Twining, ‘there is a need to draw a clear distinction between the *process* of professional formation of lawyers ... and the nature and roles of law schools as *institutions*’.¹⁴ There are two main conceptions of the role of law schools in modern industrial societies: the professional school model and the academic model.¹⁵ Prior to the end of the 20th century, Twining remarked with prescience that ‘legal professions in the modern world are so stratified, hierarchical, and fragmented that concepts like “the lawyer” or “the legal profession” are little more than fictions’.¹⁶ More recently, Harry Arthurs has provided a useful summary of the different views on the purpose of law schools, and sets out what he sees to be the three predominant positions.¹⁷ Although not mutually exclusive, one approach is likely to predominate. Of these views, he notes:

The first sees their primary, if not their sole, function as producing “practice ready lawyers” for today’s profession. The second proposes that they should produce “tomorrow’s lawyers,” lawyers with the capacity to adapt to the rapidly and radically changing circumstances of legal practice. And the third insists that the leading role played by law schools in the creation and transformation of legal knowledge, legal practice, and the legal system requires them to provide their students with a large and liberal understanding of law which alone will prepare them for a variety of legal and non-legal careers.¹⁸

This useful characterisation aids in situating many of the current debates concerning law school curricula as we move into the third decade of the 21st century. In Australia, legal education has customarily been informed by doctrinal approaches to legal pedagogy, most closely approximating the first view set out by Arthurs above — a vocational focus on ‘practice ready’ lawyers. As Nickolas James states:

Initially, legal education in Australia was little more than the uncritical transmission of legal doctrine by legal practitioners. It was not until the post-World War II emergence of the professional law teacher in Australia that a more scholarly approach was taken to the teaching of law.¹⁹

¹³ Barker (n 1) 3 (citations omitted).

¹⁴ Twining (n 4) 293 (emphasis in original).

¹⁵ *Ibid* 301.

¹⁶ *Ibid* 313.

¹⁷ HW Arthurs, ‘The Future of Law School: Three Visions and a Prediction’ (2014) 51(4) *Alberta Law Review* 705.

¹⁸ *Ibid* 706.

¹⁹ Nickolas J James, ‘A Brief History of Critique in Australian Legal Education’ (2000) 24(3) *Melbourne University Law Review* 965, 965.

Reiterating these sentiments, Mary Keyes and Richard Johnstone describe the dominant approach to legal education in the 20th century as a teacher-focused ‘traditional model’, characterised largely by ‘teachers uncritically replicat[ing] the learning experiences that they had when students, which usually [meant] that the dominant mode of instruction [was] reading lecture notes to large classes in which students [were] largely passive’.²⁰

In Australia, as in the United Kingdom, the historical decision to include legal education as an academic discipline was controversial.²¹ Many scholars viewed law as a practical vocation rather than a bona fide academic discipline. The first Australian law school was the University of Sydney, established in 1855.²² Law schools were then established at the University of Melbourne in 1857,²³ the University of Adelaide in 1883,²⁴ the University of Tasmania in 1893,²⁵ the University of Western Australia in 1927,²⁶ and the University of Queensland in 1935.²⁷ The ‘second-wave’ of law schools came after World War II and included institutions such as the Australian National University, Monash University, the University of New South Wales, and others.²⁸ It was not until the late 1980s that the state of Australian legal education received direct attention from the Commonwealth Government, with the publication of the Pearce Report in 1987.²⁹ As noted by Barker, one key recommendation of the report was that ‘there should be no more law schools established in the immediate future following on from publication of the report’.³⁰ Five years after the report was published, both Deakin University and La Trobe University opened law schools in 1992. As of 2020, describing what subsequently followed as an ‘avalanche’ of law

²⁰ Mary Keyes and Richard Johnstone, ‘Changing Legal Education: Rhetoric, Reality, and Prospects for the Future’ (2004) 26(4) *Sydney Law Review* 537, 539.

²¹ Linda Martin, ‘From Apprenticeship to Law School: A Social History of Legal Education in Nineteenth Century New South Wales’ (1986) 9(2) *University of New South Wales Law Journal* 111.

²² James (n 19) 966, citing Dennis Pearce, Enid Campbell and Don Harding, *Australian Law Schools: A Discipline Assessment for the Commonwealth Tertiary Education Commission* (Australian Government Publishing Service, 1987) (‘Pearce Report’).

²³ *Ibid* 967, citing Council of Australian Law Deans, *Studying Law in Australia 2001* (Report, 2000) 4.

²⁴ *Ibid*.

²⁵ *Ibid*.

²⁶ *Ibid*.

²⁷ *Ibid*.

²⁸ David Barker, ‘The Swinging Sixties and Beyond: The Influence of the Second Wave University Law Schools in the Development of Australian Legal Education’ (2016) 9(3) *Journal of Australasian Law Teachers Association* 7.

²⁹ Pearce Report (n 22).

³⁰ David Barker, ‘The Pearce Report: Does It Still Influence Australian Legal Education?’ (2014) 7(1–2) *Journal of the Australasian Law Teachers Association* 1, 4 (‘The Pearce Report: Does It Still Influence Australian Legal Education?’).

schools,³¹ there are now 38 law schools in Australia.³² At his opening address at Deakin Law School, Sir Anthony Mason, then Chief Justice of the High Court of Australia, opined:

A university must conserve, extend and transmit knowledge; it must also encourage and stimulate a spirit of inquiry. Indeed, a strong criticism of legal education in Australia is that we have focused on professional knowledge and skills instead of relating Law as a subject of study to the context in which it exists as a discipline. That deficiency, it is said, is now evident at a time when our legal system is being subjected to ever-increasing scrutiny by critics who see it as non-responsive to the legitimate demands of society.³³

In a similar vein, Arthurs notes:

Law schools are knowledge communities: they exist to collect, critique, produce and disseminate knowledge. We therefore need briefly to consider what we mean by knowledge in the context of law. Obviously the profession is (or should be) as concerned about knowledge as the academy. After all, its monopoly over legal practice rests (somewhat tenuously) on the claim that lawyers know things that other people do not.³⁴

In 2004, Keyes and Johnstone wrote that a key

challenge is for Australian law schools to rethink their relationship with the legal profession, to ensure that law schools assert their autonomy in matters of curriculum, teaching and learning and research, so that legal education aims for more than preparing students for work in private legal practice.³⁵

This call to action to redefine and rearticulate the role and value of legal education to the legal profession, beyond merely the vocational model, has no less diminished since the statement was made. The authors make another prescient recommendation: there needs to be a

³¹ David Barker, 'An Avalanche of Law Schools, 1989–2013' (2013) 6(1–2) *Journal of the Australasian Law Teachers Association* 1. The only Australian university without a law school is Federation University. There are 237 law schools in the United States, 24 in Canada, and 38 in Australia. Per capita, there is 1 law school for approximately every 1.38 million people in the United States and 1 law school for every 1.56 million people in Canada. This compares with 1 law school for approximately every 671,000 people in Australia.

³² Council of Australian Law Deans, 'Australia's Law Schools' (Web Page, 10 June 2020) <<https://cald.asn.au/slia/australias-law-schools/>>.

³³ Sir Anthony Mason, 'Occasional Address at the Opening of the Deakin University Law Program' (1994) 1(1) *Deakin Law Review* 1, 2.

³⁴ Arthurs (n 17) 710.

³⁵ Keyes and Johnstone (n 20) 538.

collective, law school-wide, approach to integrate matters such as legal theory, interdisciplinarity, ethics, general and legal skills, and issues of internationalisation, gender and indigeneity, so that law students are provided with a co-ordinated and incremental approach to developing knowledge, skills and attitudes.³⁶

The genesis of this particular and unique problem facing law schools, compared with the pedagogical demands and pressures facing other professional degrees, arguably arises because

reconcil[ing] the liberal tradition with the demands of the world of affairs is one of the perennial problems of university education. Possibly of all university subjects, law faces the basic dilemma in its most acute form. Other 'professional' subjects such as medicine and engineering seem to an outsider to have been relatively uninhibited in their response to 'vocational' pressures, perhaps because they have been relatively isolated from the liberal arts tradition.³⁷

For these reasons, the challenges identified by Keyes and Johnstone remain. Historically, in the United Kingdom and elsewhere

the value of a university education long remained questionable to those who regulated the profession. The central position the academy has achieved in initial legal education and training has been primarily the result of socio-political, rather than profession-inspired, change from the 1950s onwards.³⁸

In Australia, and notwithstanding its relative age now, the Pearce Report of 1987 continues to influence the development of legal education.³⁹ Since 1992, Australian law schools have been required to deliver prescribed areas of knowledge, colloquially referred to as the 'Priestley 11'.⁴⁰ These regulatory requirements have remained unchanged for well over a quarter of a century. Since that time there has been vast technological progress, and it is certainly arguable that both the legal profession and legal education are now considerably shaped by such forces.⁴¹ In 2015, the Council

³⁶ Ibid 538.

³⁷ Twining (n 4) 65.

³⁸ Andrew Boon and Julian Webb, 'Legal Education and Training in England and Wales: Back to the Future?' (2008) 58(1) *Journal of Legal Education* 79, 88.

³⁹ See Barker, 'The Pearce Report: Does It Still Influence Australian Legal Education?' (n 30).

⁴⁰ Named after Justice Lancelot John Priestley, former Chair of the Law Admissions Consultative Committee. See *Legal Profession Act 2006* (ACT); *Legal Profession Uniform Law Application Act 2014* (NSW); *Legal Profession Act 2006* (NT); *Legal Profession Act 2007* (Qld); *Legal Practitioners Act 1981* (SA); *Legal Profession Act 2007* (Tas); *Legal Profession Uniform Law Application Act 2014* (Vic); *Legal Profession Act 2008* (WA).

⁴¹ Daniel Goldsworthy, 'Socrates and Smartphones: Why the Future of Legal Education Must Be Philosophy' (2017) 10 *Journal of the Australasian Law Teachers Association* 61, 66.

of Australian Law Deans released a report recognising and recommending statutory interpretation as a discrete topic due to its critical importance to the practice of law, noting that '[f]rom a doctrinal perspective, "statutory interpretation" refers to the body of law governing the determination of the legal meaning and effect of legislation'.⁴² The Council states that this 'requires students not only to develop a mastery of the body of law, *but also awareness of a range of explanatory contexts*'.⁴³ This recognition of the need for greater emphasis on statutory interpretation demonstrates that prospective lawyers must engage with the meaning and effect of the law within and across a variety of explanatory contexts.⁴⁴ These statements imply the need to contextualise and understand law beyond merely disciplinary and jurisdictional bounds; it is a clarion call for interdisciplinarity in a globalised world.

III THE ROLE OF HUMAN BEINGS IN THE SECOND MACHINE AGE

In what Erik Brynjolfsson and Andrew McAfee describe as the Second Machine Age, technology will continue to increasingly mediate our relations with each other as well as with the very notion of work itself.⁴⁵ This section considers the nature of work, automation and the opportunities for human beings to continue to engage and contribute meaningfully to the professions.⁴⁶ Insights gleaned from these developments must inform law schools and the future of legal education. Many jobs, and in some cases entire professions, risk being automated, which leads to the critical question: what types of work are most susceptible to automation?⁴⁷ According to some experts, there might soon be no need for lawyers because 'artificial intelligence will have advanced to the point that answers to legal questions would be derived more effectively from a computer, than from a human'.⁴⁸ As Carl Frey and

⁴² Council of Australian Law Deans, *Good Practice Guide to Teaching Statutory Interpretation* (Guide, June 2015) 7 <<https://cald.asn.au/wp-content/uploads/2017/11/Council-of-Australian-Law-Deans-Good-Practice-Guide-to-Teaching-Statutory-Interpretation.pdf>>.

⁴³ *Ibid* 10 (emphasis added).

⁴⁴ *Ibid*.

⁴⁵ Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (WW Norton & Company, 1st ed, 2014) ('The Second Machine Age').

⁴⁶ See Andrew McAfee and Erik Brynjolfsson, 'Human Work in the Robotic Future: Policy for the Age of Automation' (2016) 95(4) *Foreign Affairs* 139.

⁴⁷ See Peter Fleming, 'Robots and Organization Studies: Why Robots Might Not Want to Steal Your Job' (2019) 40(1) *Organization Studies* 23; David H Autor, 'Skills, Education, and the Rise of Earnings Inequality among the "Other 99 Percent"' (2014) 344(6186) *Science* 843; David H Autor, 'Why Are There Still So Many Jobs? The History and Future of Workplace Automation' (2015) 29(3) *Journal of Economic Perspectives* 3.

⁴⁸ Manveen Singh, 'In the Line of Fire: Is Technology Taking Over the Legal Profession?' (2017) 40(1) *North Carolina Central Law Review* 122, 126, quoting Andrew Sullivan, 'Technology and the Law: New Opportunities for Lawyers and Their Clients'

Michael Osborne note in their seminal study ('Oxford Study'), the legal profession is certainly not immune from technological development and the risk of automation.⁴⁹

In its assessment, the Oxford Study considered over 800 jobs and analysed them on the basis of susceptibility to automation.⁵⁰ Their core findings are instructive and provide a principled rationale to consider the risk posed to a raft of human roles and responsibilities, but also a basis upon which to speculate as to the emergence of new and hitherto unnecessary societal roles. Regarding the legal profession, the study found that

for the work of lawyers to be fully automated, engineering bottlenecks to *creative and social intelligence* will need to be overcome, implying that the computerisation of legal research will complement the work of lawyers in the medium term.⁵¹

The term 'bottleneck' refers to areas where artificial intelligence and machine learning are not (yet) useful.⁵² Herein lies the irreducible value of human beings. Governed by technological advancements, the future role of the human being in the legal academy will continue to be defined by what roles we can reasonably and valuably perform. If legal education is to stay relevant and contemporary, curricula must be informed by such considerations. For this reason, the skills required and valued in and by the legal profession will arguably change in acute ways for centuries to come. So, what are these legal roles and tasks that require creative and social intelligence? And, to what extent can human beings continue to reasonably and valuably perform them?

In 2018, the Organisation for Economic Co-operation and Development ('OECD') considered, with greater specificity, the susceptibility to automation of a more nuanced subset of occupations and roles.⁵³ It confirmed the findings of the earlier Oxford Study,⁵⁴ and further articulated the so-called 'bottlenecks' of creative and social intelligence. These bottlenecks are

social intelligence, such as the ability to effectively negotiate complex social relationships, including caring for others or recognizing cultural sensitivities;

(Scholarly Paper No 2648538, Social Science Research Network, 27 March 2015) 2–3 <<https://papers.ssrn.com/abstract=2648538>>.

⁴⁹ Carl Frey and Michael Osborne, 'The Future of Employment: How Susceptible Are Jobs to Computerisation?' (Working Paper, Oxford Martin School, Oxford University, 17 September 2013) ('Oxford Study').

⁵⁰ *Ibid.*

⁵¹ *Ibid* 41 (emphasis added).

⁵² In this article, the term 'artificial intelligence' is used broadly to indicate 'the ability of a computer or other device or application to function as if possessing human intelligence': *Macquarie Dictionary* (7th ed, 2017) 'artificial intelligence' (def 1).

⁵³ Ljubica Nedelkoska and Glenda Quintini, *Automation, Skills Use and Training* (Working Paper No 202, Organisation for Economic Co-operation and Development, 14 March 2018) 6.

⁵⁴ *Ibid.*

cognitive intelligence, such as creativity and complex reasoning; and perception and manipulation, such as the ability to carry out physical tasks in an unstructured work environment.⁵⁵

Yuval Noah Harari reiterates the view of Brynjolfsson and McAfee, insofar as to suggest that the Industrial Revolution was indeed ‘revolutionary’ as it did away with human jobs relying upon strength and repetitive action.⁵⁶ It was the cognitive abilities that machines could not replicate, and as such humans were largely safe in doing work and completing tasks that required this skillset. That is no longer the case: with artificial intelligence advancing, technology is now beginning to outperform humans on this metric too.

A further insight into the risk or susceptibility of certain roles and tasks to automation is Moravec’s Paradox, named for Austrian robotics researcher Hans Moravec.⁵⁷ It postulates that computers excel at tasks requiring speed and precision (such as playing chess, reviewing documents, driving cars or solving equations), whilst they remain poor at those tasks that require sensorimotor skills, perception and mobility (such as gardening, caring for animals or clearing the dinner table).⁵⁸ Moravec’s ultimate claim is that computers are adept at reasoning, but the often unconscious, sensorimotor knowledge which has evolved in humans over billions of years, and which human beings find innately simple, is almost impossible for artificial intelligences to imitate.⁵⁹ This has implications for the labour market, with automation most likely to result in a ‘hollowing out’ of jobs performed by the middle class.⁶⁰ Considering a broad analysis of the current status of artificial intelligence and of future prospects for work and employment, it follows that these developments will inform and shape the legal profession and, by extension, legal education.

Vincent Müller and Nick Bostrom provide a cross-sectional survey of expert opinion on the future progress of artificial intelligence and automation, and in doing so provide greater clarity in framing timelines, risks and opportunities.⁶¹ Whilst inherently speculative, its claims are strongly empirical and should be heeded. Harari also makes

⁵⁵ Ibid.

⁵⁶ Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (Harvill Secker, 2016).

⁵⁷ Tirthajyoti Sarkar, ‘Why Math is Easy for AI but Gardening is Not: Moravec’s Paradox’ *Towards Data Science* (Web Page, 8 March 2020) <<https://towardsdatascience.com/why-math-is-easy-for-ai-but-gardening-is-not-moravecs-paradox-99994b201d10>>.

⁵⁸ Ken Goldberg, ‘Countering Singularity Sensationalism’ (2015) 526(7573) *Nature* 320.

⁵⁹ Hans Moravec, ‘When Will Computer Hardware Match the Human Brain?’ (1998) 1 *Journal of Evolution and Technology* 1.

⁶⁰ See Organisation for Economic Co-operation and Development, *Under Pressure: The Squeezed Middle Class* (OECD Publishing, 2019) <<https://doi.org/10.1787/689afed1-en>>; Paul Davidson, ‘Income Inequality and Hollowing Out the Middle Class’ (2013) 36(2) *Journal of Post Keynesian Economics* 381.

⁶¹ Vincent Müller and Nick Bostrom, ‘Future Progress in Artificial Intelligence: A Survey of Expert Opinion’ in Vincent Müller (ed), *Fundamental Issues of Artificial Intelligence* (Springer, 2016) 553.

an additional and critically important distinction when contemplating what roles may be subject to automation, and in doing so provides further affirmation for the ‘creative and social intelligence’ hypothesis.⁶² He posits that there is a fundamental and informing distinction to be made between intelligence and consciousness, and it is this distinction that can illuminate what roles and tasks will likely be susceptible to automation.⁶³ Intelligence based on pattern recognition is replicable, whereas consciousness that informs creative and social dimensions is not. To appreciate the importance of this distinction, and how the decoupling of consciousness from intelligence can be conceptualised, Harari states:

Until today, high intelligence always went hand in hand with a developed consciousness. Only conscious beings could perform tasks that required a lot of intelligence, such as playing chess, driving cars, diagnosing diseases or identifying terrorists. However, we are now developing new types of non-conscious intelligence that can perform such tasks far better than humans. For all these tasks are based on pattern recognition, and non-conscious algorithms may soon excel human consciousness in recognising patterns.⁶⁴

These distinctions allow us to situate and make better sense of artificial intelligence and to comprehend the types of skills, roles and jobs that are most susceptible to automation — and more importantly, those that are seemingly protected, at least in the short to medium term, from such risks. The legal profession is vulnerable to artificial intelligence and associated technological developments, and there will be a need to consider how this will affect and inform legal education.

IV THE FUTURE OF LEGAL EDUCATION

Higher education is inescapably subject to technological forces, both in the context of new modes of delivery as well as substantive knowledge and disciplinary insights informed by technological progress.⁶⁵ Consequently, legal education is affected both in terms of its form (in its modes of delivery) and its substance (by the new substantive laws and regulation in response to technology). In the Second Machine Age, technology will continue increasingly to mediate our relations with each other as well as work itself.⁶⁶ These ideas offer a perspective through which to consider the types of changes that may be wrought on the legal profession and the academy. When considering the future direction of legal education, the sociopolitical and

⁶² Harari (n 56) 311.

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ See Allan Collins and Richard Halverson, *Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America* (Teachers College Press, 2nd ed, 2018); Andreas M Kaplan and Michael Haenlein, ‘Higher Education and the Digital Revolution: About MOOCs, SPOCs, Social Media, and the Cookie Monster’ (2016) 59(4) *Business Horizons* 441.

⁶⁶ See Brynjolfsson and McAfee, ‘The Second Machine Age’ (n 45).

technological forces that shape our relationship with work are instructive. On the latter, John Stuart Mill wrote in 1848 that

[h]itherto it is questionable if all the mechanical inventions yet made have lightened the day's toil of any human being. They have enabled a greater population to live the same life of drudgery and imprisonment, and an increased number of manufacturers and others to make fortunes. They have increased the comforts of the middle classes. But they have not yet begun to effect those great changes in human destiny, which it is in their nature and in their futurity to accomplish. Only when, in addition to just institutions, the increase of mankind shall be under the deliberate guidance of judicious foresight, can the conquests made from the powers of nature by the intellect and energy of scientific discoverers, become the common property of the species, and the means of improving and elevating the universal lot.⁶⁷

In the words of Mill, those 'great changes in human destiny' may very well be occasioned by the growth of artificial intelligence.⁶⁸ Brynjolfsson and McAfee offer a compelling metanarrative for how to perceive the advances of technology, and they identify the importance of an education system that prepares people for the next economy instead of the last one.⁶⁹ They argue that the Second Machine Age will fundamentally reorient the nature of work and the roles human beings play in society.⁷⁰ In this regard, Richard Susskind and Daniel Susskind provide a context through which to situate and appraise the legal profession and legal education.⁷¹ They remark that all professions, including the legal profession, are united by certain common features and similarities. In order to make sense of the role and importance of the professions, Susskind and Susskind conceive of what they call the 'grand bargain', described as 'the traditional arrangement that grants professionals both their special status and their monopolies over numerous areas of human activity'.⁷² They argue that professions arise in the context of knowledge deficits. Noting the difficulties in defining precisely what the professions are, they employ Ludwig Wittgenstein's concept of 'family resemblances'⁷³ to characterise the professions as possessing four main overlapping similarities: first, they have specialised knowledge; secondly, their admission depends on credentials; thirdly, their activities are regulated; and lastly, they are bound by a common set of values.⁷⁴ They go on to argue that

⁶⁷ John Stuart Mill, *Principles of Political Economy: With Some of Their Applications to Social Philosophy* (Longmans, Green, Reader, and Dyer, 1878) vol 2, 332.

⁶⁸ Ibid.

⁶⁹ See Brynjolfsson and McAfee, 'The Second Machine Age' (n 45).

⁷⁰ Ibid.

⁷¹ Richard Susskind and Daniel Susskind, *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (Oxford University Press, 2017) 9.

⁷² Ibid.

⁷³ Ludwig Wittgenstein, *Philosophical Investigations* (Basil Blackwell, 2nd ed, 1958) 32.

⁷⁴ Susskind and Susskind (n 71) 15.

[i]n a print-based industrial society the professions have emerged as the standard solution to one shortcoming of human beings, namely, that we have ‘limited understanding’. When people need help in certain kinds of situation[s] in life, those that call for specific types of specialist knowledge, then we naturally turn to professionals. But we cannot assume that this current answer is the only or best answer for all time. We should be alive to the possibility, as we move from a print-based industrial society into a technology-based Internet society, that there are alternatives. And we should also want to investigate these.⁷⁵

Twining states that

[i]n modern industrial societies ... two main conceptions of the role of the law school have competed for dominance: the first is the law school as a service institution for the profession (the professional school model); the second is the law school as an academic institution devoted to the advancement of learning about law (the academic model).⁷⁶

Each type, he says, has significant variants and most law schools combine elements of both approaches.⁷⁷ The following sections consider, in turn, the effects of rapid technological advancement from the perspective of the professional school model and the academic model.

A Technological Progress and the Professional School Model

During the latter part of the 20th century, the global shift away from a print-based economy to a digital economy had a profound impact on the law, legal systems and legal education. This transition towards a ‘knowledge economy’ has resulted in the production of knowledge being valued over the production of goods.⁷⁸ Paul Adler states that this has resulted in a society and an economy in which the quantity, quality, and accessibility of information becomes more valuable than the means of production.⁷⁹ An abundance of knowledge in a knowledge economy — and its potential oversupply — challenges the fundamental tenets of a model based on scarcity or limited knowledge. This inescapably affects all knowledge disciplines, including the legal profession. The legal profession and law schools must consider this impact in a society where knowledge becomes infinitely replicable with no loss of quality and where information networks create a new mode of production.⁸⁰ Take the common example of a recorded lecture. Once a lecture is delivered, recorded and uploaded,

⁷⁵ Ibid 270.

⁷⁶ Twining (n 4) 301.

⁷⁷ Ibid.

⁷⁸ Alan Burton-Jones, *Knowledge Capitalism: Business, Work, and Learning in the New Economy* (Oxford University Press, 1999); Paul S Adler, ‘Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism’ (2001) 12(2) *Organization Science* 215.

⁷⁹ Adler (n 78) 216–17.

⁸⁰ Paul Mason, *Postcapitalism: A Guide to Our Future* (Allen Lane, 2015) 123.

there is no additional cost associated with the volume of downloads, and there is no additional cost that arises from its reproduction.⁸¹ This is an example of near-zero marginal cost.⁸² The concept of marginal cost refers to the increase in production costs resulting from producing one additional unit of the original product.⁸³ Zero marginal cost describes ‘a situation where an additional unit can be produced without any increase in the total cost of production, such that the product can be infinitely reproduced with no diminution in quality or to the ability of others to consume it simultaneously’.⁸⁴

This has obvious implications for higher education and, by extension, law schools. Technologies can now digitise knowledge and accelerate productivity to the point where the marginal cost of production and any subsequent reproduction, as in the example of recorded lectures, approaches zero. In this situation, goods and services after a particular point become priceless and potentially free.⁸⁵ The rise of massive open online courses (‘MOOCs’), which leverage technologies to reproduce content that is replicable at near-zero marginal cost, is a prime example.⁸⁶ Though challenges around infrastructure, sustainability and evaluation persist, the implications for higher education are evident.⁸⁷ MOOCs offer a product and service that is infinitely replicable because of digitisation and near-zero marginal cost, with a possible demand that is conceivably limitless. The motivation to seek out educational opportunities that are intrinsically rewarding, without the possibility for accreditation, perhaps says more about human motivation than it does about the power of these technologically enabled platforms.⁸⁸ In the context of law schools, Michele Pistone and Michael Horn contemplate alternative futures for legal education enabled through these types of technologies:

Online technologies make it possible to modularize the learning process ... Modular flexibility enables online competency-based providers to create and scale a multitude of stackable credentials or programs for a wide variety of audiences ... And teachers of these modules can come from a wide range of backgrounds, many outside the traditional legal academy. Lawyers, judges,

⁸¹ Goldsworthy (n 41) 62.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Goldsworthy (n 41) 62, citing Mason (n 80).

⁸⁵ See Rifkin (n 11).

⁸⁶ Nathan M Castillo et al, ‘MOOCs for Development: Trends, Challenges, and Opportunities’ (2015) 11(2) *Information Technologies and International Development* 35, 37–9. See generally Stephen P Balfour, ‘Assessing Writing in MOOCs: Automated Essay Scoring and Calibrated Peer Review’ (2013) 8 (Summer) *Research and Practice in Assessment* 40.

⁸⁷ Ibid.

⁸⁸ See Xinghua Wang, Allison H Hall and Qiyun Wang, ‘Investigating the Implementation of Accredited Massive Online Open Courses (MOOCs) in Higher Education: The Boon and the Bane’ (2019) 35(3) *Australasian Journal of Educational Technology* 1.

administrative agencies, anthropologists, psychologists, sociologists, historians, business leaders, communications experts, among many others, can provide well-designed modules on topics relevant to lawyer-based competencies.⁸⁹

Higher education is facing unprecedented transformation pressures triggered by these and other digital innovations.⁹⁰ Digitising knowledge and content allows the sharing, exchange and facilitation of ideas in a way that is unique and novel.⁹¹ In this context, the role that human beings continue to play in the production of knowledge becomes a necessary consideration for higher education institutions. Online knowledge communities will continue to fundamentally challenge the utility and value of more traditional communities such as universities.⁹² Law schools, as knowledge communities, are inescapably subject to these forces.⁹³ Notwithstanding these considerations, the expectation that humans will still remain integral to the creation of knowledge and content seems a reasonable expectation. However, as technology advances there is a critical juncture where content creation and information — the very capital of a knowledge economy — will be replicated by computers exercising artificial intelligence. Kevin Kelly postulates that

[o]ver the next century, scholars and fans, aided by computational algorithms, will knit together the books of the world into a single networked literature. A reader will be able to generate a social graph of an idea, or a timeline of a concept, or a networked map of influence for any notion in the library. We'll come to understand that no work, no idea, stands alone, but that all good, true and beautiful things are networks, ecosystems of intertwined parts, related entities and similar works.⁹⁴

⁸⁹ Michele R Pistone and Michael B Horn, *Disrupting Law School: How Disruptive Innovation Will Revolutionize the Legal World* (Report, 2016) 17–18 <<https://www.christenseninstitute.org/wp-content/uploads/2016/03/Disrupting-law-school.pdf>>.

⁹⁰ Dominic Orr, Martin Weller and Rob Farrow, *Models for Online, Open, Flexible and Technology-Enhanced Higher Education Across the Globe: A Comparative Analysis* (Final Report, April 2018) <https://oofat.oerhub.net/OOFAT/wp-content/uploads/2018/04/Models-report-April-2018_final.pdf>.

⁹¹ Peter H Diamandis and Steven Kotler, *Bold: How to Go Big, Create Wealth and Impact the World* (Simon & Schuster, 2015) 8–9.

⁹² See Hua Jonathan Ye, Yuanyue Feng and Ben CF Choi, 'Understanding Knowledge Contribution in Online Knowledge Communities: A Model of Community Support and Forum Leader Support' (2015) 14(1) *Electronic Commerce Research and Applications* 34. See also Elina H Hwang and David Krackhardt, 'Online Knowledge Communities: Breaking or Sustaining Knowledge Silos?' (2020) 29(1) *Production and Operations Management* 138.

⁹³ See generally Eyal Rabin, Yoram M Kalman and Marco Kalz, 'The Cathedral's Ivory Tower and the Open Education Bazaar: Catalyzing Innovation in the Higher Education Sector' (2020) 35(1) *Open Learning: The Journal of Open, Distance and e-Learning* 82.

⁹⁴ Kevin Kelly, 'What Books Will Become' *The Technium* (Forum Post, 15 April 2011) <<http://kk.org/thetechnium/what-books-will/>>.

This has farreaching implications for the law, particularly the common law tradition. Regarding the latter, technological processes exposing inconsistencies or outliers in search of greater coherence may affect the common law's development and judicial decision-making. A barrister's pleadings, for example, may be informed by insights garnered through such processes, in search of authorities that support one's case and those that may not. Arguments similar to those postulated by Ronald Dworkin and his seamless web of institutional coherence and 'right answer' thesis might become more compelling in the context of new and emerging technologies.⁹⁵

The digitisation of the world's literature began in 1971 with Project Gutenberg, named for the man who introduced the printing press to Europe in the 15th century.⁹⁶ It was this technology that subsequently ushered in the Printing Revolution, resulting in an era of mass communication that permanently altered the global landscape.⁹⁷ The printing press is widely regarded as the most important invention of the second millennium.⁹⁸ For higher education, the Digital Revolution promises to have an equally, if not more, profound impact than the Printing Revolution.⁹⁹ Artificially arranged and networked knowledge, possible through the use of artificial intelligence, will not only render information intrinsically valuable, but also its curation. Terry Hutchinson reiterates this point, suggesting that

[i]n the digital workplace, lawyers need to be expert at sifting through large amounts of unindexed text. Judges need the most relevant sources in order to produce timely, lucid and principled judgments. Librarians and publishers need to improve the systems for curating the vast amounts of data.¹⁰⁰

How knowledge and content is curated as a result of these processes will provide new insights and modulate human interaction with knowledge and content in ways previously not possible. Digitising the world's laws, judicial and administrative decisions, scholarly works and commentaries — and subjecting them to computational algorithms that synthesise, arrange, curate and catalogue legal information into networked patterns — will yield new conceptual insights previously inaccessible to

⁹⁵ See Kenneth J Kress, 'Legal Reasoning and Coherence Theories: Dworkin's Rights Thesis, Retroactivity, and the Linear Order of Decisions' (1984) 72(3) *California Law Review* 369.

⁹⁶ Lucien Febvre and Henri-Jean Martin, *The Coming of the Book: The Impact of Printing 1450–1800*, tr David Gerard (Verso, rev ed, 1997) vol 10, 55.

⁹⁷ *Ibid* 55–60.

⁹⁸ See 'Free E-Books: Project Gutenberg', *Project Gutenberg* (Web Page) <<https://www.gutenberg.org/>>; Elizabeth L Eisenstein, *The Printing Press as an Agent of Change* (Cambridge University Press, 1st ed, 1979).

⁹⁹ See Carl A Raschke, *The Digital Revolution and the Coming of the Postmodern University* (RoutledgeFalmer, 2003); Martin Davies, 'Can Universities Survive the Digital Revolution?' (2012) 56(12) *Quadrant* 58, 58.

¹⁰⁰ Terry Hutchinson, 'Legal Research in the Fourth Industrial Revolution' (2017) 43(2) *Monash University Law Review* 567, 568.

the human mind alone. Devices such as e-books and e-readers make it possible to share ‘highlights ... with other readers, and ... read [theirs]’.¹⁰¹ Kelly further posits:

I can read the highlights of a particular friend, scholar, or critic. We can even filter the most popular highlights of all readers, and in this manner begin to read a book in a new way. This gives a larger audience access to the precious marginalia of another author’s close reading of a book ... a boon that previously only rare-book collectors witnessed.¹⁰²

Digital devices are now constantly able to collect data on users while they are reading books. As Harari states of Amazon’s Kindle, it

can monitor which parts of the book you read fast, and which slow; on which page you took a break, and on which sentence you abandoned the book, never to pick it up again ... If Kindle is upgraded with face recognition and biometric sensors, it can know what made you laugh, what made you sad and what made you angry. Soon, books will read you while you are reading them.¹⁰³

Contemplate, for a moment, what this may mean if you were able to access information of the sort posited by Harari and Kelly, from the likes of judges, lawyers, politicians and academics. Imagine for instance, the benefit to a barrister who has access to information on those aspects of their pleadings or legal arguments that most resonated with the judge (or indeed with various judges), those arguments that were carefully considered, and those dismissed without hesitation. This will come to revolutionise legal education, as this enables consumers of content and information to be rendered ‘prosumers’,¹⁰⁴ inadvertently or even unknowingly contributing to the design, customisation and production of goods and services for their own needs.¹⁰⁵ One obvious application for law schools and academic publishers is in the bespoke design and development of textbooks and content directly informed by students. In contemplating these applications, Stephen Henderson and Joseph Thai suggest that technological innovation of this sort ‘will catalyze the transformation of the traditional casebook from a static object to an increasingly social one’.¹⁰⁶

So, what will be the value of legal education when knowledge is digitised and infinitely replicable, ubiquitous and accessible to everyone? How will the role of the legal academic be re-imagined when previous limitations around ‘bricks and

¹⁰¹ Kevin Kelly, *The Inevitable: Understanding the 12 Technological Forces That Will Shape Our Future* (Viking, 2016) 94.

¹⁰² Ibid.

¹⁰³ Harari (n 56) 344.

¹⁰⁴ See George Ritzer and Nathan Jurgenson, ‘Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital “Prosumer”’ (2010) 10(1) *Journal of Consumer Culture* 13.

¹⁰⁵ See Alvin Toffler, *The Third Wave* (William Morrow, 1980).

¹⁰⁶ Stephen E Henderson and Joseph Thai, ‘Crowdsourced Coursebooks: The Future of Law School’ (2014) 51(4) *Alberta Law Review* 907, 924.

mortar' and student-teacher ratios are alleviated through the use of technology? What happens when information and content becomes self-arranging and networked through artificial intelligence and algorithms? These technologies are all possible, and promise to revolutionise legal education into the 21st century and beyond.

Technology will likely render the pedagogical practices of many law schools outdated or even obsolete, as the skills required of lawyers in the 21st century will change time and time again. Consequently, a legal pedagogy focusing on skills transmission in a world mediated by digital technologies arguably misses the point; the rate of technological progress means that an instrumental approach equipping lawyers with the skills required for a career in law today may well be outdated, if not obsolete, tomorrow.

B *Technological Progress and the Academic Model*

Contemplating the future of legal education requires consideration of two matters: first, the competing claims regarding the object and purpose of law schools; and second, the sociopolitical and technological forces shaping society generally, and legal systems more specifically. This context can reveal the continuing value and purpose of legal education. As noted above, the purpose of legal education remains contested space, not necessarily in aspect but in degree. Arthurs, Barker and Twining highlight some of the predominant views on legal education. Irrespective of the characterisation of law schools as knowledge communities or as vocational training grounds for future lawyers, the fact remains that legal education in the 21st century requires careful consideration and re-imagining of the continued role and importance of law schools into the Second Machine Age.

Richard Susskind's description of the legal profession has much in common with Twining's rejection of singular models of a legal professional identity. He similarly highlights the variety of legal jobs for which law schools need to start preparing their students, including legal project management, knowledge manipulation, legal technologies and online dispute resolution.¹⁰⁷ However, he is emphatic that changes to legal education in response to technologically altered work practices should not see an abandonment of teaching students about 'legal method — how to think like a lawyer, how to marshal and organize a complex set of facts ... how to reason with the law (deductively, inductively, analogically), how to interpret legislation and case law, and more'.¹⁰⁸ These skills will remain relevant even to new legal jobs, reflecting the general acknowledgement that the debate over how changes to legal practice will drive change in legal education is really about what is to be added to ensure lawyers have the ability to collaborate across many disciplines. This is parallel to the depth of substantive legal knowledge that law schools have traditionally fostered.¹⁰⁹

¹⁰⁷ See Richard Susskind, *Tomorrow's Lawyers: An Introduction to Your Future* (Oxford University Press, 2013) 136.

¹⁰⁸ *Ibid* 137.

¹⁰⁹ Lyria Bennett Moses, 'Artificial Intelligence in the Courts, Legal Academia and Legal Practice' (2017) 91(7) *Australian Law Journal* 561, 569.

Within this context, I argue that legal education requires reconsideration in both form and substance. Regarding the former, I argue that there is a need for all Australian law schools to embed digital and information literacies within and across relevant subject areas. But more critically regarding the latter, I argue for a reconsideration of the substantive knowledge areas prescribed by the Law Admissions Consultative Committee ('LACC') in Australia.

In Australia, the most recent changes to the academic requirements for admission by the LACC were in 2015–16, when it undertook a limited review that ultimately led to minor changes to the descriptions of two prescribed areas of knowledge. In its recent paper titled 'Redrafting the Academic Requirements for Admission' — which states its modest objectives as revising the descriptions of the existing academic requirements — the LACC acknowledges that

[t]he present 11 prescribed areas have proved to be extremely difficult to change ... This is manifestly undesirable. Any future prescriptions thus need to be expressed in a way that allows for such changes and consequent variations in emphases to be made as circumstances alter, without having to revise the description of a prescribed area.¹¹⁰

In the same document, the Committee further notes that

[w]hile each area sets out what knowledge of that area an applicant must acquire, it does not seek to prescribe how, and at what point in a law course, teaching and learning in the area will occur, to limit possible innovation in teaching methods, to prescribe the proportion of teaching to be devoted to particular topics, or to prevent the teaching of new developments in the relevant law, its context or practice.¹¹¹

Notwithstanding, some argue that these regulatory requirements exceed 'the ambit of regulating the business of education providers and overly restricts the educational delivery format in a way that foregrounds 20th century teaching models and discourages innovation'.¹¹² Consequently, there remains limited engagement with the idea of arranging and organising legal education in Australia around digital and technological literacies.¹¹³ Digital literacy is imperative for future lawyers who will increasingly come to utilise and manipulate information in a digitally mediated society.¹¹⁴ More than this, modern lawyers must also possess excellent critical abilities in order to

¹¹⁰ Law Admissions Consultative Committee, 'Redrafting the Academic Requirements for Admission' (Draft Descriptions, 2019) 3.

¹¹¹ *Ibid* 5.

¹¹² See Stephen Colbran, Scott Beattie and Anthony Gilding, 'Legal Education xMOOCs: A Mirage in the Australian Regulatory Environment?' (2018) 28(1) *Legal Education Review* 1, 1.

¹¹³ Kate Galloway, 'A Rationale and Framework for Digital Literacies in Legal Education' (2017) 27 *Legal Education Review* 117, 141.

¹¹⁴ *Ibid* 131.

sort through masses of data and information captured at an ever increasing rate, because today's law students 'need less instruction in how to find the law and more instruction in assessing and evaluating the sources they find'.¹¹⁵ Hutchinson refers to this as information literacy.¹¹⁶ Assisting legal academics within regulatory constraints to embed digital and information literacies within and across the curricula will lead to better practice and foster innovation.¹¹⁷ Ultimately, however, the purpose of legal education must be to understand the law and legal process in a range of social contexts.¹¹⁸ As Kate Galloway states:

The challenge for legal academics lies in re-imagining the way in which law is taught, particularly in the Priestley subjects that tend to be conceptualised in traditional ways. It is this traditional thinking that may stifle the development and reform of the law itself.¹¹⁹

In this article, I not only respond to Galloway's call for re-imagination concerning delivery of the prescribed law subjects, but to Arthurs' call for the 'creation and transformation of legal knowledge' through suggesting a fundamental reorientation of the substance of the prescribed knowledge areas for law degrees in Australia.¹²⁰ Though suggested reforms concerning digital and information literacies are necessary, they do not go far enough. Technology not only mediates the way society operates; it changes the very nature of social arrangements and therefore what is substantively the concern of law. Consequently, the substantive knowledge required of 21st century lawyers must be carefully reconsidered. In an age of rapid technological progress and automation, legal pedagogies that are informed by the distinction between intelligence and consciousness will be able to respond to evolving legal landscapes which will only come to be ever more mediated by and through technology. Legal education must consider those roles and tasks human beings can and will continue to engage meaningfully with — that is in those *humane* areas concerning justice and fairness. To this end, Martha Nussbaum has called for lawyers to have a broad liberal education, an argument she has developed and refined over many years.¹²¹ In the context of the technological progress, increasing automation, and the advancement in artificially intelligent machines, a broad liberal education equips law students to be able to situate and contextualise these developments and to orient thinking about societies' responses to these developments.

¹¹⁵ Hutchinson (n 100) 588 (emphasis omitted).

¹¹⁶ Ibid.

¹¹⁷ Galloway (n 113) 119.

¹¹⁸ Ibid 141.

¹¹⁹ Ibid.

¹²⁰ Arthurs (n 17) 706.

¹²¹ See Martha C Nussbaum, 'Cultivating Humanity in Legal Education' (2003) 70(1) *The University of Chicago Law Review* 265. See also Martha C Nussbaum, 'Why Lawyers Need a Broad Social Education' (2017) 91(11) *Australian Law Journal* 894.

Fundamental legal concepts, including areas as diverse as property or evidence law, will be outdated or ill-equipped to deal with future challenges ‘unless lawyers have the intellectual and practical tools to think differently about society, economy, environment and governance and how they are mediated by technology’.¹²² Law schools must educate law students to think analytically and creatively about these challenges, and should critically analyse what knowledge can and will ground deeper thinking about legal challenges in a broader sociopolitical and technological context — that is, with a truly globalised perspective. Notwithstanding the move by some Australian law schools to adopt the American approach of graduate legal education,¹²³ the substantive requirements of all law degrees remain externally regulated by the LACC. To be clear, I am not arguing for deregulation, but rather a reconsideration of the prescribed knowledge areas which enable deep thinking about contemporary local and global challenges.

To that end, I offer a suggestion for reconstituting the prescribed knowledge areas that would better position law students to think more deeply about the role of law in responding to contemporary, globalised challenges. These include:

- constitutional law;
- comparative constitutional law;
- public international law;
- legal history and jurisprudence;
- philosophy and statutory interpretation;
- ethics and professional responsibility;
- real and intellectual property;
- criminal law;
- administrative law and procedure;
- contract law; and
- comparative legal systems.

I recognise that such arguments may be considered subversive given the conservatism that characterises legal regulation in Australia and abroad. Though as Arthurs notes:

¹²² Galloway (n 113) 139.

¹²³ Anthony Potts, ‘Selling University Reform: The University of Melbourne and the Press’ (2012) 37(2) *Studies in Higher Education* 157, 158.

[T]he leading role played by law schools in the creation and transformation of legal knowledge, legal practice, and the legal system requires them to provide their students with a large and liberal understanding of law which alone will prepare them for a variety of legal and non-legal careers.¹²⁴

It is hoped that such suggestions will generate renewed academic debate on these important issues and the necessary pedagogical and regulatory responses if legal education is to remain relevant in the 21st century and beyond.

V CONCLUSION

The tension between the divergent views on the purpose of legal education — Pericles and the Plumber — may, in time, come to be resolved by the inevitable march of technological progress. There will continue to be an increasing number of skill-based vocational tasks that will be completed by machines, and lawyers will be freed from many more process-driven tasks that currently occupy their time, energy and resources. Naturally, these developments have the potential to inform and shape the nature of legal education. The Second Machine Age will continue to fundamentally alter the way we relate to each other and to our work, and it is for human beings to consider where the possible opportunities to contribute meaningfully to knowledge disciplines, including the legal profession, arise. If the law is to retain its status as a profession pursuant to Susskind and Susskind's 'grand bargain', then an appreciation of the distinction Harari draws between intelligence and consciousness is required. It is this distinction which seems most likely to inform those roles and responsibilities that are irreducibly and ultimately human.¹²⁵ Locating those tasks that require creativity, complex reasoning or social intelligence (such as the ability to negotiate complex social relationships effectively) will remain the province of human beings. This must inform and shape legal education.

Universities and law schools must recognise the importance of legal education through its function as a knowledge community, intrinsically valuable for its capacity to add to the corpus of academic knowledge and human endeavour. Now more than ever in the history of university legal education, law schools must position themselves to be able to identify and respond to the future role of the legal profession, technological advancement and automation, the future of work, and to be able to frame education accordingly. To do so necessitates a shift away from viewing legal education in instrumental and vocational terms to an appreciation that human lawyers will come to require a broad and liberal education that enables interdisciplinary insights, creativity and social intelligence.

During the Age of Pericles, Athens prospered as a centre of education, art, culture and democracy. It was a place where the arts, literature and philosophy flourished. In the Second Machine Age, universities and law schools must carefully consider the

¹²⁴ Arthurs (n 17) 706.

¹²⁵ Harari (n 56).

continuing purpose of legal education as the nature of law and the legal profession continue to change. Invoking Twining's distinction, it seems that the future of legal education may, by necessity, swing the way of Pericles. But as Pericles is credited with having said, time is the wisest counsellor of all.¹²⁶

¹²⁶ Plutarch, *Plutarch's Lives of Illustrious Men*, tr AH Clough (Little, Brown and Company, 1878) 115.

