

SOCRATES AND SMARTPHONES: WHY THE FUTURE OF LEGAL EDUCATION MUST BE PHILOSOPHY

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I INTRODUCTION

We are at a Grotian moment in history as the convergence of new social, economic and technological forces are fundamentally altering societies on a global scale, posing inescapable challenges for the legal profession and legal education. Technological growth and development, the global ubiquity of smart phones, and the subsequent automation of many jobs, is changing how human beings interact with and relate to the very notion of work.¹

The law is not immune from automation, and there will be a need to support and manage this transition. In the short term, many legal roles that nevertheless involve repetitive processes, will become increasingly automated by smart and self-learning algorithms.² In the long term, the role and value of the human being to the legal process will become drastically recast and redefined.³

The irreducible human value to the legal profession is to be found in the distinction made between what can be reproduced artificially (intelligence) and consequently automated, and what cannot (consciousness).⁴ At this juncture, where a multiplicity of outcomes may be derived through artificially intelligent processes, consideration must then be given to the reasons for preferring one coherent, logical and 'intelligent' outcome over another. It is this contemplation that will remain the domain of human reason and consciousness. As a consequence, the future for human beings in the legal profession will come more and more to be characterised by roles and responsibilities innately requiring the exercise of human consciousness (as distinct from intelligence). This article contends that these future human roles in the legal profession will be grounded in philosophy and, given the residual roles that human lawyers will come to play, that a deep training in philosophy will be imperative for future lawyers.

II THE KNOWLEDGE ECONOMY IN AN AGE OF EXPONENTIAL GROWTH

The law is at once both informed and shaped by the societal forces it seeks to regulate. Given that laws are enforceable rules which seek to guide and moderate individual and collective human behaviour, legislatures must consider how new and emerging forces shape human behaviours.

During the latter part of the twentieth century, the global shift towards a 'knowledge economy' resulted in the production of knowledge being valued over the production of goods.⁵ This resulted in an economy where growth is dependent on the quantity, quality, and accessibility of

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1 Roman Batko and Anna Szopa, *Strategic Imperatives and Core Competencies in the Era of Robotics and Artificial Intelligence* (IGI Global, 1st ed, 2016).

2 Cynthia Estlund, 'What Should We Do After Work? Automation and Employment Law' (2017) *New York University School of Law, Public Law Research Paper No. 17-28* <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3007972>.

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

4 Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (Vintage Publishing, 1st ed, 2016).

5 Alan Burton-Jones, *Knowledge Capitalism: Business, Work, and Learning in the New Economy* (Oxford University Press, 1st ed, 1999); Paul Adler, 'Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism' (2001) 12(2) *Organization Science* 215.

information available, rather than the means of production.⁶ The convergence of the knowledge economy with the exponential technological growth of recent decades, is directly challenging the fundamental tenets upon which capitalism is predicated – supply and demand.⁷ At the centre of any capitalist system based on this ‘invisible hand’ of supply and demand, is one precondition – the scarcity of finite goods and resources.⁸

What happens when this precondition is removed, and the supply of ‘knowledge’ in a knowledge economy becomes abundant? This fundamentally alters capitalist economies and affects all knowledge disciplines. The legal academy must consider this impact in a society where knowledge is now infinitely replicable with no loss of quality through technology. Mason posits that such a scenario is incompatible with current capitalist market economies.⁹ It is a world of abundance in a system that relies on scarcity.¹⁰ Rifkin further considers these ideas, and contemplates the implications of near-zero or zero marginal cost for the reproduction of knowledge through technology.¹¹ The concept of marginal cost is a term used to refer to the increase in total production costs resulting from producing one additional unit of the original product.¹² 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.¹³ Take the example of a recorded lecture, uploaded to a learning management system, and its subsequent download. Once a lecture is produced and recorded, there is no additional ‘cost’ associated with the number of times it can be downloaded or streamed as no further or additional cost arises from its reproduction.

More efficient technologies that accelerate productivity can now do so to the point where the marginal cost of production approaches zero. In this situation, goods and services become ‘price-less’ and potentially free.¹⁴ This, Rifkin contends, is rendering the market exchange economy obsolete.¹⁵ In the tertiary sector, one example is the emergence of Massive Open Online Courses (MOOCs) which leverage the exponential development of technologies and the internet, to reproduce a product that is infinitely replicable at near-zero marginal cost.

Diamandis and Kotler propose that there is an exponential chain reaction to such technological progression in circumstances where knowledge becomes infinitely replicable, which begins where digitisation is possible.¹⁶ Digitisation presupposes that where something that can be represented by ones and zeros – that is, digitised – it can be spread at the speed of light, or at least the speed of the Internet.¹⁷ Given that cultural progress is cumulative and ideas are taken and built upon by others, this digitisation allows humans to share, exchange and facilitate ideas in a way that hitherto has been impossible.¹⁸ To reconcile this zero-sum marginal cost

6 Adler, above n 5, 216-217.

7 Samuel Bowles, Richard Edwards and Frank Roosevelt, *Understanding Capitalism: Competition Command and Change* (Oxford University Press, 3rd ed, 2005).

8 Ibid.

9 Paul Mason, *Postcapitalism: A Guide to our Future* (Penguin Random House UK, 1st ed, 2015).

10 Ibid.

11 Rifkin, above n 3.

12 Henning Schwardt, *The Path to A Modern Economics: Dealing with the Complexity of Economic Systems* (Springer International Publishing, 1st ed, 2017).

13 Mason, above n 9.

14 Rifkin, above n 3.

15 Ibid.

16 Peter Diamandis and Steven Kotler, *Bold: How to Go Big, Create Wealth and Impact the World* (Simon & Schuster, 1st ed, 2015).

17 Ibid 8-9.

18 Ibid.

knowledge economy with the fundamental tenets of capitalism such as supply, demand and scarcity, a re-imagining of the human role in the production of knowledge is imperative.¹⁹ The law, as a knowledge discipline, is inescapably subject to these forces.

III CONTENT AND CURATION: KNOWLEDGE IN THE DIGITAL REVOLUTION

Notwithstanding the forces of digitisation and zero marginal cost, the assumption remains that human beings are still integral to the creation of content. As technology continues to progress, what happens when the mode of production and content development, the very capital of a knowledge economy, is transferred from human beings to computers that are able to exercise artificial intelligence? Kelly postulates that:

Over 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.²⁰

This process of digitising and uploading the world's literature began in 1971, with the commencement of Project Gutenberg.²¹ Named for Johannes Gutenberg, the introduction of his mechanical movable type printing to Europe in the fifteenth century ushered in the Printing Revolution, widely regarded as the most important invention of the second millennium.²² It spawned an era of mass communication which permanently altered the structure of society.²³ The advent of the internet and the subsequent Digital Revolution promise to do the same. Reflecting on the early printing press and medieval manuscripts, Gopnik contends that 'our minds were altered less by books than by index slips.'²⁴ In the same way for the Digital Revolution, networked arrangement of knowledge through artificial intelligence and algorithms will arguably not only render intrinsically valuable information in and of itself, but also its curation. How knowledge and content is curated will arguably further moderate human interaction with knowledge itself.

Following from the Gutenberg Project, it is readily conceivable that technology will enable all law texts, articles, statutes, cases and commentaries to be digitised and networked into a single literature. Thereafter, legal resources will be subjected to computational algorithms that synthesise, arrange, curate and catalogue legal information into patterns and networks never before possible. Through the digitisation of books and the advent of E-books and E-readers such as Kindle, it is possible to, with a reader's permission, share 'highlights.... with other readers, and...read theirs'.²⁵ Kelly further posits:

We can even filter the most popular highlights of all readers, and in this manner begin to read a book in a new way. I can also read the highlights of a particular friend, scholar or critic. This

19 Rifkin, above n 3.

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

21 Project Gutenberg <<https://www.gutenberg.org/>>.

22 Elizabeth Einstein, *The Printing Press as an Agent of Change* (Cambridge University Press, 1st ed, 1979).

23 Lucien Febvre and Henri-Jean Martin, *The Coming of the Book: The Impact of Printing 1450–1800* (Verso Books, 3rd ed, 2010).

24 Adam Gopnik, 'The Information: How the Internet Gets Inside Us' (2011) *The New Yorker* (14 & 21 February 2011) <<http://www.newyorker.com/magazine/2011/02/14/the-information>>.

25 Kevin Kelly, *The Inevitable: Understanding the 12 Technological Forces that will Shape our Future* (Random House USA Inc, 1st ed, 2016) 94.

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.²⁶

It is through this technological enabling, that consumers are rendered prosumers,²⁷ who inadvertently or even unknowingly contribute to designing, customising and producing products for their own needs.²⁸ Digital devices and publications are able to constantly collect data on users while they are reading books. As Harari states of Amazon's Kindle, it

can monitor which parts of a book you read quickly, 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 was to be upgraded with face recognition software and biometric sensors, it would know how each sentence influenced your heart rate and blood pressure. It would know what made you laugh, what made you sad, what made you angry. Soon, books will read you while you are reading them.²⁹

So what will the value of legal education be where knowledge is digitised and infinitely replicable, ubiquitous and accessible to everyone? Furthermore, what happens when the knowledge or information itself becomes self-arranging and networked through artificial intelligence and algorithms? In such a future, the continued role of the human being in the legal academy is to be realised in the distinction between intelligence and consciousness.

IV I THINK THEREFORE I AM AUTOMATED: DECOUPLING INTELLIGENCE FROM CONSCIOUSNESS

At this point, it is necessary to consider the continued value of the human being where artificial intelligence continues to exponentially advance.³⁰ Furthermore, it is essential to consider the difference between intelligence and consciousness, and the decoupling of intelligence *from* consciousness.³¹ To appreciate the importance of this distinction when considering automation, Harari powerfully demonstrates its significance as a current historical juncture:

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.³²

It is only by decoupling intelligence from consciousness that we can situate and begin to make sense of artificial intelligence and comprehend the sorts of roles that are, and will continue to be, subject to automation. Perhaps more importantly, a decoupling of intelligence from consciousness, will allow us to contemplate what human roles will not be automated. For the legal profession, many legal roles that contain repetitive processes, or as Harari has put it 'non-conscious intelligence', will arguably become increasingly automated by smart and self-

26 Ibid.

27 George Ritzer and Nathan Jurgensen, 'Production, Consumption and Prosumption: The Nature of Capitalism

in the Age of the Digital Prosumer' (2010) 10(1) *Journal of Consumer Culture* 13.

28 Alvin Toffler, *The Third Wave* (Future Shock, 1st ed, 1980).

29 Harari, above n 4.

30 Ritzer and Jurgensen, above n 27.

31 Harari, above n 4.

32 Ibid 311.

learning algorithms. The law is not immune from advances in artificial intelligence, and there will be a need to support and manage this transition.

One contemporary theory of human consciousness is that it evolved to help us learn through the extraction of relevant information from our surroundings, and the subsequent organisation of this information into meaningful patterns.³³ Organising by ‘chunking’ this information is key, as it allows human beings to compress and maximise data through sensory input and to make sense of salient information.³⁴ If artificial intelligence can seemingly arrange and chunk this information for us, it will then be for human beings to justify their preference for one networked arrangement of information over others.

V THE FUTURE OF THE LEGAL ACADEMY: DWORKIN’S SEAMLESS (WORLD WIDE) WEB

In 1986, prior to the proliferation of the internet, legal theorist Ronald Dworkin proposed that the law could be viewed as a ‘seamless web’ capable of yielding one right answer to any legal problem.³⁵ To navigate this seamless web of complexity, Dworkin envisaged the idealised conception of such an individual who would be capable of undertaking this task, the fictitious Justice Hercules.³⁶ Hercules, he contended, was a judge of ‘superhuman skill, learning, patience and acumen’³⁷ and was expected to be able to ‘construct a scheme of abstract and concrete principles that provides a coherent justification for all common law precedents and, so far as these are to be justified on principle, constitutional and statutory principles as well’.³⁸ Hercules was encouraged to be ‘wide ranging and imaginative in his search for coherence with fundamental principles’³⁹ and to treat the law as if it were a comprehensive whole.

It has been stated that Dworkin, in fact, did, ‘...not expect us, save in our imagination, to believe that he [Hercules] inhabits an actual bench. He is a useful *idea* because he sets a standard by which real judges might measure their performance.’⁴⁰ But almost thirty years since conceiving of omniscient Justice Hercules, it now seems that the ability to construct such an abstract scheme may no longer simply be an idea, but reality. Artificial intelligence, through algorithmic pattern recognition, will be able to gather and reveal this seamless web of ‘institutional coherence’ and render it navigable. The result will be the ability to leverage the collective knowledge of great legal minds across countries, continents and generations – both living and passed. How one does, or *should* navigate this vast web of networked legal information resembles the considerations accorded to interpreting big data and the philosophy of data analytics.⁴¹

Consequently, it will arguably become the role of the lawyers, judges and academics to deconstruct and reconstruct theories of law and justice where the artificial intelligence allows for more than one cogent, logical outcome. It will be at this intersection that the value of the human being to the legal process, in contrast with non-human artificial intelligence, will

33 Daniel Bor, *The Ravenous Brain: How the New Science of Consciousness Explains our Insatiable Search for Meaning* (Basic Books, 1st ed, 2012).

34 *Ibid.*

35 Ronald Dworkin, *Taking Rights Seriously* (Harvard University Press, 1st ed, 1978).

36 *Ibid.*

37 *Ibid* 105.

38 *Ibid* 116-117.

39 Ronald Dworkin, *Law’s Empire* (Bloomsbury Publishing PLC, 1st ed, 2003) 220.

40 Raymond Wacks, *Understanding Jurisprudence* (Oxford University Press, 4th ed, 2015) 141 (emphasis in original).

41 Vincenzo Morabito, *Big Data and Analytics: Strategic and Organisational Impacts* (Springer International Publishing, 1st ed, 2016).

continue and be further amplified. To compellingly and convincingly argue why one coherent, logically sound outcome should be preferred over another is the province of philosophy.

VI A PRIESTLEY VOCATION: THE FUTURE OF LEGAL EDUCATION IN AUSTRALIA AND BEYOND

Governed by exponential technological advancements, the future role of the human being in the legal academy will continue to be defined by what roles they can reasonably and valuably perform. For this reason, the skills required and valued by judges, lawyers and their clients, will arguably come to change in an acute way for many centuries to come. As a knowledge discipline subject to regulatory oversight, legal education in Australia must deliver the ‘Priestley 11’ subject areas, named for Justice Lancelot John Priestley, former Chair of the Law Admissions Consultative Committee (LACC) in 1992.⁴² Demonstrating competency across these areas constitutes the minimum standard required by law students seeking admission to legal practice in Australia, and have remained unchanged for a quarter century. At that stage, the Internet was still in its embryonic stages, Google was six years from being created, and iPhones were fifteen years away. Much has changed since the Priestly 11 set the mandatory requirements for legal education in Australia, with the current legal landscape being shaped less by committees and more by social and technological forces. This fundamental shift in the legal landscape will necessitate a transformation of the higher education sector, not only in form (delivery) but also in substance (pedagogy).

Foreshadowing the need for change and development in legal education, the Council of Australian Law Deans (CALD) released a report in 2015 recognising statutory interpretation as a discrete area of law critically important to the practice of law.⁴³ The report notes that, ‘...from a doctrinal perspective, statutory interpretation refers to the body of law governing the determination of the legal meaning and the effect of legislation.’⁴⁴ The Council further posits that this ‘...requires students not only to develop a mastery of the body of law, but also awareness across and within a range of explanatory contexts.’⁴⁵ This move toward a greater focus on statutory interpretation recognises the need for prospective lawyers to engage with the ‘meaning and effect’ of the law. It is an implicit recognition of the need to balance competing meanings, which is ultimately the province of legal philosophy.

In 2016, Irish president Michael D. Higgins affirmed the importance of philosophy when he suggested that its teaching ‘is one of the most powerful tools we have at our disposal to empower children into acting as free and responsible subjects in an ever more complex, interconnected, and uncertain world.’⁴⁶ We are seeing the increase in human obsolescence proportional to the rise in automation,⁴⁷ and in a world where technical expertise is becoming increasingly narrow and

42 See for example: *Legal Profession Uniform Law Application Act 2014* (Vic); *Legal Profession Uniform Law Application Act 2014* (NSW); *Legal Profession Act 2007* (Qld); *Legal Profession Act 2007* (Tas); *Legal Practitioners Act 1981* (SA); *Legal Profession Act 2008* (WA); *Northern Territory of Australia Legal Profession Act 2006* (NT); *Legal Profession Act 2006* (ACT).

43 Council of Australian Law Deans, *Good Practice Guide to Teaching Statutory Interpretation* (June 2015) <<http://www.cald.asn.au/assets/lists/resources/gpgsi-june15.pdf>>. 7.

44 Ibid 7.

45 Ibid 10.

46 Charlotte Blease, ‘Philosophy Can Teach Children What Google Can’t’, *The Guardian* (online), 9 January 2017 <<https://www.theguardian.com/commentisfree/2017/jan/09/philosophy-teach-children-schools-ireland>>.

47 David Autor, ‘Why are there still so many Jobs? The History and Future of Workplace Automation’ (2015) 29(3) *Journal of Economic Perspectives* 7.

specialised, the skills and confidence to traverse disciplines will become ever more important.⁴⁸ The law is not immune from this fundamental shift in the human experience. In a knowledge economy with zero marginal cost of reproduction, the continued value of the human being is recognised only through making a distinction between intelligence and consciousness.⁴⁹

Universities, as bastions of legal knowledge for centuries, must meaningfully adapt to technologies that may render current pedagogical models outdated at best, or obsolete at worst. This changing landscape will necessitate legal education that recognises the significance of the distinction between intelligence and consciousness, wherein the irreducible value of the human being to knowledge disciplines is to be realised. As such, this article contends that in a world of increasing automation, human value in the law will find expression in traditional areas of justice and fairness, right and wrong. These areas will return to play an ever more prominent role where technological automation will liberate lawyers from the tedium of many process-driven tasks that currently occupy their time, energy and resources.

VII CONCLUSION

Technology has the potential to free us from tedious and mundane work, to enable the pursuit of leisure and more meaningful and productive activities. In fact, the etymology of the Greek word for leisure and philosophy, *skhole*, is the root word for the English word ‘school’.⁵⁰ How law schools identify and incorporate more meaningful and productive activities into legal curricula will continue to be influenced by social forces and the growth of exponential technologies. As the Guttenberg printing press ushered in the Printing Revolution and was the most important invention of the second millennium, so too the internet and Digital Revolution will radically transform and permanently alter our societal structures in unforeseen ways well into the third millennium.

This article contends that the exponential growth of technologies in the context of a zero marginal cost knowledge economy will both fundamentally change the way human beings relate to work, but also the ways in which human beings will be able to meaningfully contribute to knowledge disciplines such as the law, into the future. Furthermore, this article posits that the rise of artificial intelligence and subsequent human obsolescence, necessitates an understanding of the nuanced distinction between intelligence and consciousness. It is only through apprehending this distinction that we recognise the irreducible and continuing role human beings will come to play in such disciplines. For the legal academy, this role will be through philosophy.

48 Blease, above n 46.

49 Harari, above n 4.

50 Johan Bouwer and Marco van Leeuwen, *Philosophy of Leisure: Foundations of the Good Life* (Routledge, 1st ed, 2017) 230.