FAMILY LAW, ACCESS TO JUSTICE, AND AUTOMATION

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Family law has historically been an area that many people end up traversing with only limited legal assistance. With increasing interest in artificial intelligence in legal services has come an expanding range of family law applications. Many of these applications have potential to assist clients, lawyers and courts. However, clients will continue to need, and seek out, human lawyers to assist them in family law matters. Especially in the case of vulnerable parties and children, technology may not be an appropriate substitute for human family lawyers.

Τ Introduction

Several years ago, artificial intelligence (AI) was foretold – often in gleeful headlines¹ - to spell the demise of the legal profession. This initial dramatic prognosis has given way to a more nuanced and qualified understanding of how AI is impacting the provision of legal services and how it may affect legal professionalism.² Scholarship examining the impact of automation on governmental and administrative decisionmaking, the rule of law, and legal values, is rapidly developing.³ At the same time reports, media releases, and other industry and professional literature propound the many uses of AI in law, among other areas.⁴ The idea of applying AI to legal problems is not new, having been investigated since the 1970s.5 Yet the rapid developments of recent years have propelled its applications further and, in so doing, generated new and immediate concerns as well as opportunities.

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See Gary E Marchant, 'Artificial Intelligence and the Future of Legal Practice' (2017) 14(1) SciTech Lawyer 20, 21.

See, eg, Dana Remus and Frank Levy, 'Can Robots Be Lawyers: Computers, Lawyers, and the Practice of Law' (2017) 30(3) Georgetown Journal of Legal Ethics 501; Tanina Rostain, 'Robots versus Lawyers: A User-Centered Approach' (2017) 30(3) Georgetown Journal of Legal Ethics 559; Benjamin Alarie, Anthony Niblett and Albert H Yoon, 'How Artificial Intelligence Will Affect the Practice of Law' (2018) 68 (Supplement 1) University of Toronto Law Journal 106; Sergio David Becerra, 'The Rise of Artificial Intelligence in the Legal Field: Where We Are and Where We Are Going' (2018) 11 Journal of Business, Entrepreneurship & Law 27; Sean Semmler and Zeeve Rose, 'Artificial Intelligence: Application Today and Implications Tomorrow' (2017-18) 16 Duke Law & Technology Review 85.

See especially Monika Zalnieriute, Lyria Bennett Moses and George Williams, 'The Rule of Law and Automation of Government Decision-Making' (2019) 82(3) Modern Law Review 425, 426-

See, eg, CodeX TechIndeX: Stanford Law School (Web Page) https://techindex.law.stanford.edu/; Michael Mills, 'Artificial Intelligence in Law: The State of Play 2016' (Discussion Paper, Thomson Reuters Legal Executive Institute, 23 February

Whilst there is a recently found interest in this topic amongst the legal community, academic discussions and research in this discipline first occurred upon the birth of the internet two decades ago: see John Zeleznikow, 'Can Artificial Intelligence and Online Dispute Resolution Enhance Efficiency and Effectiveness in Courts' (2017) 8(2) International Journal for Court Administration 30, 35 ('Efficiency and Effectiveness in Courts').

In its loosest sense, artificial intelligence refers to software processes which can carry out tasks that, if performed by a person, would be considered evidence of intelligence.⁶ Distinction is made between 'general' AI and 'narrow' AI. In precisely defined tasks, such as playing the ancient board game of Go,⁷ narrow AI processes can outperform humans. However, the AI 'robolawyer'⁸ with the broad range of skills which humans possess, is still some time off.⁹ As discussed in Part II, 'AI' is a loose term to describe a collection of tools and functions. In this article it is used to denote a range of different automated systems and processes which have in common their capacity to mimic aspects of legal services, in this case with particular reference to family law.

In relation to the justice system, Professor Tania Sourdin has categorised technological effects as coalescing around three impacts: supporting those involved in the system; replacing elements of the system that were previously conducted by humans; and disrupting or fundamentally transforming the system.¹⁰ She notes that, to date, most reforms have involved the first two categories (supporting and supplementing).¹¹ We can differentiate, for example, between supporting a decision-maker to make their decision (such as by guiding them through a series of steps) as opposed to actually automating the decision process.¹² However, the expansion of AI into administrative decision-making,¹³ and the growth in online dispute resolution options – including under the auspices of the court system – suggests that the third category is developing quickly.

Meanwhile, some North American scholars have suggested that lawyers practising in family law will continue to enjoy greater job security when compared to their colleagues in other areas of law, given the importance of human interaction for family law clients. ¹⁴ Yet the imperatives of financial strain and the difficulty of obtaining legal aid already raise access to justice concerns and compel many in the direction of less than full legal representation, whether they are partially represented, self-represented and/or accessing other kinds of legal information, advice and support systems. ¹⁵

⁶ Jerry Kaplan, *Artificial Intelligence: What Everyone Needs to Know* (Oxford University Press, 2016) 1.

See, eg, *AlphaGo Home* (Web Page) https://deepmind.com/research/alphago/>.

Jason Koebler, 'Rise of the Robolawyers: How Legal Representation Could Come to Resemble TurboTax' (April 2017) *The Atlantic*

https://www.theatlantic.com/magazine/archive/2017/04/rise-of-the-robolawyers/517794/>.

Though some predict that this will be achieved by 2050: Seth D Baum, Ben Goertzel and Ted G Goertzel, 'How Long Until Human-Level AI? Results from an Expert Assessment' (2011) 78(1) *Technological Forecasting & Social Change* 185.

Tania Sourdin, 'Justice and Technological Innovation' (2015) 25(2) *Journal of Judicial Administration* 96, 96 ('Justice and Technological Innovation').

¹¹ Ibid

¹² Zeleznikow, 'Efficiency and Effectiveness in Courts' (n 5) 37.

See, eg, Zalnieriute, Bennett Moses and Williams (n 3); Dominique Hogan-Doran, 'Computer Says "No": Automation, Algorithms and Artificial Intelligence in Government Decision-Making' (2017) 13(3) *The Judicial Review* 345.

Noel Semple, 'Personal Plight Legal Practice and Tomorrow's Lawyers' (2014) 39(1) Journal of the Legal Profession 25 ('Personal Plight Legal Practice'); Samuel V Schoonmaker IV, 'Withstanding Disruptive Innovation: How Attorneys Will Adapt and Survive Impending Challenges from Automation and Nontraditional Legal Services Providers' (2017) 51(2-3) Family Law Quarterly 133.

John Dewar, Barry W Smith and Cate Banks, 'Litigants in Person in the Family Court of Australia' (Research Report No 20, Family Court of Australia, 2000) 16, use the term 'partially represented' to denote litigants who may have lawyers come and go. The authors observe that although a person may appear in court without legal representation does not mean that the

Access to justice in family law matters has been identified as a serious problem in Australia (and indeed in other common law jurisdictions, such as Canada and England and Wales). This is a key reason why developments in the categories described by Sourdin have already impacted and have the potential to further impact the way that family law legal services are delivered.

Automated systems hold out many possibilities for improving information provision and supporting decision-makers; for replacing some elements of legal work; and even, as Sourdin notes, 'where predictive analytics may reshape the adjudicative role'. ¹⁷ Many of its applications can be of use to family law clients and to family lawyers themselves. At the same time, it is important to be wary of seeing automated systems as too ready a solution in the face of constraints on the family law system and what Professor John Dewar termed 'the normal chaos of family law'. ¹⁸

Part III discusses some of the reasons that family lawyers may be seen as necessary in family law disputes but also constraints on access to justice and problems with the family law system. Part IV describes some examples of automation in family law, while Part V examines specific issues associated with increasing use of automated systems, and Part VI concludes.

II 'AI', 'LEGALTECH' AND OTHER UMBRELLA TERMS

Artificial intelligence is an umbrella term which may encapsulate many different methods and lacks an agreed or consensus meaning. As someone joked on Twitter, 'If it is written in Python, it's probably machine learning. If it is written in PowerPoint, it's probably AI'. AI might also be referred to generically as automated systems. Despite the reference to 'intelligence', '[a]n AI system is not really "reasoning" or "thinking" but is following a set of pre-programmed or computational steps... or mathematically analysing a huge amount of data to infer a probability'. 22

person has not accessed some form of legal advice or information beforehand. Differing definitions of 'self-represented' exacerbate problems for evidence-based decision-making: see Elizabeth Richardson and Tania Sourdin, 'Mind the Gap: Making Evidence-Based Decisions about Self-Represented Litigants' (2013) 22(4) *Journal of Judicial Administration* 191, 194–95.

See, eg, Michael Saini, Rachel Birnbaum and Nicholas Bala, 'Access to Justice in Ontario's Family Courts: The Parents' Perspective' (2016) 37(1) Windsor Review of Legal and Social Issues 1, 1-2 n 2; Asher Flynn and Jacqueline Hodgson (eds), Access to Justice and Legal Aid: Comparative Perspectives on Unmet Legal Need (Hart Publishing, 2019); John Eekelaar and Mavis Maclean, Family Justice: The Work of Family Judges in Uncertain Times (Hart Publishing, 2013) ('Family Justice').

Note that Sourdin discusses some of the many issues around technology supplanting the judicial role but this is not the focus here: Tania Sourdin, 'Judge v Robot: Artificial Intelligence and Judicial Decision-Making' (2018) 41(4) *University of New South Wales Law Journal* 1114, 1117 ('Judge v Robot').

John Dewar, 'The Normal Chaos of Family Law' (1998) 61(4) The Modern Law Review 467.

Ellen Broad, Made by Humans: The AI Condition (Melbourne University Press, 2018) xix.

 [@]matvelloso (Mat Velloso) (Twitter, 22 November 2018, 5:25PM AEST)
 https://twitter.com/matvelloso/status/1065778379612282885?lang=en; Python is a programming language: Welcome to Python.org (Web Page) https://www.python.org/.
 Broad (n 19) xx.

Michael Legg and Felicity Bell, 'Artificial Intelligence and the Legal Profession: A Primer' (Law Society of NSW and UNSW Law, 2019) 2, available at FLIP Stream (Web Page) https://www.allenshub.unsw.edu.au/news/artificial-intelligence-and-legal-profession-primer.

AI has developed considerably since its early iterations, though progress has not been linear but rather marked by a series of cycles – rapid development and generous funding punctuated by 'AI winters'. The current surge in interest has been fuelled by the greatly increased processing power (at considerably less relative cost) of computers, including personal computers and devices, and the massively increased volumes of electronic information or data that are available.

The history of AI and law, a discipline established decades ago, is illustrative. From this period onwards academics investigated 'expert systems', using decision trees, to solve legal problems.²⁴ These types of system are representative of existing knowledge and are pre-programmed with logical rules and definitions. They may also employ mathematical formulae and weightings of different variables. Their outputs might be an assessment of a legal situation, or the automatic completion of a form.²⁵

During the 1990s, there was interest in the AI and law community not only in expert systems based on explicit rules but in 'case based reasoning systems', which attempted to derive those rules from an existing body of case law.²⁶ The limitations of these approaches led to investigation of neural nets as a means of overcoming them. Neural nets are systems structured in a way that mimics the (projected) architecture of the human brain as a network of interconnected nodes. Exploration of the possibilities of neural nets has occurred, as explained in Part IV, in the development of systems for family law disputes.²⁷

Professor Kevin Ashley has noted that 'legal expert systems are still widespread in use',²⁸ and some of their applications are discussed below. However, Ashley considers that they will not revolutionise the delivery of legal services.²⁹ Rather, it is advances in cognitive computing, or machine learning, that are galvanising interest, and massive investment, today.³⁰ Neural networks are one subset of methods which fall under the umbrella of 'machine learning'. In particular, 'deep' neural networks (with multiple 'hidden' layers), used for 'deep learning', are behind many publicised AI developments.³¹

Sometimes referred to as 'data-driven systems', machine learning programs 'infer formal relations... from unstructured data'.³² Rather than being pre-programmed with rules, the program itself identifies patterns and correlations in training data and creates a mathematical or statistical model which is then applied to new data.

Toby Walsh, *It's Alive! Artificial Intelligence from the Logic Piano to Killer Robots* (La Trobe University Press and Black Inc, 2017) 49–50.

Kevin D Ashley, Artificial Intelligence and Legal Analytics: New Tools for Law Practice in the Digital Age (Cambridge University Press, 2017) 8–9.

²⁵ Ibid 9.

See Michael Aikenhead, 'The Uses and Abuses of Neural Networks in Law' (1996) 12 Santa Clara Computer & High Technology Law Journal 31, 44–46 nn 43–48.

John Zeleznikow and Andrew Stranieri, 'The Split-Up System: Integrating Neural Networks Reasoning in the Legal Domain' (Conference Paper, International Conference on Artificial Intelligence and Law, 21–24 May 1995) 185; John Zeleznikow, 'The Split-Up Project: Induction, Context and Knowledge Discovery in Law' (2004) 3(2) *Law, Probability and Risk* 147.

²⁸ Ashley (n 24) 10.

²⁹ Ibid.

³⁰ Walsh (n 23).

See, eg, Anthony Elliott and Julie Hare, 'The Revolution Will Not Be Televised – The AI Challenge', *The Australian* (Sydney, 18 April 2019) 27.

³² Rostain (n 2) 561.

Supervised machine learning refers to providing the program with labelled training data – in other words, indicating the outputs which are sought. An image recognition program could be trained with photos already labelled as to what they depict (or more precisely, what a human has determined they depict),³³ for example, an apple or an orange. The goal then might be for the program to correctly classify a new image as one or the other, or as something else. Using all the data available – in this case, every pixel of every image – the program uses inductive reasoning to deduce the 'rules' which match the data to the correct labels. The program can then itself 'learn' the relationships between inputs and outputs. Importantly, it can continue to adjust its model as it is provided with new data. Unsupervised learning, on the other hand, is where the software is provided with data (such as many images of fruit) and left to identify patterns on its own.³⁴ Supervised learning is more common in legal applications.³⁵

It would be a mistake, however, to think that humans do not have control or input over how systems are created. Rather, as David Lehr and Professor Paul Ohm explain, at every step in what may be a complex process, human input is required.³⁶ The question to be addressed, the data, the choice of algorithm or 'the software code that explores the relationships between the input information and the answers',³⁷ and weighting mechanisms, are all crucially important factors. Essentially, the programs are doing statistical analysis, but with the potential for millions of data points to be input, and billions of relationships modelled – in other words on a much more complex scale.

An application of machine learning which is important to legal applications is natural language processing (NLP), 'a collective term referring to automatic computational processing of human languages'.³⁸ This includes both algorithms that take human-produced text as input, and algorithms that produce natural looking text as outputs'.³⁹ The natural language of humans is complex because it is contextual – sentence order is important and words have multiple meanings.

Developments in machine learning and NLP have generated renewed interest in the legal applications of AI,⁴⁰ and in 'LegalTech' (technology and software with legal applications) more generally. It can be difficult to discern technology that makes use of AI (even broadly defined) and that which does not. The latter might include more conventional software for billing or document storage, for example. As explained above, an expansive definition of AI is adopted here to refer to automated systems

For the difficulties that this may generate: see Broad (n 19).

John Markoff, 'How Many Computers to Identify a Cat? 16,000', *New York Times* (online, 25 June 2012) https://www.nytimes.com/2012/06/26/technology/in-a-big-network-of-computers-evidence-of-machine-learning.html>.

David Lehr and Paul Ohm, 'Playing with the Data: What Legal Scholars Should Learn about Machine Learning' (2017) 51(2) *University of California, Davis Law Review* 653.

³⁶ Ibid 673.

Warren E Agin, 'A Simple Guide to Machine Learning' (2017) 14(1) SciTech Lawyer 5.

Jason Brownlee, 'What is Natural Language Processing?', Machine Learning Mastery, (Web Page, 22 September 2017) https://machinelearningmastery.com/natural-language-processing/.

Yoav Goldberg, Neural Network Methods in Natural Language Processing (Morgan & Claypool Publishers, 2017) xvii.

Michael Mills and Julian Uebergang, 'Artificial Intelligence in Law: An Overview' [2017] (139) Precedent 35.

which, unlike more general 'LegalTech', are capable of substituting for lawyers or elements of legal work in relation to complex processes.

Supervised machine learning is very useful in certain legal contexts – for example, where a huge number of documents must be reviewed in discovery. Provided that the documents are electronically readable (or can be converted to a readable format), the software can review and learn to classify them as either discoverable, or not.⁴¹ Other AI legal tools may use some form of simple expert system where an internet bot, or question and answer tree, guides the user through a series of steps.

By blending expert systems with machine learning, it is also possible to design tools which also learn from the examples with which they are provided, increasing their sophistication. There are many such programs available, particularly in the United States.⁴² The Law Society of England and Wales predicts that as these types of system become ever more sophisticated and fluent in natural language processing, they will increasingly be manned 'by robots with the ability to test queries against a vast database of past information in seconds – as IBM Watson demonstrates for medicine'.⁴³ Typically, the more they are used, the more such programs learn, and therefore they continue to improve as they address more queries.⁴⁴

Substantial claims have been made generally about the capacity of legal AI or automated systems (and indeed, technology in general) to improve access to justice.⁴⁵ This may occur through clients being able to do their legal work themselves; through clients doing some elements of their own legal work (unbundling);⁴⁶ or through lawyers using technology to themselves work more efficiently and pass costs savings on to their clients. The US Legal Services Corporation, in its 'vision' for improving access to justice through the use of technology, described a strategy with five components, including the development of expert systems 'to assist lawyers and other services providers'.⁴⁷

Thomas Davey and Michael Legg, 'Machine Learning Disrupts Discovery' [2017] (32) *Law Society Journal* 82.

Stanford University, CodeX Techindex, 'Document Automation', http://techindex.law.stanford.edu/companies?category=2.

Tara Chittenden, 'Capturing Technological Innovation in Legal Services' (Research Report, The Law Society of England and Wales, 25 January 2017) 12.

See, eg, Christopher Knaus, 'NDIA denies Cate Blanchett-voiced 'Nadia' virtual assistant is in doubt', *The Guardian* (online, 22 September 2017) <www.theguardian.com/australia-news/2017/sep/22/ndia-denies-cate-blanchett-voiced-nadia-virtual-assistant-is-in-doubt>.

See generally Lois R Lupica, Tobias A Franklin and Sage M Friedman, 'The Apps for Justice Project: Employing Design Thinking to Narrow the Access to Justice Gap' (2017) 44(5) Fordham Urban Law Journal 1363; Jessica Frank, 'A2J Author, Legal Aid Organizations, and Courts: Bridging the Civil Justice Gap Using Document Assembly' (2017) 39(2) Western New England Law Review 251; David Luban, 'Optimism, Skepticism and Access to Justice' (2016) 3(3) Texas A&M Law Review 495, 502.

Sourdin, 'Judge v Robot' (n 17) 1118; Michael Legg and John Corker, 'Unbundling for Access to Justice and for Commercial Law', *Presentation to Future of Law and Innovation in the Profession (FLIP) Conference*, Sydney, 14 September 2018.

LSC: Legal Services Corporation, *Report of the Summit on the Use of Technology to Expand Access to Justice* (Report, December 2013) 2.

III FAMILY LAWYERING

Family law is often seen as necessitating skills which are not strictly technical or legal, and indeed might fall into the category of 'life skills' which are attained through experience rather than formal training. The idea that family law is qualitatively different to other areas of practice has been largely embraced by family lawyers, possibly in part as a reaction to the traditional view of family law as a 'low status' branch of legal practice.⁴⁸ The characterisation of family law as a separate, specialist area of law is also sometimes connected to the espousal of non-litigiousness by lawyers. Family law involves clients who are likely to be traversing one of the most difficult periods in their lives (and hence, not be in an optimal position to make important decisions) and, importantly, where the interests of vulnerable non-parties, namely children, often require consideration. One former judge has described family law as involving value judgments about deeply personal aspects of life.⁴⁹ All these factors, which are explicated in greater detail below, indicate some of the complexities involved in automating family law.

Nevertheless, non-lawyer or 'self-help' options are not at all new to family law. For example, with the introduction of 'no-fault' divorce in many states of the United States in the 1970s, divorce 'kits' and self-help books proliferated.⁵⁰ In the 1990s, as well as printed materials, software (available for purchase on CD-ROM, for example) could be used to simplify the completion of forms.⁵¹ Information about family law has been around on the internet for a long time, and has already produced a cultural change toward self-help.⁵² Generally, people are more likely to seek information on the internet, including in areas which would once have been considered to require professional advice. ⁵³ One Canadian study suggested that this is a factor driving self-representation, more so than a general dislike or mistrust of lawyers.⁵⁴

The arguments that were made about these kinds of materials at the time are essentially the same as those raised about the considerably more sophisticated options now available. These concern whether they might violate prohibitions on unauthorised practice of law, by crossing over from being mere provision of legal information to constituting legal advice.⁵⁵ More generally, there is a debate as to whether providing

Martha Minow, "Forming Underneath Everything That Grows": Toward a History of Family Law [1985] (4) *Wisconsin Law Review* 819, 819; John H Wade, 'The Professional Status of Family Law Practice in Australia' (1985) 8(1) *University of New South Wales Law Journal* 183.

Nahum Mushin, 'Ethics in Family Law – Beyond Legal Principles and into Value Judgments' (2018) 30 (Special Issue) *Singapore Academy of Law Journal* 427.

See, eg, Warren H Resh, 'More on Do-It-Yourself Divorce Kits and Services' (1973) 37(2) *Unauthorized Practice News* 59.

Unauthorized Practice of Law Commission v Parsons Technology Inc, 1999 WL 47235 (ND Tex, 1999), vacated, 179 F 3d 956 (5th Cir, 1999); In Australia: see Attorney-General (WA) v Quill Wills Ltd (1990) 3 WAR 500, 503-4 (Ipp J).

See, eg, Rosemary Hunter, Jeff Giddings and April Chrzanowski, 'Legal Aid and Self-Representation in the Family Court of Australia' (Research Paper, Griffith University Socio-Legal Research Centre, May 2003).

Jonathan Crowe et al, 'Understanding the Legal Information Experience of Non-Lawyers: Lessons from the Family Law Context' (2018) 27(4) *Journal of Judicial Administration* 137, 137.

Julie Macfarlane, *The National Self-Represented Litigants Project: Identifying and Meeting the Needs of Self-Represented Litigants* (Final Report, May 2013) 35.

See generally Emma Beames, 'Technology-Based Legal Document Generation Services and the Regulation of Legal Practice in Australia' (2017) 42(4) *Alternative Law Journal* 297.

people with such self-help options fulfils an important social good (enabling access to legal services for those who would otherwise not be able to access it affordably), or leaves people vulnerable to poor quality information or advice. This is discussed in Part V.

In terms of quality, there is another relatively long-standing debate concerning the degree to which family lawyers are, and should be, specialists. American researchers Lynn Mather and Craig McEwen distinguished between family law 'specialists and generalists', identifying these groups as constituting separate 'communities of practice'.56 Other studies have reported that family lawyers 'have claimed for themselves special characteristics'57 setting them apart from other practitioners.⁵⁸ Australian family lawyers do largely seem to identify as a separate, distinct and unique group of legal practitioners. They have been described as 'close knit and relatively homogenous'59 and sharing a 'cohesive legal culture'.60 Legislation to merge the Family Court and Federal Circuit Court, introduced to the Senate in late 2018,61 was criticised by lawyers concerned about the impact of a loss of family law specialisation within the courts.⁶² The appointment to the family law courts of judges lacking in family law expertise has also been a source of complaint.⁶³ Reporting on its recent inquiry into the family law system, the Australian Law Reform Commission (ALRC), while recommending significant structural reforms in order to close the 'jurisdictional gap' between State matters (such as child protection and family violence intervention orders) and Federal family law matters, emphasised the continuing importance of specialisation.64

This is significant because family law specialisation is associated with non-litigiousness, according priority to the wellbeing of clients and their children, and interpersonal skills including management of conflict. Studies indicate that rather than increasing discord, specialist family law solicitors tend to be resolution focused.⁶⁵

Lynn Mather and Craig A McEwen, 'Client Grievances and Lawyer Conduct: The Challenges of Divorce Practice' in Leslie C Levin and Lynn Mather (eds), *Lawyers in Practice: Ethical Decision Making in Context* (University of Chicago Press, 2012) 63, 66.

⁵⁷ Cf Christine Piper, 'How Do You Define a Family Lawyer?' (1999) 19(1) *Legal Studies* 93, 93.

Bren Neale and Carol Smart, "Good" and "Bad" Lawyers? Struggling in the Shadow of the New Law' (1997) 19(4) *Journal of Social Welfare and Family Law* 377; Katherine Wright, 'The Role of Solicitors in Divorce: A Note of Caution' (2007) 19(4) *Child and Family Law Quarterly* 481 ('A Note of Caution').

Rosemary Hunter et al, 'Legal Services in Family Law' (Research Report, Law Foundation of New South Wales, December 2000) xii, 340–3 ('Legal Services').

Jill Howieson, 'The Professional Culture of Australian Family Lawyers: Pathways to Constructive Change' (2011) 25(1) *International Journal of Law, Policy and the Family* 71, 81 ('Professional Culture').

Federal Circuit and Family Court of Australia Bill 2018 (Cth); Federal Circuit and Family Court of Australia (Consequential Amendments and Transitional Provisions) Bill 2018 (Cth).

See, eg, Law Council of Australia, Submission No 2 to the Australian Law Reform Commission, *Review of the Family Law System* (16 November 2018); Nicola Berkovic, 'Lawyers fight for Family Court', *The Australian* (Sydney, 29 November 2018) 6.

^{63 &#}x27;What Can be Done to Fix the Family Law System?', *ABC Radio AM* (Thomas Oriti, 6 October 2018) https://www.abc.net.au/radio/programs/am/what-can-be-done-to-fix-the-family-law-system/10346244.

Australian Law Reform Commission, *Family Law for the Future: An Inquiry into the Family Law System – Final Report* (Report No 135, March 2019) ch 4 ('Family Law for the Future').

Neale and Smart (n 58); Piper (n 57); referring to a new 'hybrid profession': Wright, 'A Note of Caution' (n 58); Craig A McEwen, Lynn Mather and Richard J Maiman, 'Lawyers, Mediators and the Management of Divorce' (1994) 28(1) *Law and Society Review* 149; Janet Walker, 'Is

While solicitors adopt different styles as required,⁶⁶ the 'ideal' family lawyer type has shifted in the last few decades to embrace this.⁶⁷ Mather and McEwen identified the norm of the 'reasonable lawyer' acting in divorce matters who 'should anticipate likely case outcomes, argue only for "realistic" positions (not whatever the client wants), show respect for other lawyers, and avoid unnecessary conflict in settling cases'.⁶⁸ In England and Wales, the 'new breed' of family lawyer was described as conciliatory rather than adversarial,⁶⁹ possibly the result of legal and mediation practice converging.⁷⁰ Dr Jill Howieson's Australian study found that 'the family lawyers tended towards a more conciliatory approach to family lawyering and used a blend of lawyering approaches in their work to achieve constructive outcomes'.⁷¹

Family lawyers have ethical duties not only to the administration of justice and to their clients, but also to ensure that children's interests are properly considered.⁷² In Australia, there has also been a concerted effort over many years to divert people away from engaging in adversarial litigation in family law and toward agreed resolutions.⁷³ Parties in dispute over the parenting of children are intended to attend Family Dispute Resolution (FDR), a form of family mediation, prior to commencing court proceedings.⁷⁴ At the time that this became mandatory, the federal Government set up 'Family Relationship Centres' around the country to provide (among other services) FDR. There are not currently any similar mandatory processes for property disputes; however, the ALRC has recommended their introduction.⁷⁵ One group of academics has commented that it is part of a family lawyer's obligation to encourage clients to resolve disputes outside of court and 'clients need to be reminded that "divorce is not

There a Future for Lawyers in Divorce?' (1996) 10(1) *International Journal of Law, Policy and the Family* 52; John Eekelaar, Mavis Maclean and Sarah Beinart, *Family Lawyers: The Divorce Work of Solicitors* (Hart Publishing, 2000) ch 1; Hunter, 'Legal Services' (n 57); Rosemary Hunter, 'Adversarial Mythologies: Policy Assumptions and Research Evidence in Family Law' (2003) 30(1) *Journal of Law and Society* 156.

⁶⁶ See Howieson, 'Professional Culture' (n 60) 81.

See, eg, Michael King, "Being Sensible": Images and Practices of the New Family Lawyers' (1999) 28(2) *Journal of Social Policy* 249, 249.

Mather and McEwen (n 56) 66.

King (n 67); Neale and Smart (n 58); Katherine Wright, 'The Divorce Process: A View from the Other Side of the Desk' (2006) 18(1) *Child and Family Law Quarterly* 93; Wright, 'A Note of Caution' (n 58).

See generally Eekelaar and Maclean (n 16) 32–8; Howieson, 'Professional Culture' (n 58) 93; Neale and Smart (n 58) 383; Lisa Webley, 'Gate-Keeper, Supervisor or Mentor? The Role of Professional Bodies in the Regulation and Professional Development of Solicitors and Family Mediators Undertaking Divorce Matters in England and Wales' (2010) 32(2) *Journal of Social Welfare and Family Law* 119; Wright, 'A Note of Caution' (n 58).

Howieson, 'Professional Culture' (n 60) 80; see also Jill Howieson, 'Family Law Dispute Resolution: Procedural Justice and the Lawyer-Client Interaction' (PhD Thesis, University of Western Australia, 2008).

Nicholas Bala, Patricia Hebert and Rachel Birnbaum, 'Ethical Duties of Lawyers for Parents Regarding Children of Clients: Being a Child-Focused Family Lawyer' (2017) 95(3) Canadian Bar Review 557.

See, eg, Margaret Harrison, Finding a Better Way: A Bold Departure from the Traditional Common Law Approach to the Conduct of Legal Proceedings (Family Court of Australia Report, April 2007).

Family Law Act 1975 (Cth) s 60I ('FL Act'); Joe Harman, 'Should Mediation be the First Step in all Family Law Act Proceedings?' (2016) 27(1) Australasian Dispute Resolution Journal 17.

Australian Law Reform Commission, 'Family Law for the Future' (n 64) 261–2.

a zero sum game;" they may both be better off with a fair, nuanced settlement that takes account of their circumstances than a regime imposed by a court'.⁷⁶

Professor Barbara Glesner Fines has argued that, despite massive changes to family structures – notably that fewer people marry, and more marriages end in divorce – 'the core of family law practice has remained unchanged'.⁷⁷ Specifically, Glesner Fines claims that what she characterises as the dual challenge and reward of family law – assisting those in personally difficult circumstances – remains at the heart of family law professionalism.⁷⁸

The corollary to Glesner Fines' argument is that human lawyers are essential to family law matters, which is explained by Canadian academic Noel Semple as follows:

A client who is divorcing from a co-parent, or contesting the care of an older relative, is often best served by a settlement that creatively identifies options that work well for everyone involved, within the framework of the law. Cost-effectively securing such an outcome may require an advocate with a personal reputation within a local community of practice and a working knowledge of what outcomes are considered reasonable by other lawyers and judges within the local legal culture.⁷⁹

Here, Semple emphasises the human aspects of professionalism which cannot be replaced, even by sophisticated software, to suggest that family law is relatively more 'sheltered' from the incursion of technology into legal services. The benefits of automated options must, however, be considered by reference to the current family law system, which, as reflected in *Family Law for the Future*, is widely regarded as a broken one.⁸⁰ Human family lawyers also come in for their share of criticism – whether for charging exorbitant fees, increasing discord among separated families, or generally lacking competence.⁸¹ Accordingly, despite claims about the importance of human family lawyers, certain aspects of family law make it susceptible to automation – the first being affordability and accessibility, and the second, larger-scale problems with the efficiency of the family law system.

Firstly, unaffordability of legal services is a fundamental issue in family law. Litigants are individuals, rather than corporations, and separation typically generates enormous financial pressures as parties face disentangling financial affairs and financing the running of two households instead of one.⁸² Moreover, family problems

Bala, Herbert and Birnbaum (n 72) 580, quoting Robert H Mnookin, *Bargaining with the Devil: When to Negotiate and When to Fight* (Simon & Schuster, 1st ed, 2010) 217.

Barbara Glesner Fines, 'Fifty Years of Family Law Practice - The Evolving Role of the Family Law Attorney' (2012) 24(2) *Journal of the American Academy of Matrimonial Lawyers* 391, 392.

⁷⁸ Ibid.

⁷⁹ Semple, 'Personal Plight Legal Practice' (n 14) 34.

⁸⁰ See, eg, Australian Law Reform Commission, 'Family Law for the Future' (n 64) 123 [4.43].

See, eg, Zoë Durand, *Inside Family Law: Conversations from the Coalface* (Longueville Media, 2018); Michaela Whitbourn, 'Family Court Judge Blasts "Bitter, Aggressive" Litigation Culture in Sydney', *Sydney Morning Herald* (online, 13 December 2017)
https://www.smh.com.au/national/nsw/family-court-judge-blasts-bitter-aggressive-litigation-culture-in-sydney-20171213-h03nv5.html.

Patrick Parkinson and Brian Knox, 'Can There Ever Be Affordable Family Law?' (2018) 92(6) Australian Law Journal 458, 458.

generate significant emotional stress which can lead to ill health.83 The Law and Justice Foundation's survey of legal need in Australia found that '[r]elationship breakdown was one of several problem types that acted as a trigger and appeared to trigger debt, legal action and other family problems'.84 In Australia, as in many other common law jurisdictions, government funding of legal aid continues to decline, and a large proportion of people do not qualify for legal aid yet are unable to afford the cost of engaging a lawyer⁸⁵ – the 'missing middle' of the legal services market.⁸⁶ In many discussions of family law and technological advances, including the use of automated systems, it is this missing middle who are the expected or intended beneficiaries. Professor Ben Barton has argued that lawyers in the US initially ignored or underestimated automated options (typically low-cost online providers of legal services and forms) to their peril.⁸⁷ This was because, initially, these services were directed toward people who would otherwise have accessed no legal advice at all. With time, however, these services became attractive to the missing middle.⁸⁸ That is, as they have become more established, online providers have begun to compete with lawyers as their rates are greatly discounted when compared with those of attorneys.89 Another benefit to automation might be to increase access to accurate family law information and services. Ease of access might include avoiding courts but could also extend to avoiding formal dispute resolution procedures, or face-to-face interactions with lawyers and/or the other party.

The second issue relates to the first, and concerns problems of delay and inefficiencies in the court system.⁹⁰ For years the Australian family law system has been plagued by claims about delays and backlogs.⁹¹ In 2017, the House of Representatives Standing Committee on Social Policy and Legal Affairs reported that

delays from court filing to the commencement of a trial can be as high as 36 months in both the Family Court and the Federal Circuit Court of Australia (Federal Circuit Court) ... [which] can increase the risk of harm to families... [I]n remote or regional areas, delays can be even greater.⁹²

⁸³ Christine Coumarelos et al, *Legal Australia-Wide Survey: Legal Need in Australia* (Law and Justice Foundation of New South Wales, August 2012) vol 7, xvi.

⁸⁴ Ibid 15.

Ibid 38; see also Andrew Higgins, 'The Costs of Civil Justice and Who Pays' (2017) 37(3) Oxford Journal of Legal Studies 687.

Productivity Commission, *Access to Justice Arrangements* (Inquiry Report No 72, 2014) vol 2, 875; Margaret Castles, 'Expanding Justice Access in Australia: The Provision of Limited Scope Legal Services by the Private Profession' (2016) 41(2) *Alternative Law Journal* 115, 117.

Benjamin Barton, 'The Lawyer's Monopoly: What Goes and What Stays' (2014) 82(6) Fordham Law Review 3068.

Samuel V Schoonmaker IV, 'Withstanding Disruptive Innovation: How Attorneys Will Adapt and Survive Impending Challenges from Automation and Nontraditional Legal Services Providers' (2017) 51(2) Family Law Quarterly 133.

⁸⁹ Gerard J Clark, 'Internet Wars: The Bar against the Websites' (2013) 13(2) *Journal of High Technology Law* 247.

⁹⁰ See Zeleznikow, 'Efficiency and Effectiveness in Courts' (n 5).

See, eg, Chief Justice Alastair Nicholson, 'Legal Aid and a Fair Family Law System' (Speech, Legal Aid Forum Towards 2010, 1999); Nicola Berkovic, Inquirer, 'Break-Up So Hard to Do', The Australian (Sydney, 3 November 2018) 17; Opinion, 'Expedite Family Law Reforms', The Australian (Sydney, 28 August 2018) 15.

House of Representatives Standing Committee on Social Policy and Legal Affairs, Parliament of Australia, *A Better Family Law System to Support and Protect Those Affected by Family Violence* (Report, 2017) 56 nn 32, 34; see also Pricewaterhouse Coopers, Submission to the Attorney-General's Department, *Review of Efficiency of the Operation of the Federal Courts:*

Certainly, within family law, delays have severe impact, not just on parties but upon their children. For victims of domestic violence, for example, risk of homicidal violence from their former partner is at its highest post-separation, and children may be left in inappropriate or unsafe situations. ⁹³ Family Law for the Future referred to 'multi-year delays in reaching final hearing' in the Family Court. ⁹⁴ Perhaps unsurprisingly, the ALRC's espousal of non-court options for dispute resolution, such as arbitration, is clearly directed to alleviating the courts' workload and providing parties with faster access to resolution. ⁹⁵

Issues of delay and court overwork are real and substantial, and require address. ⁹⁶ As discussed in Part V, however, automation does not necessarily present a complete or straightforward solution to these issues, which are long-standing, cultural and structural. While there are individual applications which may be very useful, it is important to scrutinise each in its particular context.

IV EXAMPLES OF AUTOMATION IN FAMILY LAW

A Information Provision and Automated Drafting

The most long-standing application of automated systems to family law is for tailoring information and in some cases generating drafts of documents or forms. The US Legal Services Corporation recommended the use of document assembly applications to facilitate the drafting of legal documents, including 'by litigants themselves'.97 Another group of US authors have explained the benefits of such tools in terms of access to justice:

Instead of finding static court forms online to download, print, and complete by hand, litigants can now use interactive A2J Guided Interviews, created with A2J Author, which walks the user through the litigation process step-by-step. As litigants answer a series of questions, a form is assembled in the background using HotDocs document assembly software...⁹⁸

The Networked Society Institute (NSI), in its review of automated legal advice tools, noted that they cover a spectrum of uses, including those designed for consumers to use themselves, exclusively for lawyer use, or something in between (such as preparing an initial draft of a document for a lawyer to review).⁹⁹ The NSI noted that the tools available are becoming more sophisticated, can provide more precise information to clients, and in some cases, can generate documents based on responses received.¹⁰⁰ In

Final Report (April 2018) https://www.ag.gov.au/LegalSystem/Courts/Documents/pwc-report.pdf>.

Australian Law Reform Commission, 'Family Law for the Future' (n 64) 298 [10.10].

⁹⁴ Ibid 332 [10.135].

⁹⁵ See, eg, ibid 279 [9.1].

Greg Howe, 'The Family/Federal Circuit Court Restructure: What's all the fuss about?' (2018) 40(10) *The Bulletin* 6; Australian Law Reform Commission, 'Family Law for the Future' (n 62) 223 [5.160].

⁹⁷ LSC: Legal Services Corporation (n 47) 2.

James E Cabral et al, 'Using Technology to Enhance Access to Justice' (2012) 26(1) *Harvard Journal of Law and Technology* 241, 251.

Judith Bennett et al, 'Current State of Automated Legal Advice Tools' (Discussion Paper No 1, Networked Society Institute, University of Melbourne, April 2018) 22–25.

¹⁰⁰ Ibid.

the United States and United Kingdom, family law document automation seems to presently encompass only simple and non-contentious items such as prenuptial agreements, uncontested divorces and name changes.¹⁰¹

There is already a significant volume of family law information available online and for free. Aside from legislation and case law, organisations provide factsheets on different issues. Professor Jonathan Crowe et al noted a proliferation of legislation, case law, 'websites, factsheets, self-help guides and other material', authored variously by government services, non-government organisations or individuals. For some years the Family Court itself has provided 'do-it-yourself' kits for different forms. There are also some interactive types of online tools for family law matters in Australia, for example to obtain a divorce. One recent suggestion has been to implement an online questionnaire to be completed at the time of filing an application, in which each party could explain the steps they have taken to resolve or narrow the dispute.

Despite the volume of information, non-lawyers seeking family law information in the online environment reportedly find it difficult traverse its complexities, and hard to evaluate the credibility of different sources. The potential benefit, then, of using automated tools is to more precisely direct non-lawyers to relevant information. Chatbots or more complex expert systems can walk a user through a series of steps to answer simple legal queries or be directed to curated information. For example, an Australian family law client intake system is Settify, an online portal whereby potential clients can provide their instructions online prior to their first face-to-face meeting with a lawyer, by answering a series of questions. This is intended to save clients' and lawyers' time by generating a set of comprehensive instructions prior to the first meeting.

B 'Predictive' Analytics

The technology discussed above can be seen as promoting easier and more affordable access to justice (via information and in assisting people to complete forms and documents in simple and uncontentious matters). The use of 'predictive' analytics is geared more toward finding efficiencies by indicating a range of likely outcomes, thereby enabling people to better understand their legal position or options.

See, eg, 'Products for Your Big Life Changes' *LegalZoom* (Web Page) https://www.legalzoom.com/personal/marriage-and-divorce/; 'Find the Right Amicable Service' *Amicable* (Web Page) https://amicable.io/services> self-describes as 'the UK's only divorce service that works with couples to help you reach fairer agreements'.

¹⁰² Crowe et al (n 53).

^{&#}x27;Do It Yourself Kits', Family Court of Australia (Web Page, 14 February 2019) http://www.familycourt.gov.au/wps/wcm/connect/fcoaweb/forms-and-fees/court-forms/diy-kits/.

See, eg, *Online Divorce Applications* (Web Page) <www.onlinedivorceapplications.com.au >.

¹⁰⁵ Parkinson and Knox (n 80) 466.

¹⁰⁶ Crowe et al (n 53) 141.

Robert Ambrogi, 'This Week in Legal Tech: Everyone's Talking About Chatbots', *Above the Law* (Web Page, 17 April 2017) https://abovethelaw.com/2017/04/this-week-in-legal-tech-everyones-talking-about-chatbots/?rf=1.

See Settify (Web Page) <www.settify.com.au>.

Many have observed the importance of prediction to what lawyers do.¹⁰⁹ Big data analytics or predictive analytics is a way of analysing a massive quantity of data to reveal meaningful patterns. 'Big data' refers to the vast quantities of electronic data existing in the world, which continue to grow at an incredible rate.¹¹⁰ Large quantities of data, extremely powerful computers, and advances in machine learning all mean that extracting patterns from data is much easier, and the results more accurate.¹¹¹ Through different types of analysis, it is also possible to make predictions from this data. Predictive analytics does not (and cannot) explain *why* something is so – it just identifies the existence of a pattern.

As explained in Part II, statistical and computational modelling of legal cases is not new.¹¹² Initial models worked on information retrieval – locating or retrieving similar cases in order to analyse whether the case in question was sufficiently similar to those cases to match the outcome. Ashley has explained that by connecting 'features' of cases with particular outcomes, a program can discern a pattern and use that to make predictions about the outcome of cases with similar features.¹¹³ Features might include any number of things: those we might term 'external' (and which are likely technically irrelevant to the merits of the case) such as who the judge was, who the lawyers were, whether the plaintiff/applicant was a natural person or a company, where the application was filed, and so on. They might also include those 'internal' or case-specific features more readily recognised as going to the merits, such as factual information about the events which have generated the claim.

A differentiator of programs is the extent to which the program must be told by humans about which features to use.¹¹⁴ Early programs required the relevant features to be identified, which involved humans determining those features which seemed to be important, either based on analysis of key cases, or from research.¹¹⁵ Describing the 'Split-Up' system, Professor John Zeleznikow has explained how relevant features were identified:

In developing Split-Up, Australian Family Law experts were used to identify factors pertinent to a property distribution following divorce. A data set of past cases was then fed to machine-learning programs. Thus, Split-Up learned the way in which judges weighed factors in past cases... The way the factors combine was not elicited from experts as rules or complex formulas. Rather, values on the 94 variables were extracted from cases previously decided, so that a neural network could learn to mimic the way in which judges had combined variables.¹¹⁶

Mark K Osbeck and Michael Gilliland, 'Outcome Prediction in the Practice of Law' [2018] (50) Foresight: The International Journal of Applied Forecasting 42.

Viktor Mayer-Schönberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work and Think* (First Mariner Books, 2014) 8.

¹¹¹ Ibid 1-3.

See Ashley (n 24); Zeleznikow, 'Efficiency and Effectiveness in Courts' (n 5) 35.

¹¹³ Ashley (n 24) 107.

¹¹⁴ Ibid 110

Ejan Mackaay and Pierre Robillard, 'Predicting Judicial Decisions: The Nearest Neighbour Rule and Visual Representation of Case Patterns' (1974) 3(3-4) *Datenverarbeitung im Recht* 302, 306, cited by Kevin D Ashley and Stefanie Brüninghaus, 'Automatically Classifying Case Texts and Predicting Outcomes' (2009) 17(2) *Artificial Intelligence and Law* 125, 129; Ashley (n 24) 108–9.

¹¹⁶ Zeleznikow, 'Efficiency and Effectiveness in Courts' (n 5); see also Sourdin, 'Justice and Technological Innovation' (n 10) 101.

The program would then determine the weight that should be given to different features and could use this information to reach conclusions about new, or future cases.

More recently, the hope is that by using capabilities in reading text, a program will be able to analyse a mass or corpus of documents to itself identify (and weigh) the relevant features. 117 Instead of relying on a human to manually program the features needed, they are extracted automatically from the textual data (such as the text of judgments) using machine learning. A recent example is the study of Nikolaos Aletras et al, who analysed certain judgments of the European Court of Human Rights (ECHR). Reportedly, these researchers were able to infer the outcome of cases with 79 per cent accuracy,118 though their study has been criticised.119 Among its limitations was the use of judgments in substitute for the materials filed by the parties in each case. In other words, an analysis of the text of a judgment which had already been written, was used to 'predict' the outcome of the case. 120 As Pasquale and Cashwell argue, '[a] truly predictive system would use the filings of the parties, or data outside the filings, that was in existence before the judgement itself'. 121 The method of Aletras et al disregards the ways that judges draft their judgment so as to support their final conclusions, including the ways that facts are interpreted, 122 undermining the apparently impressive accuracy of the results.

Within subject-specific domains, commercial providers now offer forms of legal predictive analytics. ¹²³ For example, Lex Machina, ¹²⁴ among the first of its kind to offer such a service, analyses patent decisions. From its repository of thousands of decisions, it extracts information such as whether a certain lawyer has a good track record with a particular type of case, or whether a certain judge is likely to be amenable to a certain type of motion. Proponents of this type of analytics argue that this is empowering to consumers of legal services, who can judge a lawyer's track record on objective data. ¹²⁵

The difficulties in applying data analytics to judgments are that judgments tend to have no set format in terms of structure; factual disputes are not accounted for; and there may be insufficient data available to make reliable predictions, especially in a small jurisdiction such as Australia. One commentator has noted that

¹¹⁷ Ashley (n 24) 13.

Nikolaos Aletras et al, 'Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective' [2016] (2) *PeerJ Computer Science* 92.

Frank Pasquale and Glyn Cashwell, 'Prediction, Persuasion, and the Jurisprudence of Behaviourism' (2018) 68 (Supplement 1) *University of Toronto Law Review* 63.

¹²⁰ Ibid 68-9.

¹²¹ Ibid 70.

¹²² Ibid 119.

Some examples include Fastcase, Ravel Law (including Judge Analytics), Lex Machina and CARA

Originally the Stanford IP Litigation Clearinghouse. It was subsequently acquired by LexisAdvance: 'LexisNexis Acquires Premier Legal Analytics Provider Lex Machina', *Lex Machina* (Web Page, 23 November 2015) https://lexmachina.com/media/press/lexisnexis-acquires-lex-machina/.

See, eg, Robert Ambrogi, 'Rating Lawyers by their Wins and Losses', *Above the Law* (Web Page, 13 February 2017) https://abovethelaw.com/2017/02/this-week-in-legal-tech-rating-lawyers-by-their-wins-and-losses/.

under the strong influence of the current AI hype, people try to plug in data that is dirty and full of gaps, that spans years while changing in format and meaning, that's not understood yet, that's structured in ways that don't make sense, and expect those [data] tools to magically handle it.¹²⁶

Further, the effectiveness of some machine learning algorithms may mean that there is a tendency towards 'over-fitting' – finding patterns in training data which are not present in the real world.¹²¹ There are likely to also be biases present in family law data related to gendered patterns of labour, and so on.¹²8 If data is historic, it is questionable how social changes occurring since the 1970s could be accounted for. On the other hand, if only more recent judgments are used, the smaller sample size may present problems. There have also been numerous legislative changes to the *Family Law Act* 1975 (Cth) itself – a key issue would be the changes to the treatment of superannuation in the early 2000s,¹²² which would have significantly impacted property division. Finally, if the data comprised only of judgments and excluded settled or non-litigated cases, this would represent essentially a collection of 'outlier' data, as the majority of separations do not proceed to final hearing and judgment. While this is arguably how a system based on precedents (judgments) works, the benefit of a lawyer's input is that person's experience of settled as well as litigated cases.

In their extensive critique of the study by Aletras et al, Pasquale and Cashwell commented that

there is a danger that the model could be deployed by bureaucrats at the [Court] to prioritize certain petitions, given that the Court is deluged with thousands of petitions each year and can only decide a fraction of those cases. Without a clear understanding of how the model is predicting the success of a claim, [this] would be irresponsible ...¹³⁰

In the family law setting, for example, suppose that gender is highly significant in determining property division – which is likely, given the differences in earnings of men and women over time. Should this be built into an algorithmic model which 'predicts' what property division should be? Or should it be excluded? If it is to be excluded, will it be possible to do this, as there may be any number of other data points from which gender could be inferred?¹³¹

It is worth bearing Pasquale and Cashwell's caution in mind, and the limitations discussed above, when considering the application of predictive analytics to family law decisions. The Federal Court has publicised its development of an AI system, using IBM software, with the goal of identifying factors which are correlated to judicial (or

Monica Rogati, 'The AI Hierarchy of Needs', *Hackernoon* (Blog Post, 1 August 2017) https://hackernoon.com/the-ai-hierarchy-of-needs-18f111fcc007, cited by Philip Segal, 'Legal Jobs in the Age of Artificial Intelligence: Moving from Today's Limited Universe of Data Towards the Great Beyond' (2018) 5(1) *Savannah Law Review* 211, 219–20.

¹²⁷ See Sourdin, 'Judge v Robot' (n 17) 1126–30.

Lyria Bennett Moses and Noam Peleg, 'Why have a lawyer when you can have a robot?' (Presentation to National Family Law Conference Brisbane, 5 October 2018).

Family Law Legislation Amendment (Superannuation) Act 2001 (Cth).

Pasquale and Cashwell (n 119) 78.

Bennett Moses and Peleg (n 128).

negotiated, if consent orders are included) distribution of property.¹³² While this might be possible – and the Court has indicated that such a system would be used for the assistance of parties – it has potentially concerning implications for justice and fairness,¹³³ some of which are discussed below in Part V.

C Online Dispute Resolution

The methods described in the preceding two sections may be combined for use in online dispute resolution (ODR). ODR is a broad term encompassing both alternative dispute resolution (ADR) which is conducted online, and systems of online courts. ¹³⁴ Broadly speaking, it might include online portals (as recommended in the United States Legal Services Corporation (LSC) plan for access to justice). Via such portals, people can be triaged and directed to appropriate assistance. The LSC also envisaged self-represented parties being guided 'through the entire legal process.' ¹³⁵ The established Civil Resolution Tribunal in British Colombia provides such a portal for people looking to resolve some civil disputes, ¹³⁶ including family law.

Generally, it has been suggested that ODR is especially suitable for family law disputes. The complete physical (and possibly temporal) separation of the parties in particular lends itself to family mediation or family dispute resolution (FDR), especially in cases involving allegations of violence. It is argued that another benefit is that the technology creates a record of interactions, though given that what transpires in FDR is inadmissible, this may not be especially useful), and may reduce the effect of power imbalances in relationships. In 2011, Mark Thomson reported on a project piloted in Queensland to delivery FDR services online. Thomson noted that the resulting web-based platform included video communication, and also:

^{&#}x27;Federal Court Registrar Jessica Der Matossian on FLIP Inquiry Series: Behind the Buzzwords – AI' Law Society of NSW (*FLIP Inquiry Series: Podcasts*, 12 December 2018) https://www.lawsociety.com.au/advocacy-and-resources/advocacy/flip/flip-inquiry-series-behind-buzz-words/podcasts; see also 'Mr Warwick Soden – Biography', *Future Justice 2018* (Web Page) https://www.futurejustice2018.com/1584>.

See, eg, Emilia Bellucci and John Zeleznikow, 'Developing Negotiation Decision Support Systems that Support Mediators: A Case Study of the Family_Winner System' (2006) 13(2) *Journal of Artificial Intelligence and Law* 233.

Michael Legg, "The Future of Dispute Resolution: Online ADR and Online Courts" (2016) 27(4) Australasian Dispute Resolution Journal 277; Dory Reiling, 'Beyond Court Digitalization with Online Dispute Resolution' (2017) 8(2) International Journal for Court Administration 2.

Later, the launch of portals in Alaska and Hawaii was announced: LSC: Legal Services Corporation (n 47) 2.

¹³⁶ Civil Resolution Tribunal, 'Civil Resolution Tribunal' (2018) https://civilresolutionbc.ca/; and MyLawBC, Separation, Divorce & Family Matters, https://mylawbc.com/paths/family/.

Tania Sourdin and Chinthaka Liyanage, 'The Promise and Reality of Online Dispute Resolution in Australia' in Mohamed S Abdel Wahab, Ethan Katsh and Daniel Rainey (eds), *Online Dispute Resolution: Theory and Practice – A Treatise on Technology and Dispute Resolution* (Eleven International Publishing, 2012) 499 n 3.

Noam Ebner, 'E-Mediation' in Mohamed S Abdel Wahab, Ethan Katsh and Daniel Rainey (eds), Online Dispute Resolution: Theory and Practice – A Treatise on Technology and Dispute Resolution (Elven International Publishing, 2012) 357, 377.

¹³⁹ Ibid.

Mark Thomson, 'Alternative Modes of Delivery for Family Dispute Resolution: The Telephone Dispute Resolution Service and the Online FDR Project' (2011) 17(3) *Journal of Family Studies* 253; see also Relationships Australia, 'Development and Evaluation of Online Family Dispute Resolution Capabilities' (Final Report, 30 March 2011).

- screen features including small windows (pods) which can be scaled, resized and repositioned and hold a variety of information;
- visual sharing of information, including document sharing, online demonstration and whiteboard feature;
- ability to record notes which can subsequently be emailed to [FDR Practitioner]; and
- secure access to functionalities via [FDR Practitioner] authorisation.¹⁴¹

As this example shows, ODR may just involve traditional ADR processes which are conducted online or through electronic means. It is promoted as being cheaper, faster, more flexible, and offering more convenience than traditional ADR.¹⁴² Importantly though, humans may have a smaller role to play – it is possible for AI to 'become the third party that performs the mediation or decision making'.¹⁴³ A well-known model for such services is eBay's ODR system, created by Modria,¹⁴⁴ which deals with millions of disputes each year and settles 90 per cent of them with no input from eBay.¹⁴⁵ Modria is also involved in systems that are and have been used for family disputes, such as Rechtwijzer (discussed below) and the Civil Resolution Tribunal.

Zeleznikow has reported on several 'intelligent negotiation support systems' with application to family law, including Split-Up and Family_Winner.¹⁴⁶ In various writings, he has suggested that a system such as Split-Up could be used to inform parties about the probable outcome of their case (dependent, of course, on how facts would be determined) and therefore support negotiations.¹⁴⁷ Zeleznikow has maintained, however, that ODR systems should incorporate advice about likely outcome, support the parties to make 'trade-offs', and also facilitate communication.¹⁴⁷ Moreover, he commented that ODR 'should not be fully automated'¹⁴⁷ – the systems Zeleznikow described are to support decision-making rather than to take over this function.¹⁵੦

ODR has not 'taken off' to the degree which might perhaps be expected considering the pervasive issues of cost and delay in traditional family law litigation. ¹⁵¹ One reason

¹⁴¹ Thomson (n 140) 256.

John Zeleznikow, 'Methods for Incorporating Fairness into the Development of an Online Family Dispute Resolution Environment' (2011) 22(1) *Australasian Journal of Dispute Resolution* 16, 16 ('Methods for Incorporating Fairness').

Legg (n 134), citing Scott Shackelford and Anjanette Raymond, 'Building the Virtual Courthouse: Ethical Considerations for Design, Implementation, and Regulation in the World of ODR' [2014] (3) *Wisconsin Law Review* 615, 628; Suzanne Van Arsdale, 'User Protections in Online Dispute Resolution' (2015) 21(1) *Harvard Negotiation Law Review* 107, 118–19.

¹⁴⁴ Colin Rule, 'Making Peace on eBay: Resolving Disputes in the World's Largest Marketplace' (Fall 2008) *AC Resolution*.

Ben Barton, 'Modria and the Future of Dispute Resolution', *Bloomberg Law* (Web Page, 1 October 2015) https://biglawbusiness.com/modria-and-the-future-of-dispute-resolution/>.

Split-Up, Family_Winner, AssetDivider; Zeleznikow, 'Methods for Incorporating Fairness' (n 142).

¹⁴⁷ Zeleznikow, 'Efficiency and Effectiveness in Courts' (n 5) 39-41.

¹⁴⁸ Ibid 43.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid 36.

¹⁵¹ Ibid; see also Australian Law Reform Commission, *Review of the Family Law System* (Discussion Paper 86, October 2018) ('Review of the Family Law System'); Opinion (n 91); Berkovic (n 91).

for this may be an existing under-utilisation of mediation and arbitration options. 152 People in dispute over the care of children are notionally required to attend FDR prior to filing in court. 153 However, the high number of exemptions granted – at least as reported in one study¹⁵⁴ – suggests that FDR attendance is still the exception rather than the norm. There is no requirement to attend any out of court dispute resolution process in property disputes, though Family Law for the Future has recommended that this be changed. 155 Other barriers to adoption may include the lack of a unifying representative organisation of family law mediators, 156 a reluctance on the part of lawyers to encourage their clients to take up external mediation options, and seemingly a continuing preference for barristers as mediators. A final issue is that at present, FDR can only be performed by a Family Dispute Resolution Practitioner accredited by the federal Attorney-General's Department.¹⁵⁷ This means that while people are free to use an ODR process to attempt to resolve their family law parenting issues, they would not be able to obtain a s 60I certificate to later enable court filing. For people approaching FDR as simply a hurdle to be overcome prior to filing, there would be little incentive to use an ODR process. As Professor Patrick Parkinson and former judge Brian Knox SC have observed, channelling parties into alternative dispute resolution options will require, above all, 'cultural change', 158 regardless of whether that process is online or not. Semple has said that the primary task of 'good family law professionals' is not to litigate but to '[keep] separating people out of family court by securing their legal rights through settlement negotiation and other forms of alternative dispute resolution'. 159 This is premised, however, on lawyers' continuing involvement in ADR processes.

Overseas there have been well-publicised attempts to increase the use of ODR in family law matters. An ODR platform for separating couples called Rechtwijzer ('Signposts to Justice') operated in the Netherlands from 2014 to 2017. Although the platform had been available since 2007, its newer iteration resulted from a partnership between the Dutch Legal Aid Board, the Hague Institute for the Internationalization of Law (HiiL), and Modria. Separating couples paid €100 for access to the program, which guided them through various aspects of their lives and preferences upon separation. Dutch Judge Dory Reiling explained that it included 'online forms, chat functionality, calculation tools, and the ability to get help from an expert'.¹60 Upon identifying points of agreement, the program would offer a solution, which the former partners could accept or reject. An evaluation of Rechtwijzer found that users found their experience satisfactory but many nevertheless wanted a third party to review their agreement.¹61

¹⁵² See Parkinson and Knox (n 82) 464–65.

¹⁵³ *FL Act* (n 74) s 60I.

¹⁵⁴ Harman (n 74).

¹⁵⁵ Australian Law Reform Commission, 'Review of the Family Law System' (n 151) ch 5.

Joe Harman, 'The Field of Dreams' (2018) 29(1) Australasian Dispute Resolution Journal 33.

¹⁵⁷ FL Act (n 74) s 10G.

¹⁵⁸ Parkinson and Knox (n 82) 467.

Noel Semple, 'A Third Revolution in Family Dispute Resolution: Accessible Legal Professionalism' (2017) 34(1) *Windsor Yearbook of Access to Justice* 130 ('A Third Revolution').

Reiling (n 124) 2

Esmee A Bickel, Marian A J van Dijk and Ellen Giebels, 'Online Legal Advice and Conflict Support: A Dutch Experience' (Report, University of Twente, March 2015) 31, cited by Sourdin, 'Judge v Robot' (n 17) 1122.

This feature was later included, and reportedly nearly 60 per cent of those who used the platform proceeded through to finalising an agreement and registering it. 162

Rechtwijzer was said to be used in around 700 Dutch divorces a year, ¹⁶³ though as Professor Richard Moorhead has pointed out, this approximates to only one per cent of all divorces in the Netherlands. ¹⁶⁴ Financial difficulties reportedly caused the cessation of the ODR platform. ¹⁶⁵ In a post sub-titled 'Why online supported dispute resolution is hard to implement', Maurits Barendrecht of HiiL speculated about some of the reasons Rechtwijzer had not succeeded but reached no definite conclusions. ¹⁶⁶ Barendrecht did note lessons from traditional voluntary mediation – that there are multiple and complex reasons for people to wish to avoid such processes. ¹⁶⁷ Rechtwijzer has now been succeeded by a new platform, Uitelkaar.nl, which assists expartners to design their own separation agreements. ¹⁶⁸

Citing Rechtwijzer, various Australian organisations announced their intention to pursue a similar form of ODR. In 2016, Rechtwijzer representatives were in Australia promoting their efforts at increasing access to justice, ¹⁶⁹ and in 2017 the Australian federal government provided 'seed funding' to National Legal Aid (NLA) to create an ODR platform. ¹⁷⁰ It is unclear whether the proposed platform would be only for parenting matters or would encompass property disputes as well. ¹⁷¹ Though NLA's chairman claimed at the time that up to 20 per cent of family law disputes could be resolved online, no basis for this estimate was given. ¹⁷² Given that Rechtwijzer captured only a very small percentage of Dutch divorces after its years of operation, the 20 per cent projection seems highly optimistic. It is also possible that a family law ODR system would capture people who would have attended some form of family

Maurits Barendrecht, 'Rechtwijzer: Why Online Supported Dispute Resolution is Hard to Implement', *Law Technology and Access to Justice* (Blog Post, 20 June 2017) https://law-tech-a2j.org/odr/rechtwijzer-why-online-supported-dispute-resolution-is-hard-to-implement/.

Carol Matlack, 'Robots are Taking Divorce Lawyers' Jobs, Too', *Bloomberg* (Web Page, 30 June 2016) https://www.bloomberg.com/news/articles/2016-06-30/robots-are-taking-divorce-lawyers-jobs-too

Barendrecht (n 159) estimated 'a market share of 2-3 per cent of the separation market'; see also Richard Moorhead, 'After the Rechtwijzer Energizer', *Lawyer Watch* (Blog Post, 31 March 2017) https://lawyerwatch.blog/2017/03/31/after-the-rechtwijzer-energizer/.

Roger Smith, 'Goodbye Rechtwijzer: hello Justice42', *Law Technology and Access to Justice* (Blog Post, 31 March 2017) https://law-tech-a2j.org/advice/goodbye-rechtwijzer-hello-justice42/.

Barendrecht (n 162).

¹⁶⁷ Ibid; see further Part V below.

Uitelkaar (Web Page) https://uitelkaar.nl/> ('An independent lawyer checks whether the agreements are legally correct and balanced for both parties'). As Barendrecht (n 162) notes, it is too early to know how this new platform is performing.

See, eg, 'Negotiating Your Divorce Online', *The Law Report* (ABC Radio National, 12 July 2016) http://www.abc.net.au/radionational/programs/lawreport/resolving-disputes-online/7585364.

Matthew Denholm, 'Quick E-Divorce to Save Couples Time and Money', *The Australian* (Sydney, 8 August 2017), 5.

The reporting of the story, which references 'e-Divorce' in its headline, is also quite misleading given that obtaining a divorce online has been possible in Australia since 2009: Federal Magistrates Court, *Annual Report 2009/10*. Indeed since January 2018 paper copies of divorce orders are no longer posted, with the divorce order being electronic only: see http://www.federalcircuitcourt.gov.au/wps/wcm/connect/fccweb/how-doi/divorce/apply-for-a-divorce/apply-for-divorce>.

¹⁷² Denholm (n 170).

mediation or dispute resolution regardless, rather than attracting people who would otherwise *not* have attended and proceeded to file in court. Clearly, a shift from face-to-face family mediation or FDR to an online or partially automated process, while it may be cost-effective for government funded FDR services, does not carry the same benefits as diverting more people away from litigation.

V ASSISTING AND 'RESPONSIBILISING'

In *Family Law for the Future*, the ALRC noted that those litigating family law disputes represent only a very small proportion of all people who go through separation. Most people (70 per cent) resolve parenting disputes without recourse to the family law system.¹⁷³ Forty per cent of parents resolve their property disputes via discussion, and it is projected that this rate is higher for separating couples without children.¹⁷⁴ Of matters which do enter the system, the 'vast majority' settle.¹⁷⁵ This includes those which proceed as far as a trial, with over 40 per cent of these settling during trial or prior to judgment being delivered.

Those matters which do enter the family law system, however, frequently involve families and individuals with multiple complex needs. In the Australian Institute of Family Studies' (AIFS) *Evaluation of the 2006 Family Law Reforms*, co-occurrence of complex problems, such as family violence, addictions and mental health problems, was noted to feature in family law matters. These findings were confirmed in AIFS' 2014 study. The Such findings are not confined to Australia. For example, Professor Janet Johnston et al, when writing of the United States, have observed that 'conflict-ridden divorcing families' are likely to be beset by multiple serious problems. The legal problems of individuals generally tend to cluster and are interconnected and interdependent. In the case of groups who are already socially marginalised, the prevalence of multiple interconnected problems is greater.

Academics in the United Kingdom have identified within family law a renewed focus on individual autonomy and a corresponding narrowing of the concept of

Australian Law Reform Commission, 'Family Law for the Future' (n 64) 79, citing Lixia Qu et al, 'Post-Separation Parenting, Property and Relationship Dynamics after Five Years' (Report, Attorney-General's Department, Commonwealth, 2014) xvi.

Australian Law Reform Commission, 'Family Law for the Future' (n 64) 79 n 2.

¹⁷⁵ Ibid 80 [3.3].

Rae Kaspiew et al, *Evaluation of the 2006 Family Law Reforms* (Report, Australian Institute of Family Studies, December 2009) 29–30; In the United States, it has been observed that 'intransigent conflict-ridden divorcing families' are likely to be beset by multiple serious problems: Janet Johnston et al, 'Allegations and Substantiations of Abuse in Custody-Disputing Families' (2005) 43(2) *Family Court Review* 283, 291.

Rae Kaspiew et al, Evaluation of the 2012 Family Violence Amendments: Synthesis Report (Report, Australian Institute of Family Studies, October 2015) 16; see also Family Law Council, Families with Complex Needs and the Intersection of the Family Law and Child Protection Systems: Terms 1 & 2 (Interim Report, June 2015).

¹⁷⁸ Johnston et al (n 176).

Rosemary Hunter, 'Doing Violence to Family Law' (2011) 33(4) *Journal of Social Welfare and Family Law* 343, 354; Pascoe Pleasence et al, *Causes of Action: Civil Law and Social Justice* (Legal Services Commissioner, 1st ed, 2004).

Jess Mant and Julie Wallbank, 'The Mysterious Case of Disappearing Family Law and the Shrinking Vulnerable Subject: The Shifting Sands of Family Law's Jurisdiction' (2017) 26(5) *Social and Legal Studies* 629, 639–42 ('The Mysterious Case').

vulnerability.¹⁸¹ It has been argued that the privileging of individual autonomy permits a corresponding reduction in State responsibilities for welfare generally, including family law legal services.¹⁸² By shrinking the boundaries of vulnerability, and repositioning all those outside it as capable and 'responsibilised',¹⁸³ legal aid has been significantly reduced. Constraining the category of people who may be identified as vulnerable is, however, to overlook the significant issues facing many of those who now fall outside the definition of vulnerability and are therefore rendered ineligible for legal aid.

The construction of fewer individuals as vulnerable and in need of assistance, and of more as able to independently manage their own legal matters, is occurring against a backdrop of enormous growth in 'informal' sources of legal support.¹⁸⁴ Scholars note that, as in Australia, a 'plethora of informal, self-help resources ... can be accessed online'.¹⁸⁵ Yet, many people will struggle to use these resources effectively:

The scalar shift here is political, intending the majority to take personal responsibility for managing their own disputes. But, many people living in circumstances that require specific and holistic advice or formal intervention will inevitably experience significant difficulty both in locating these sources of help and making use of any information or guidance they are able to access.¹⁸⁶

In other words, despite comparative ease of access and low cost, there are many reasons why some people will not be able to access automated options; the most disadvantaged, who may also be most in need of legal help, may face too many complex and interconnected difficulties and have too few resources. ¹⁸⁷ In her Canadian study of self-represented parties, Macfarlane noted that: 'Many ... expressed the need for more than on-line resources, however good – a need for human contact and support as they navigate the justice system and prepare their case to the best of their ability'. ¹⁸⁸

For these reasons, despite problems of affordability, access, and efficiency in the family law system, automated options must be critically examined in their context. In the United States, facilitating access to justice has long been the counter-argument to concerns voiced about legal advice or drafting offered by legally-unqualified entities, and lawyers and their representative organisations are accused of protectionism when unauthorised practice issues are raised. However, some academics have queried

Ibid; Alison Diduck, 'Autonomy and Family Justice' (2016) 28(2) Child & Family Law Quarterly 133; Alison Diduck, 'Autonomy and Vulnerability in Family Law: The Missing Link' in Julie Wallbank and Jonathan Herring (eds) Vulnerabilities, Care and Family Law (Routledge, 2013) 95.

Mant and Wallbank, 'The Mysterious Case' (n 180) 639.

¹⁸³ Ibid 641.

¹⁸⁴ Ibid.

¹⁸⁵ Ibid 643.

¹⁸⁶ Ibid 638.

Coumarelos (n 83) xv; Geoff Mulherin, 'Law and Disadvantage' in Michael Legg (ed) *Resolving Civil Disputes* (LexisNexis, 2016) 225, 249 [16.79].

¹⁸⁸ Macfarlane (n 54) 67.

Cody Blades, 'Crying Over Spilt Milk: Why the Legal Community is Ethically Obligated to Ensure LegalZoom's Survival in the Legal Services Marketplace' (2015) 38(1) *Hamline Law Review* 31; Lauren Moxley, 'Zooming Past the Monopoly: A Consumer Rights Approach to Reforming the Lawyer's Monopoly and Improving Access to Justice' (2015) 9(2) *Harvard Law and Policy Review* 553; Ben Barton, 'Lessons from the Rise of LegalZoom', *Bloomberg Law* (Web Page, 18 June 2015) https://biglawbusiness.com/lessons-from-the-rise-of-legalzoom>.

whether automation is really a panacea for access to justice issues. ¹⁹⁰ Nick Robinson, for example, has pointed out that in the case of will-writing, affordable options not involving lawyers have been widely available for many years – firstly as paper forms, then as computer software, and now online – yet this has not changed the proportion of Americans dying intestate. ¹⁹¹ In other words, though more people may use the non-lawyer option, there has been no overall increase in people making wills. This example illustrates the complexity of access to justice, or the reasons why people do not access justice options, which include not knowing there is a legal issue, personal stress or distress, inconvenience, fear or mistrust of the legal system, or lacking faith in the system's effectiveness – it is more than just affordability, though this clearly plays a key role. ¹⁹²

In family law matters, it seems likely that cost is a significant barrier, ¹⁹³ especially to people wishing to consult a lawyer or litigate. The ALRC noted that litigation involves 'prohibitive' costs for most people. ¹⁹⁴ Those most likely to benefit from low-cost automated options, however, are not those most in need, but rather people whose affairs are uncomplicated, relationships are not characterised by coercion, control or fear, and who are able to afford the costs of the service. Robinson essentially makes this point when he observes that online document drafting providers such as LegalZoom are marketed squarely to the middle classes. ¹⁹⁵

A Affordability and Access to Legal Options

Some of the possibilities and limitations of automation for access to justice can be illustrated by a recent Australian example. 'Ailira', the 'Artificially Intelligent Legal Information Research Assistant', can provide tailored advice and help to victims of domestic violence, including drafting applications for civil protective orders. ¹⁹⁶ Its website explains: 'Ailira can log incidents of domestic violence so as to create a time-stamped paper-trail. She can generate Intervention Orders, accompanying affidavits and background letters based on those logs'. ¹⁹⁷ This is a worthy goal and there is nothing to suggest that Ailira's developers are not making a serious attempt to create a product which will be helpful to persons in need of protection (PINOPs). Ailira may not, however, be well-suited to PINOPs, for reasons detailed below.

Catherine J Lanctot, 'Regulating Legal Advice in Cyberspace' (2002) 16(3) St. John's Journal of Legal Commentary 569; Nick Robinson, 'When Lawyers Don't Get All the Profits: Non-Lawyer Ownership, Access, and Professionalism' (2016) 29(1) Georgetown Journal of Legal Ethics 1; Francesca Bartlett, 'An Uncomfortable Place for Technology in the Australian Community Legal Sector' (Presentation to International Legal Ethics Conference VIII, University of Melbourne Law School, Melbourne, 7 December 2018).

¹⁹¹ Robinson (n 190).

Rebecca L Sandefur, 'What We Know and Need to Know About the Legal Needs of the Public' (2016) 67(2) *South Carolina Law Review* 443, 445, 449-50; see also Schoonmaker (n 88). Semple, 'A Third Revolution' (n 159).

Australian Law Reform Commission, 'Family Law for the Future' (n 64) 196 [6.5], 248 [8.8].
Robinson (n 190).

^{&#}x27;Ailira – Domestic Violence Assistant Beta Testing Now Open', Cartland Law (Web Page) https://www.cartlandlaw.com/ailira-domestic-violence-assistant-beta-testing-now-open/. The program was initially funded by the D3 Digital Challenge "Keeping Women Safe" program in South Australia: see 'Ailira wins Government Grant to Help Victims of Domestic Violence', Cartland Law (Web Page) https://www.cartlandlaw.com/ailira-wins-government-grant-to-help-victims-of-domestic-violence/.

¹⁹⁷ Ibid.

The first issue is whether Ailira is addressing a presently existing legal need. 198 It is not clear that the drafting of the application is the major hurdle facing a PINOP when it comes to seeking protection. There is extensive literature on the barriers faced by complainants in reporting family violence, which are both psychological (including the experience of being subjected to coercion and control)199 and structural200 rather than procedural. In addition, in Australia it is generally the police who play 'a major role... in applying for protection orders' and have specialised units focused on domestic violence.²⁰¹ In some jurisdictions police have compelling obligations to investigate family violence, and to apply for protective orders.²⁰² In New South Wales, where police must apply for protective orders if they suspect that a family violence offence has been, is being, or is likely to be committed against a PINOP, the vast majority of applications are made by police.²⁰³ In some instances a PINOP may make a private application. This generally happens if the police have refused to make an application, the person is mistrustful of police and hence prefers to proceed independently, or if two parties are making cross-applications. Ailira might, therefore, enable more people to effectively apply themselves, though there are differing views as to whether it is preferable for police, or PINOPs, to make the application.²⁰⁴

The second issue is whether Ailira is capable of drafting Intervention Orders effectively. Translating a narrative of a person's experience of violence into a legally relevant account is a challenging task, as Dr Jane Wangmann's research in NSW found.²⁰⁵ There is the challenge of knowing what is legally relevant, and what is not. A PINOP might unwittingly self-incriminate by disclosing incidences of his or her own criminal acts or other issues such as migration status – statements such as these would be difficult for an automated system to identify. Professor Richard Moorhead has also noted the ethical complexity of constructing a legal narrative in a more mundane

The concept of 'legal need' is to capture problems which individuals may not themselves identify as legal issues: see generally Hazel Genn, *Paths to Justice: What People Do and Think About Getting to Law* (Hart Publishing, 1999).

See, eg, Special Taskforce on Domestic and Family Violence in Queensland, *Not Now, Not Ever: Putting an End to Domestic and Family Violence in Queensland* (Report, 28 February 2015) 301.

See, eg, Australian Law Reform Commission, Family Violence and Commonwealth Laws – Improving Legal Frameworks: Final Report (Report No 117, November 2011) 51–54 [1.18]-[1.26] ('Family Violence: Improving Legal Frameworks'); Australian Law Reform Commission, Family Violence: Improving Legal Frameworks – Consultation Paper (Consultation Paper No 9, June 2010) 214 [4.224].

Australian Law Reform Commission, *Family Violence: Improving Legal Frameworks* (n 201) 958–59 [20.16].

²⁰² Ibid 244–45 [5.72]-[5.77].

²⁰³ Crimes (Domestic and Personal Violence) Act 2007 (NSW) s 49; Jane Wangmann, 'Incidents v Context: How Does the NSW Protection Order System Understand Intimate Partner Violence' (2012) 34(4) Sydney Law Review 695.

This was recommended by the Victorian Law Reform Commission, *Review of Family Violence Laws* (Report, February 2006) [5.80]-[5.93]; on the other hand, the NSW Law Reform Commission had previously stressed the importance of police making complaints on behalf of PINOPs: New South Wales Law Reform Commission, *Apprehended Violence Orders* (Report No 103, October 2003) [3.8]; see also Heather Douglas, 'Do We Need a Specific Domestic Violence Offence?' (2015) 39(2) *Melbourne University Law Review* 434. The debate about mandatory arrest policies in the domestic violence context also illustrates this complexity: see, eg, Rachel Camp, 'Pursuing Accountability for Perpetrators of Intimate Partner Violence: The Peril and Utility of Shame' (2018) 98(6) *Boston University Law Review* 1677, 1703–4, n 132.

Wangmann's research was focused on cross-applications: she reviewed 156 such applications.

Wangmann's research was focused on cross-applications: she reviewed 156 such applications, as well as conducting court observation: Wangmann (n 203) 702–3.

example. He utilised DoNotPay, globally touted as the world's first 'legal chatbot'.²⁰⁶ By answering a series of questions, the app generated a letter for Moorhead challenging his (fictitious) parking fine. Moorhead noted that the resulting missive contained an untruth which had not formed part of his instructions.²⁰⁷ Among other things, this illustrates the ethical challenge of translating a person's narrative into a legal complaint via an AI system. Wangmann has explained further that the focus of the complaints which she reviewed tended to be on a specific incident or incidents, thereby disregarding the ongoing pattern of behaviour constituting coercion and control (notwithstanding the intent of the legislation to capture such patterns). While Ailira might enable *more* incidents to be described, it still appears to retain this structure. It is not clear whether Ailira will be able to advise users on brevity, or if it will encourage or discourage lengthy complaints.

The third issue is whether the infrastructure of the justice system can follow through on the application process. This is not a fault of Ailira but rather reflects the reality that ultimately, seeking to increase the use of Intervention Orders will require increased resourcing of police and courts. Wangmann's research in NSW and that of Rosemary Hunter conducted in Victoria found that the average time for civil protective order applications to be dealt with in court was around three minutes.²⁰⁸ If Ailira enabled considerably more PINOPs to apply for protective orders, there would need to be additional resourcing of courts to hear and determine such applications and of police to be capable of enforcing the orders once made.

The concept of Ailira as a means of increasing access to justice for PINOPs has some salient points for family law. There is the question of unmet legal needs, and whether they will actually be addressed by a given program. At times, it also seems to be assumed that the use of technology, and automated systems in particular, will always be cost-saving. Yet, even aside from the cost of developing, building, training and testing a program, if the technology achieves its goal of increasing access, the opposite may be true.

Finally, increasing affordable options should not be a substitute for adequate funding of courts, Legal Aid, or community legal services. Using the example of family violence, Professor Paul Gowder has commented that:

[T]he victim of domestic violence who needs help from the legal system to protect herself ... does not merely need an analysis of the relationship between the facts of her situation and the legal standards for a restraining order. She often needs the human and interpersonal assistance provided by lawyers – someone to listen to those facts and take her account of them seriously, who is credible to police and to courts, and who has the social capital as well as the courage...²⁰⁹

Richard Moorhead, 'DoNotLie – A quick post on ChatBot ethics', *LawyerWatch* (Blog Post, 1 February 2018) https://lawyerwatch.blog/2018/02/01/donotlie-a-quick-post-on-chatbot-ethics/.

²⁰⁷ Ibid.

Wangmann (n 203) 712–13, citing Crimes (Domestic and Personal Violence) Act 2007 (NSW) s
 49; Rosemary Hunter, Domestic Violence Law Reform and Women's Experience in Court: The Implementation of Feminist Reforms in Civil Proceedings (Cambria Press, 2008) 81-82.

Paul Gowder, 'Transformative Legal Technology and the Rule of Law' (2018) 68 (Supplement 1) *University of Toronto Law Journal* 82, 85.

As well as ensuring that a complaint is not self-incriminating and does not contain untruths or other inappropriate material, a lawyer can assess if the PINOP has other legal issues associated with the abusive situation, such as family law, employment, migration or debt matters, which, in the absence of specific questions, an automated system would not be able to do. In the case of Ailira, it would be supposing the PINOP has a potential victim's compensation claim that she is not advised about. This raises in turn the spectre of professional negligence and liability, and who might bear that responsibility. Documenting some of the online sources that offer family law assistance to Australians, Tahlia Gordon has noted that non-lawyer providers have professional looking websites, and that information about the provider's non-lawyer status is often difficult to locate, or is not disclosed. 211

B Justice and Fairness

Civil justice regimes involve, inter alia, a trade-off between efficiency and individual rights.²¹² Justice Perry of the Federal Court has commented that 'the efficiencies which automated systems can achieve, and the increasing demand for such efficiencies, may overwhelm an appreciation of the value of achieving substantive justice for the individual'.²¹³ The application of automated systems in family law raises a number of fairness and justice concerns, both at a structural and an individual level.

At the individual level, Zeleznikow's example of the 'Family_Winner' system for family dispute resolution is illustrative.²¹⁴ He explains:

[S]olicitors at Victoria Legal Aid and mediators at Relationships Australia were very impressed with the manner in which Family_Winner suggested trade-offs and compromises. However, they had one major concern: that by focusing upon interest-based negotiation, the system had ignored issues of justice.²¹⁵

Of course, this problem arises in any form of privatised dispute resolution and is especially pertinent in family law, as Professors John Eekelaar and Mavis Maclean discuss comprehensively in their book, *Family Justice*.²¹⁶ It is well-illustrated in Australia by the strict approach initially taken by the court in determining whether a financial agreement would be binding on the parties.²¹⁷ A key issue is the potential

See generally Beames (n 55).

Tahlia Gordon, 'The Unregulated Cowboys that May be "Engaging in legal practice" (Presentation, FLIP Regulatory Subcommittee, Law Society of NSW, 9 April 2019), referring to Online Divorce Applications (n 104) and *AU Divorce* (Web Page) https://www.audivorce.com.au/.

Eekelaar and Maclean, Family Justice (n 16) ch 9.

Melissa Perry, 'iDecide: Administrative Decision-Making in the Digital World' (2017) 91(1) Australian Law Journal 29, 33.

²¹⁴ Zeleznikow, 'Methods for Incorporating Fairness' (n 142) 19.

²¹⁵ Ibid

Eekelaar and Maclean, *Family Justice* (n 16); see also Penelope E Bryan, 'Reclaiming Professionalism: The Lawyer's Role in Divorce Mediation' (1994) 28(2) *Family Law Quarterly* 177.

See *Black v Black* (2008) 216 FLR 422, 430 [45], which adopted a strict approach to compliance with the legislation before a financial agreement would be binding; Patrick Parkinson, 'Setting Aside Financial Agreements' (2001) 15(1) *Australian Journal of Family Law* 26.

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vulnerability of one party, especially in the context where family violence is alleged. ²¹⁸ There are many positives to privatised dispute resolution in family law – time and cost savings, control and ownership of the outcome, preservation of relationships – yet the combination of automation and privatisation raises additional concerns. In family law matters, perhaps more so than any other area of law, personal and social concerns are germane – the pursuit or non-pursuit of legal options may be driven by a multitude of factors which are not susceptible to quantification or cost-benefit analysis. For example, a person may forgo their property entitlement in order to avoid a dispute, for many personal reasons – care for the other party, fear of the other party, concern for children, and so on. Moreover, family law decisions are highly discretionary. As Parkinson has noted, there are no principles of quantification which can guide the resolution of property disputes. ²¹⁹ Thus, applying a mathematical approach to family law matters should be pursued with caution, as it has the potential to result in unjust outcomes.

It has been argued that 'in divorce hearings, algorithms can automatically assess the individuals' property, financial background, and calculate the amount of time spent together to create a fair agreement'.²²⁰ This assertion, however, rests on the assumption that what a particular subset of other separating couples (since no system will have access to the decisions of every separated couple) decided was fair is necessarily fair for the individuals in question. The assumption that the experience of a population provides the 'fairest' outcome for everyone cannot be made lightly.

The problems with transposing fairness to an individual and the experience of a broader group is brought into stark relief by the use of algorithmic risk assessments, such as COMPAS,²²¹ which is used in the United States criminal justice system. Lehr and Ohm have noted the many places in the machine learning process where decisions must be made – about the questions to be asked, the choice of algorithms, and so on.²²² There is little consensus on how 'fairness' might be defined, let alone reproduced in a machine learning system.²²³ Further, the training data itself may be the product of biased human thinking or historic discrimination – such as the over-policing and over-incarceration of certain communities.

Estimates as to prevalence vary, but see, eg, Lawrie Moloney et al, *Allegations of Family Violence and Child Abuse in Family Law Children's Proceedings: A Pre-Reform Exploratory Study* (Research Report No 15, Australian Institute of Family Studies, May 2007) which suggested that over half of family law cases involved allegations of violence and/or child abuse.

Patrick Parkinson, 'Why are Decisions on Family Property So Inconsistent?' (2016) 90(7) *Australian Law Journal* 498, 498–9.

Daniel Ben-Ari et al, "Danger, Will Robinson?" Artificial Intelligence in the Practice of Law: An Analysis and Proof of Concept Experiment' (2017) 23(2) *Richmond Journal of Law & Technology* 2.

The Correctional Offender Management Profiling for Alternative Sanctions: see Julia Angwin et al, 'Machine Bias', *Propublica* (Web Page, 23 May 2016)

https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing. Lehr and Ohm (n 35).

For a discussion of differing approaches to fairness: see Sam Corbett-Davies et al, 'A computer program used for bail and sentencing decisions was labeled biased against blacks. It's actually not that clear', *The Washington Post* (Web Page, 17 October 2016)

; Broad (n 19) ch 7.

In common with decisions about bail, parole, and sentencing, family law decisions are largely 'predictive'. Rather than being a decision adjudicated on past events (as most judicial decisions are), knowledge of past events is used to determine what is in children's best interests, or (to a lesser extent) what a person's financial needs will be, going into the future. In family law, however, there is no data *at all* as to whether the decision — whether made by the parties themselves, or judicial determination — actually did represent the best or fairest outcome. The only possible measure of this (which is a poor one) is whether the parties returned to litigate further.

When it comes to analysing past cases in order to try and predict future outcomes, there are normative concerns about a rigid or isolated interpretation. In other words, just because past decisions on a certain issue tend one way, this does not mean that they *should* have tended that way, or that the immediate case in point should have that same outcome. AI lacks what is referred to as 'common sense' – generalised knowledge of social context and the human world.²²⁴ In law, this includes an understanding of the idiosyncratic way that the common law has developed and continues to develop, but also more nebulous policy concerns and the importance of the rule of law. Pasquale and Cashwell question 'the social utility of prediction models as applied to the judicial system', fearing 'that their deployment may endanger core rule-of-law values'.²²⁵

While the common law is based on precedent, appellate courts frequently develop the law. Lyria Bennett Moses and Janet Chan have noted that '[r]elying on past data, including past settlements, when making settlement decisions creates a feedback loop so that an initial bias ... is perpetuated'.²²⁶ This would be problematic in family law where social norms have changed, leading to legal change; where laws themselves have changed; or simply where past decisions available are not reflective of present circumstances. This has ramifications for the use of data analytics of decisions and consent orders, especially if AI-generated predictions were used to make determinations about Legal Aid funding or otherwise hinder a person accessing the court. In a worst-case scenario, people might settle based on the prediction of software even though a court would not have found the same way,²²⁷ or be denied Legal Aid when they should have received assistance. Thus, while it might be argued that the ready availability of data is empowering for individual consumers – they can more rationally assess their case's chances of success, for example – it might also have a chilling effect, further entrenching pronounced disparities of access.

There are many potentially useful access-to-justice applications for automated systems. Access to better quality and more reliable information about the family law system would be beneficial, for instance. Access to justice need not mean access to lawyers or courts. In family law matters, it might simply be people understanding their legal options and being able to choose the resolution option they prefer, without excessive wait times or cost, and in circumstances of safety.

²²⁴ Gillian K Hadfield, *Rules for a Flat World* (Oxford University Press, 2017) 25.

Pasquale and Cashwell (n 119).

Lyria Bennett Moses and Janet Chan, 'Using Big Data for Legal and Law Enforcement Decisions: Testing the New Tools' (2014) 37(2) *University of New South Wales Law Journal* 643, 668.

Frank Pasquale and Glynn Cashwell, 'Four Futures of Legal Automation' [2015] (63) *UCLA Law Review Discourse* 26, 43.

Research into human decision-making also suggests that technology can be highly useful as an organisational, corrective, and supplemental tool.²²⁸ Ailira, for instance, may produce a useful first draft of a complaint which a lawyer, domestic violence support worker, or police officer could review. Yet interest in efficiencies and self-help options should not lead to financial efficacy being prioritised above all, nor should it result in a 'two-tiered' justice system²²⁹ where those who cannot afford 'real' lawyers are reduced to making do with automated options.

VI CONCLUSION

Some commentators have claimed, ambitiously, that 'most' disputes can be solved by artificial intelligence and that family lawyers are not immune from the impact of AI.²³⁰ In contrast, Semple, as noted above, suggests that 'personal plight lawyers' will continue to be needed and sought out, even in the face of increasing automation of legal services, due to the importance for individuals of connecting with a human lawyer when confronting family law or other personal matters.²³¹

Family lawyers are frequently gatekeepers to the family law system and their influence on clients is substantial.²³² Yet, family law also involves emotional work on the part of the lawyer as clients usually seek, and require, more than 'pure' or mechanistic legal advice. The difficulties that clients may have – as Gowder's comment²³³ quoted in the previous Part illustrates – tend to be vastly more substantial than needing to know the steps of a legal process, though clearly this is also important. Some argue that this limits opportunities for automation in family law,²³⁴ but the opposite is also claimed. One former family law judge suggests that the majority of matters brought to United States family courts are 'non-legal' disputes over parenting, ²³⁵ where people are more in need of sensible advice about managing time and communicating (which apps may be able to provide) than legal counsel.²³⁶ It is these non-legal elements, however, which are important for 'problem-solving' lawyers, as this necessarily involves aspects which are relational and contextual. Carrie Menkel-Meadow has summarised the steps which lawyers need to consider when advising clients, which include the client's goals, 'underlying needs or interests', and what is important to them and requires resolution. Menkel-Meadow suggests that lawyers must consider 'the legal, social, economic, political, psychological, moral, ethical and organizational issues, benefits, and risks implicated in the matter'.²³⁷ This holistic picture of a lawyer's task demonstrates the

See National Research Council, *Complex Operational Decision Making in Networked Systems of Humans and Machines: A Multidisciplinary Approach* (National Academies Press, 2014).

²²⁹ Remus and Levy (n 2) 551.

²³⁰ Ben-Ari et al (n 220).

²³¹ Semple, 'Personal Plight Legal Practice' (n 14).

Patrick Parkinson, Atlanta Webster and Judy Cashmore, 'Lawyers' Interviews with Clients about Family Violence' (2010) 33(3) *University of New South Wales Law Journal* 929.

²³³ Gowder (n 209).

Semple, 'Personal Plight Legal Practice' (n 14); Schoonmaker (n 88).

Lydia Dishman, 'This App Helps Divorced Parents Stop Fighting Over Custody and Save Money', Fast Company (Web Page, 17 January 2019)
 https://www.fastcompany.com/90290963/this-app-helps-divorced-parents-stop-fighting-over-custody-and-save-money.

Adieu is one example of a startup using artificial intelligence to help humans resolve conflict, starting with separation and divorce: *Adieu* (Web Page) https://www.adieu.ai/>.

²³⁷ Carrie Menkel-Meadow, 'When Winning isn't Everything: The Lawyer as Problem Solver' (2000) 28(4) *Hofstra Law Review* 905, 909–10.

importance of situating the client and the problem in order to discern the specific legal questions involved; and considering the ramifications of any action in a broad way. Yet, unbundling has been used in family law matters for some time, demonstrating that a disaggregation of tasks is possible.²³⁸

In terms of AI's impact on the profession of law, Remus and Levy predict that the least impact will be felt on 'unstructured' areas of practice and those where personal interaction is required.²³⁹ In a good example for family law, they explain 'legal prediction software programs address only courts and case law, but lawyers must routinely predict many other things, such as how an opponent will react to a settlement offer'.²⁴⁰ In family law, lawyers must also have regard to the best interests of the child.

AI innovations in family law can thus far only supplement the work of lawyers. Yet there are undoubtedly potential benefits, such as reducing the cost to consumers and increasing access to justice, in some circumstances. Both family lawyers and litigants may benefit from such increased efficiencies. Professor Rebecca Aviel has discussed the importance of differentiated case management in family law, which she describes as 'a multistream system that endeavors to tailor the level of procedural intricacy to the degree of conflict and complexity presented by their particular circumstances'.²⁴¹ Aviel refers to the value of triaging or 'sorting' to accord appropriate priority to family law matters, using intake procedures, and also leveraging metrics to gain a more accurate picture of how case management is working. In other words, she describes processes at which AI is likely to excel. Lawyers may use AI technology themselves to increase the efficiency of what they do, clients may already have made use of technology themselves, or lawyers may wish to refer their clients to technological assistance. It will be important, though, that family lawyers have a clear understanding of the limitations and pitfalls of automated systems as well as their potential benefits and uses. This is particularly so in relation to the use of automation by courts and governments in pursuit of efficiency. Especially in the case of vulnerable clients and children, self-help automated options may be useful tools, but will not be appropriate substitutes for professional family lawyers.

Semple, 'A Third Revolution' (n 159) 142-3.

²³⁹ Remus and Levy (n 2).

²⁴⁰ Ibid 526.

Rebecca Aviel, 'Family Law and the New Access to Justice' (2018) 86(5) *Fordham Law Review* 2279, 2282.