

‘How will the Rule of Law be affected by advances in legal technology?’

Introduction

The legal profession is undergoing its greatest change since the birth of the internet. According to Deloitte, 100,000 legal roles will be automated by 2036.¹ Over the past decade firms have adopted an array of legal technologies from case management systems to contract-review technologies in the name of cost reduction and efficiency. Courts and tribunal services across England and Wales are undertaking a £1.2bn modernisation programme facilitating the introduction of legal technologies such as e-filing, video communication and e-discovery in court proceedings.² In 2016-17, video-links were used in more than 137,000 cases in England and Wales.³ Following the decision in *Pyrrho Investments Ltd v MWB Property Ltd*, the use of predictive coding for disclosure was endorsed by the High Court for the first time.⁴ This technology enabled 17.6 million documents to be reviewed for disclosure in under 8 hours.⁵ It is apparent human lawyers will be outgunned by the brute processing power of legal technology. The question is; to what extent will legal technology affect the traditional boundaries associated with the Rule of Law?

Artificial Intelligence is commonly used as a blanket term to cover the majority of legal technology. I will use the term AI in reference to legal technologies which ‘detect patterns in data and apply these patterns to automate certain tasks’.⁶ I will also make specific reference to both blockchain and Online Dispute Resolution (ODR).

The Rule of Law has been a concept since the times of ancient Greece with the phrase being popularised by Dicey in 1885. However, scholars such as Professor Brian Tamanah conceded the Rule of Law is ‘an exceedingly elusive notion’.⁷ In his book ‘The Rule of Law’, Tom Bingham defines the Rule of Law as the principle that ‘all persons and authorities within the state... should be bound by and entitled to the benefit of the laws... which are publicly administered in the courts’.⁸ He goes on to split the Rule of Law into eight distinct areas. This essay will focus on four in particular, accessibility, administrative discretion, fairness and equality before the law.

The first section of this essay will deal with access to justice. Section two will deal with the idea that in the pursuit of accessibility, we must not inhibit administrative discretion or sacrifice fairness and equality before the law. Finally, the idea that we must create a legal environment allowing technology to prosper without inhibiting the Rule of Law is addressed.

¹ Bernard Marr, “How AI and Machine Learning Are Transforming Law Firms and the Legal Sector” (Forbes, 23 May 2018) <<https://www.forbes.com/sites/bernardmarr/2018/05/23/how-ai-and-machine-learning-are-transforming-law-firms-and-the-legal-sector/#12388ef332c3>>.

² Joanna Goodman, “Roundtable: Information technology in dispute resolution” (Law Society Gazette, 4 June 2018) <<https://www.lawgazette.co.uk/roundtables/roundtable-information-technology-in-dispute-resolution/5066307.article>>.

³ Owen Bowcott, “Videolinks in court trials undermine justice system” (The Guardian, 23 Oct 2017) <<https://www.theguardian.com/law/2017/oct/23/videolinks-in-court-trials-undermine-justice-system-says-report>>.

⁴ Damian Taylor, Nataie Osafo, “Artificial intelligence in the courtroom” (Law Society Gazette, 9 April 2018) <<https://www.lawgazette.co.uk/practice-points/artificial-intelligence-in-the-courtroom-/5065545.article>>.

⁵ *Pyrrho Investments Limited, MWB Business Exchange Limited v MWB Property Limited* [2016] EWHC 256.

⁶ The Law Society of England and Wales, “Horizon Scanning; Forward Thinking- Artificial Intelligence and the Legal profession” (3 May 2018) <<https://www.lawsociety.org.uk/news/documents/horizon-scanning-artificial-intelligence-and-the-legal-profession>>.

⁷ Tom Bingham, *The Rule of Law*, (London, Penguin Books, 2011) p.8.

⁸ Bingham, *Op. Cit.* p. 12.

1. Access to justice

Tom Bingham argues that ‘the constitutional right of access to justice’, encouraging a ‘speedy, informal and inexpensive procedure’ is central to the Rule of Law.⁹ Blockchain technology offers the opportunity to promote these ideals. Essentially it is a shared database that grows exponentially, keeping a secure and entire record of all the transfers in ownership and known attributes of any particular asset that have occurred since the database’s inception.¹⁰ A good example of how blockchain could be used practically is in conveyancing. Traditionally, lawyers carry out the research into title, exchange of contracts and registration of title, often at great expense.¹¹ Through blockchain individuals will be able to conduct research into title and transfer deeds of their own accord, in turn reducing legal fees and increasing accessibility.

In relation to litigation, ODR is leading the way in reducing costs and facilitating access to justice. Although yet to be trialled in UK courts, ODR has already been used to great effect. Each year around 60 million disputes between eBay traders are resolved through ODR technology.¹² The process is database-driven using the experience of thousands of prior cases. This allows the system to present the most common dispute types and provide reasonable resolutions correlated to each one. The technology provides opportunities for compromise and self settlement through discussion. If the parties fail to reach a resolution, the resolution can be facilitated by a professional human third party (at a cost of \$15), deploying traditional mediation, but all online.¹³ The technology has been successfully implemented in the Netherlands where it is used for divorces, landlord and tenant disputes and employment claims.¹⁴ This effectively allows ordinary people to pursue small claims at minimal expense.

Given that AI can assess the likely outcomes of cases, in certain cases with 96% accuracy,¹⁵ it is realistic to ask if this could be extended to actually replacing judicial decision making in all claims.¹⁶

2. Administrative Discretion

However, in pursuit of accessibility there is potential for AI to infringe on other rights associated with the Rule of Law. As AI bases its decisions solely on past cases, it is currently unable to exercise the necessary nuance and judgement to address contemporary social changes. Bingham argues that while it is the law that rules, as opposed to judicial discretion, ‘such a degree of

⁹ R (on the application of UNISON) v Lord Chancellor [2017] UKSC 51.

¹⁰ Gabrielle Patrick and Aunurag Bana; ‘IBA Legal Policy & Research Unit Legal Paper Rule of Law Versus Rule of Code: A Blockchain-Driven Legal World’ (November 2017) <<https://www.ibanet.org/Document/Default>>.

¹¹ Patrick, Op. Cit.

¹² Civil Justice Council, ‘Online Dispute Resolution for Low Value Civil Claims, Online Dispute resolution advisory group’ (February 2015) <<https://www.judiciary.uk/wp-content/uploads/2015/02/Online-Dispute-Resolution-Final-Web-Version1.pdf>>.

¹³ eBay, Dispute Resolution Overview <<https://pages.ebay.com/services/buyandsell/disputeres.html>>.

¹⁴ Gavin Haynes, “How Goldie is leading the tech revolution sweeping British courts” (The Guardian, 18 March 2018) <<https://www.theguardian.com/law/shortcuts/2018/mar/18/how-goldie-is-leading-the-tech-revolution-sweeping-british-courts>>.

¹⁵ Joshua Rozenberg, “Law in Action: Artificial Intelligence and the Law” <<https://www.bbc.co.uk/radio/play/b07dlxmi>> Accessed 15 October 2018.

¹⁶ Max Walters, “Lawyers Safe from Brave New World of AI” (Law Society Gazette, 30 October 2018) <<https://www.lawgazette.co.uk/law/lawyers-safe-from-brave-new-ai-world--for-now/5068126.article>>.

inflexibility built into the system would make no allowance for the exceptional case calling for special treatment'.¹⁷

The employment case of *Aslam and Farrar and Others v Uber B.V* considered if drivers were in fact working while logged into the Uber app and how obligations to pick up 80% of potential passengers while on the app affected employment status. These points were central to the decision that the drivers were workers rather than self employed contractors. There are no precedents in UK law for employment status when signed in or out of a mobile app. Indeed, the tribunal commented 'the conflict of law points are fairly otiose'.¹⁸ The judges had to exercise judgement and discretion in order for justice to be served. In pursuit of accessibility we must not inhibit judges' ability to make nuanced decisions in exceptional cases. Without this, the development of the common law is put at risk.

Equality before the Law and Fairness

Another example of AI encroaching on the Rule of Law is the potential effect it might have on the right to a fair trial. In *Axa v Lord Advocate*, Lord Hope stated equality of treatment was 'at the very core' of the Rule of Law.¹⁹ As discussed, traditional machine learning is built on the basis of historical data. This may lead to historical prejudices that are endemic in reality being reproduced. For example, it is unlawful to deny pregnant women jobs, however there may be historical data associating pregnancy with access denial. We run the risk of teaching machines to discriminate.²⁰

Of further concern is the fact that these decisions cannot be challenged. AI software does not allow a user to 'look under the bonnet' to verify how a decision has been reached. Instead of storing what it has learned in a neat block of digital memory, it diffuses the input information in a way that is exceedingly difficult to decipher.²¹

Furthermore, developers are unwilling to disclose their algorithms for fear of losing their competitive advantage. This was highlighted by the American Supreme Court in the case of *Loomis v. Wisconsin*. A judge sentenced a defendant because risk score technology deemed him of higher than average risk of re-offending.²² *Loomis* appealed the sentence, however the formula for the risk assessment could not be examined as it was a trade secret. The Rule of Law is lost if the public are not confident decisions are being made impartially and decisions cannot be challenged. We must be able to look at the thought processes that shape the legal outcome. Transparency is essential in ensuring 'minimum standards of fairness, both substantive and procedural' are maintained.²³

Evidently AI has important limitations. However, the consensus amongst many is that AI will be revolutionary in its ability to forecast case outcomes. AI is likely to have a large impact in guiding

¹⁷ Bingham, Op. Cit. p. 51.

¹⁸ *Aslam and Farrar and Other v Uber BV* [2016] Case Number 2202550/2015.

¹⁹ *AXA General Insurance Limited and others v The Lord Advocate and others* [2011] UKSC 46.

²⁰ Dino Pedreschi, Salvatore Rggieri, Franco Turini, 'Integrating induction and deduction for finding evidence of discrimination' *Artificial intelligence and law*, volume 18, Number 1, Spring 2010, p. 38.

²¹ Joanna Goodman, "The Legal and Ethical Minefield of AI: 'Tech has the power to do harm as well as good'" (The Guardian, January 2018) <<https://www.theguardian.com/legal-horizons/2018/jan/05/the-legal-and-ethical-minefield-of-ai-tech-has-the-power-to-do-harm-as-well-as-good>>.

²² Frank Pasquale, "Secret Algorithms Threaten the Rule of Law" (Technology Review, June 2017) <<https://www.technologyreview.com/s/608011/secret-algorithms-threaten-the-rule-of-law/>>.

²³ *Lord Steyn R v Davis* [2008] UKHL 36.

decisions, for example whether to settle or pursue a case (in turn reducing costs). However, its shortcomings mean its usefulness may be limited.

3. Can the Rule of Law and AI coexist?

Law, science and technology expert Mireille Hildebrandt disputes this, arguing we cannot allow legal technologies to be limited to conducting menial tasks.²⁴ Technology capable of drawing on 100,000 past cases in a matter of minutes should not be limited to database searching and settling small claims.²⁵ Limitations of AI such as its apparent inability to comprehend human nuances and discrimination must be addressed.

Technology experts are currently tackling discrimination problems through the development of counter profiling technology. Though social, cultural and economic factors often combine to create subtle forms of discrimination, technologies exist to assess the behaviours of AI technology, identifying situations of potential discrimination. Legal protection by design is a promising response to the threat which smart technologies pose to the Rule of Law.²⁶ Furthermore, rather than feeding the machines with purely legal input, statistics such as local crime rates, accident rates on roads or industry gender pay gaps could enable them to form more contextualised conclusions.

In return, legislators must adapt legislation and legal language to account for legal technology. As it stands there are clear conflicts between certain legislation and legal technology. The GDPR regulations are an example. The whole basis of both blockchain and AI is that personal information cannot be easily deleted.²⁷ The GDPR regulations by contrast are designed to protect the personal information of individuals. Legislation should be drafted in a way that is both compatible with and accessible to technology. For example, Mens Rea could be defined as 'developing second order intentions that allow individuals to refrain from acting upon first order intentions that cause harm or damage'.²⁸ Legislation could be rewritten without losing its core essence. It is a matter of both technology experts and lawyers understanding each other and attempting to co-exist. Hildebrandt argues 'The challenge facing modern law is to reinvent the law in a computing environment without giving up on the core achievements of the Rule of Law'.²⁹

Practicality of balancing advances in AI and the Rule of Law

One of the key issues to consider as legal technology advances is the question of liability - who is responsible in the event AI decisions cause harm? Developments in the driverless car industry may lead the way. The Automated and Electric Vehicles Act 2018 already regulates certain areas of liability through insurance. The act extends the existing compulsory third party insurance framework to cover the use of self-driving vehicles. As the question of liability is addressed, the legislation encourages development while ensuring justice in the event an individual were to be

²⁴ Mireille Hildebrandt, 'Smart technologies and the End(s) of law: Novel entanglements of law and technology' *Jurimetrics*, Volume 56, Number 3, Spring 2016, p. 307.

²⁵ Richard Susskind, *Tomorrow's Lawyers and Introduction to your Future*, (Oxford, Oxford University Press, 2017) p. 189.

²⁶ Mireille Hildebrandt. 'Legal Protection by Design. Objections and Refutations', *Legisprudence*, Volume 5, Number 2 Spring 2011, p. 316.

²⁷ Eduard Fosch Villaronga, Peter Kieseberg, Tiffany Li, 'Humans forget, machines remember: Artificial intelligence and the right to be forgotten' *Computer Law and Security Review*, Volume 34, Issue 2, Spring 2018, p. 2.

²⁸ Mireille Hildebrandt, Jeanne Gaakeer, 'From Galatea 2.2 to Watson- and Back?' *Human Law and computer law: Comparative perspectives*, Volume 25, Number 1, Autumn 2013, p. 43.

²⁹ Hildebrandt 2016, Op. Cit. p. 309.

wronged. While scholars such as Jacob Turner advocate the idea that one day AI agents may have their own legal personhood and be personally liable,³⁰ at the moment, ‘some form of no-fault strict liability is the most pragmatic solution society can offer to victims of AI accidents’.³¹ The future lies in pragmatism, ensuring accountability while not stifling progress.

We must not look at legal technology reaching 96% accuracy and say, yes, this has outperformed the best lawyers but cannot be trusted. Instead, Hildebrandt speculates that AI will one day be central to the legal profession. The role of the lawyer will not be to review the output, but to engage with the performance metrics. To ask questions in disputes, such as can we see your data set? What happened in this hypothesis space? Why were these arguments filtered out?³² The question is not how will legal technology affect the Rule of Law, but how can we safely allow legal technology to achieve its potential without inhibiting certain aspects of the Rule of Law.

Conclusion

The lack of transparency and the inability to exercise the nuance of judges clearly inhibit the potential usefulness of legal technology. However, its immense potential to provide ‘speedy, informal and inexpensive’ access to law cannot be ignored. It is the challenge for both law makers and scientists to create an environment in which AI can apply legislation correctly, exercise judgement and most importantly, do so fairly ensuring equality before the law. Correctly used, AI could revolutionise access to justice in the UK, without impinging on the other core principles integral to the Rule of Law.

Word Count: 1,998

³⁰ Jacob Turner, *Robot Rules: Legal Personality for AI* (Palgrave Macmillan, London, 2018) pp. 173- 205.

³¹ Paul Rogerson, “IBA Rome: Artificial Intelligence must mean strict liability- and higher insurance premiums” (Law Society Gazette, 12 October 2018) <<https://www.lawgazette.co.uk/news/iba-rome-artificial-intelligence-must-mean-strict-liability--and-higher-insurance-premiums-/5067928.article>>.

³² Natasha Lomas, What do Ai and Blockchain mean for the Rule of Law (Tech Crunch, 12 May 2018) <<https://techcrunch.com/2018/05/12/what-do-ai-and-blockchain-mean-for-the-rule-of-law/?guccounter=1>>.

