

# Artificial Intelligence, Human Flourishing and the Rule of Law

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2022-03-30T13:55:46

We are living in the era of hyperconnectivity and the unprecedented digitalization of society, with our every move on the Internet being recorded somewhere. A by-product of this trend is large quantities of data, referred to as 'big data'. Artificial intelligence (AI), originally a discipline committed to the creation of systems with the capability of simulating human intelligence in order to execute tasks, is now being used to exploit big data. This trend is being fuelled by the promises AI will bring to society – a more effective and efficient society, a reduction in the cost of and access to services, environmental protection and an improved health care sector. However, there are a number of risks associated with AI – incorrect decisions, bias, discrimination, manipulation and the lack of transparency, explainability and predictability, to name but a few

One harm stemming from AI is the stifling of human flourishing or agency, which is 'the free will by which people choose their actions'.<sup>1)</sup> Mayer-Schönberger, Viktor and Cukier, Kenneth, *Big Data: A Revolution That Will Transform How We Live, Work and Think*, Mifflin Harcourt Publishing Company, 2013, p. 175. This may occur directly, as we engage with digital environments or indirectly, where decision-making systems are used to determine outcomes in various contexts, algorithmic justice one such example. The law is a mechanism to identify and mitigate risks to society and the rule of law is a legal concept that, while having multiple functions, ultimately maps out what constitutes a good society. One function of the rule of law is the promotion of human flourishing, often represented by the term 'autonomy'. However, the ability to rely on the rule of law as a tool for counteracting AI's constricting effect on human flourishing is being negated as the composition and design AI systems flout the ideals that the rule of law demand as necessary for a certain type of society.

## What is Artificial Intelligence?

Artificial intelligence incorporates many technologies. While there is currently no legal definition, [formal definitions](#) are provided. Besides being a scientific field of research:

*Artificial intelligence (AI) refers to systems designed by humans that, given a complex goal, act in the physical or digital world by perceiving their environment, interpreting the collected structured or unstructured data, reasoning on the knowledge derived from this data and deciding the best action(s) to take (according to pre-defined parameters) to achieve the given goal. AI systems can also be designed to learn to adapt their behaviour by analysing how the environment is affected by their previous actions.*

Artificial intelligence [entails](#) the extraction of knowledge from data using mathematical algorithms and other statistical mechanisms, the complexity of which far exceeds the cognitive abilities of humans. For example, the mathematical activity taking place deep inside deep neural networks are beyond the comprehension of humans, this technology remaining somewhat of a mystery or ‘black box’.

The knowledge gained from AI is incorporated into decision-making systems, potentially replacing human decision-makers. The profiles of our behaviour extracted from big data represent our actions, personalities and our deepest inner most thoughts. This knowledge is a powerful tool in the hands of those with access to AI – it allows them to manipulate how we think and act. This is not difficult to achieve, considering that knowledge gained from psychology and the behavioural sciences shows that nearly half of our daily actions are based on habit – human are essentially easy to predict (see [Neal et al.](#) and [Chi](#)). Also, advances in psychology map our cognitive processes, facilitating the exploitation of these by AI-systems.<sup>2)</sup>For work on dual-process models, see Chaiken, Shelly and Trope, Yaacov (eds.), *Preface in Dual-Process Theories in Social Psychology*, The Guilford Press, 1999, at p. ix. See also Thaler, Richard and Sunstein, Cass R., *Nudge: Improving Decisions about Health, Wealth and Happiness*, Penguin Books, 2008. For a deeper discussion of these concepts, see Greenstein, Stanley, *Our Humanity Exposed: Predictive Modelling in a Legal Context*, Dissertation, Stockholm University, available at <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1088890&dswid=2696>.

Regulatory frameworks warn of these dangers. For example, the European Commission warns of the negative impact of artificial intelligence, ‘[on the human mind itself](#)’. Also, the proposed Artificial Intelligence Act has the goal of banning ‘AI systems or applications that manipulate human behaviour to circumvent users’ free will’.<sup>3)</sup>European Commission Press Release, *Europe fit for the Digital Age: Commission proposes new rules and actions for excellence and trust in Artificial Intelligence*, 21 April, 202, p. 1. These manipulative technologies have the potential to restrict human flourishing, which many see as a vital element of what it means to be a human. While regulatory frameworks warn of AI, they also contribute to its lack of transparency, the GDPR as an example, where Recital 63 includes a right to access the logic of AI while heavily restricting this right to the extent that it infringes upon IPR and trade secrets – the law too perpetuates the black box of AI.

The characterization of AI as a ‘black box’ lacking accessibility, predictability, rationality, transparency and understanding is brought to the fore as it is starting to be used in judicial contexts, the system of COMPAS being one such instance. It is here that the attributes of AI collide head-on with those attributes promoted by the rule of law.<sup>4)</sup>State v. Loomis, 881, N.W.2d 749, 7532 (Wis 2016).

## The Rule of Law

The rule of law is an elusive concept and its fluidity lends itself to multiple interpretations, yet it remains a symbol for the characteristics embodying a society we should strive after. It is a universally recognized concept entrenched in many

legal systems, arguably because ‘the “rule of law” is good for everyone’, an attitude that seemingly enjoys international support.<sup>5)</sup>Tamanaha, Brian Z., *On the Rule of Law*, Cambridge University Press, Cambridge, 2004, p. 1.

Discussions on the function and composition of the rule of law often culminate in the distinction made between the rule of law’s formal requirements, i.e. what conditions are required for a system to be considered compliant with the rule of law, and the substantive objectives it promotes. Some view it as a concept comprised purely of formal structures of governance, while others recognize it as embodying moral considerations.<sup>6)</sup>Simmonds, Nigel E., *Central Issues in Jurisprudence- Justice, Law and Rights*, Sweet and Maxwell, 2008, p. 115. The [rule of law](#) is said to embody a notion of reciprocity between those that govern and those that are governed, where those in positions of authority must exercise this authority according to established public norms and not arbitrarily and where citizens are expected to comply with legal norms, the law should be the same for everyone, no one is above the law and finally, everyone should be protected by the law. Already here these notions of the rule of law contradict the characteristics of AI, comprised of complex mathematical rules determining the outcomes of decisions. The rule of law is also described as a solution to the problem of how to make the law rule, addressing how power is exercised, more specifically its abuse by exercising it in an arbitrary manner.<sup>7)</sup>Krygier M, *What’s the point of the rule of law?*, *Buffalo Law Rev* 67(3):743–791, 2019, p. 758-760. Once again, how do we know how power is being exercised, when the technology is hidden from any type of appraisal. There is also the [idea that the source of authority to](#) rule originates from a moral right to rule, where this moral dimension dictates that rules be publicly declared in a perspective manner and are general, equal and certain. In AI, these demands put forward via the rule of law are hardly achievable. The rule of law, therefore, is a political ideal, although its content and composition remains a point of discussion and to a certain degree controversial.<sup>8)</sup>Matsou, Let the Rule of Law be Flexible to Attain Good Governance, in: Berling P, Ederlöf J, Taylor V (eds), *Rule of Law Promotion: Global Perspectives, Local Applications*, *Skifter från juridiska institutionen vid Umeå universitet Nr 21*, Iustus Förlag, Uppsala, pp 41–562009, p. 41.

Lon Fuller in his work entitled *The Morality of Law* perceives the rule of law as a combination of the formal institutions of society together with what he terms ‘the inner morality of law’, describing it by means of eight formalistic principles: 1) there must be rules, 2) they must be prospective, not retrospective, 3) they must be published, 4) they must be intelligible, 5) they must not be contradictory, 6) compliance with the rules must be possible, 7) the rules must not be constantly changing and 8) there must be congruence between the rules as declared and as applied by officials.<sup>9)</sup>Fuller L, *The Morality of Law*, Revised Edition, Yale University Press, New Haven and London. Of interest is Simmonds’s interpretation of Fuller’s outwardly formalistic depiction of the rule of law, where he argues that the ‘inner morality’ aspect of Fuller’s eight principles promotes ‘the morality of duty’ and ‘the morality of aspiration’.<sup>10)</sup>Simmonds, Nigel E., *Central Issues in Jurisprudence- Justice, Law and Rights*, Sweet and Maxwell, 2008, at p. 118. The former involves

a duty to abide by laws that are obligatory and either one does this or not, whereas the latter concept is not an 'either/or' notion but rather a question of degree, where one strives towards this ideal to the best of one's ability.<sup>11)</sup> Ibid. The attainment of the morality of aspiration requires that there be rules and orderliness, guaranteed by the morality of duty, which allows humans to flourish, this being a goal of rule of law. It is here that the rule of law can be argued to fulfil its function as an instrument promoting human flourishing and 'value the projective capacities of men and women', an ideal that is achievable only where there are clear and notified rules.<sup>12)</sup> Ibid, p. 120. Here too, the mathematical rules of the AI solutions that judge us are ubiquitous yet hidden from public scrutiny, thereby frustrating this ultimate function of the rule of law of promoting human flourishing. Simmonds states:

*These values are internal to the law in the sense that they form a part of the concept of law itself. We understand what the law is only by reference to its purpose; and its purpose is an ideal state of affairs (the rule of law) represented by the eight principles. [...] [The law] carries a commitment to the idea of man as a rational purposive agent, capable of regulating his conduct by rules rather than as a pliable instrument to be manipulated; and it carries a commitment to the values of the rule of law as expressed in the eight principles.*<sup>13)</sup> Ibid, p. 122.

This interpretation promotes the rule of law as a mechanism creating stability, allowing individuals to achieve their potential and flourish as human beings.

The law is traditionally viewed as a mechanism for achieving human flourishing.<sup>14)</sup> Nussbaum, Martha C., *Creating Capabilities*, The Bellknop Press, 2013, pp.ix-xi and 186. Nussbaum argues that traditionally, economic factors such as profit have been used to measure human development. For example, the quality of life is said to be improving when a country's Gross Domestic Profit (GDP) is increasing. It is argued that it should take into account the, 'ordinary, everyday ways in which situated, embodied subjects experience their culture and their own evolving subjectivity, and when they consider the ways in which networked information technologies reshape everyday experience'.<sup>15)</sup> Cohen, Julie E., *Configuring the Networked Self: Law, Code, and the Play of Everyday Practice*, Yale University Press, 2012, at p. 6. It is argued that the factors that best achieve a position of human flourishing in the networked society are access to knowledge, operational transparency and room for play of everyday practice.<sup>16)</sup> Ibid.

The law's importance, therefore, is as a mechanism creating the environment within which the individual enjoys the freedom to make decisions ('right of subjective freedom') and pursue his or her notion of a good life in a sphere of liberty, free from interference. In this context, it is argued that notions such as 'rights', 'justice' and 'equality' gain importance.<sup>17)</sup> Supra, note 16, p. 7.

## The Problem at Hand

The rule of law is argued to comprise a number of formal characteristics, e.g. transparency, publicity, fairness and predictability. These attributes are not an end in themselves, rather, their existence promotes higher level goals, e.g. the flourishing of human beings. In other words, making sure that laws are transparent, predictable, public, and fair, to mention a few attributes of the rule of law, benefits society materially, human flourishing and agency as an example of this. Aside from the risks associated with AI's manipulative potential, its composition and legal status threatens individuals to the extent that it erodes legal mechanisms that promote the human being, the human flourishing aspect of the rule of law a prime example. This in turn puts into question the rule of law's ability to attain its goal of promoting human flourishing as technical advances are made.

## Conclusion

This piece highlights the incompatibility of modern emerging technologies such as AI with traditionally established legal concepts. This incompatibility stems from the nature of this technology – mathematical complexity, the inability to cognitively explain the inner workings of the technology and the legal protection that it is given. These attributes make this technology, being used to replace humans in decision-making contexts, beyond the reach of those that it affects, thereby making it incontestable. The characteristics of AI, therefore, fly in the face of legal mechanisms that once upon a time were created to regulate circumstances in an analogue environment, e.g. where the rule of law promoted transparency, contestability and predictability, the ultimate goal being human flourishing. Perceiving this threat through the legal lens of the rule of law warrants the question of how to negate this vulnerability? In other words, if the higher-level goals or values promoted by the rule of law are in fact desirable, how then are we going to secure them as the rule of law is being relinquished of its role as a promoter of human flourishing? In addition, while other legal regulatory frameworks are beginning to address the risks with AI, if the rule of law, utilized for many years as a template for constituting a better society, has a part to play in identifying and promoting the conditions necessary in order to cultivate and perpetuate human flourishing, how will it do so in the face of the challenges posed by modern technologies such as AI? The questions are not simple and will require a substantial consideration if the values that the rule of law promotes are to be perpetuated as emerging technologies play an ever-increasing role in our daily lives.

*This article is based on the idea presented in Greenstein, Stanley, Preserving the Rule of Law in the Era of Artificial Intelligence (AI), *Artificial Intelligence and Law*, Springer Nature, 2021, available at <https://doi.org/10.1007/s10506-021-09294-4>.*

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