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# Nevermore Algorithmic Justice: The Future and The End of Law

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## Abstract

This article deals with the possible impact of automated decision-making on law. It argues that such could constitute a death of the law. To demonstrate this point, the article describes the underlying technological process of machine learning. It describes its negative impact on possible future reinterpretation and development of law that reflects societal development. As such, the tools of automation represent an ideal tool for the conservation of the existing status quo. Further, this article deals with the idea that for law to be just it needs to be not only personalized but always made anew in each judgement. This is also made impossible due to the described nature of the automation which makes the law not only forever cemented in its ways, denying any contestation, but rids it of any justice, which is the legitimizing element of the laws' violence.

**Keywords:** algorithmic justice, Derrida, critical technology studies, open texture, force of law

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## 1. INTRODUCTION

The absolutisation of every single aspect of our daily life in a form of ever-increasing technocratisation is far from being a new phenomenon.[2] This possibility of inscribing every process into the strict machinic logic is infinitely seductive. The combination of our fascination with such possibility, as well as the tenets of the neoliberal paradigms of efficiency[3], seem particularly dangerous when uncritically utilised by the state (under its monopoly on violence), for example in the area of law where 'after all every juridicial contract ... is founded on violence'.[4] What we have seen so far in this domain such as the unashamedly racist COMPAS software used by courts in U.S. for sentencing[5] or the Dutch example of automatised scanning of and deciding on social benefits application, that by its wrongful fraud accusation, as per the journalists, "has ruined lives".[6] The dangers are many, as are the discussions of the impact of the use of automation (and AI-based technologies) that we need to have. The following article seeks to be one such contribution to an analysis of the impact of the use of machine learning and the technologies of artificial intelligence in the area of justice and the authoritative application of the law.

In particular, this article seeks to shed some light on what might be the (long-term) impact on the justice system, more specifically this article focuses on the particular issue of the evolution of law, or law as a dynamic phenomena and whether and how it could be affected by its "functional freeze" within the algorithms of automated decision-making. For this purposes, we will work with an absolute, for the time being non-existing yet highly plausible, scenario of 'full automation' where



2 Jean Baudrillard, *The systems of objects* (Verso 2020) 117.

3 Darryl Cressman, 'Introduction: The Necessity (and Spirit) of Critique in Andrew Feenberg's Philosophy of Technology' in Darryl Cressman (ed.) *The Necessity of Critique. Andrew Feenberg and the Philosophy of Technology* (Springer 2020) 1 – 14; Jacques Ellul, *The Technological Society* (Random House 1973) 25

4 Jacques Derrida, *Force of law* (Translated by Mary Quaintance, Routledge 1992) 47.

5 Julia Angwin et al, 'Machine Bias' (*ProPublica,* 23 May 2016) <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> Accessed 2.1.2024.

6 Melissa Heikikklä, 'Dutch scandal serves as a warning for Europe over risks of using algorithms' (*Politico,* 29 March 2022) <https://www.politico.eu/article/dutch-scandal-serves-as-a-warning-for-europe-over-risks-of-using-algorithms/> Accessed 2.1.2024.

there is no human intermediary[7] between the authority of the judgement and the machinic judgement as such. The main concern of this paper are the implications of the underlying technical aspects for the development of the law, having in mind specifically its open-texture and the essential inconsistencies between the former and the functioning of machine learning. Based on these observations, the paper will approach the issue of the necessity of individual rediscovery of justice in every case, as the necessary legitimisation of state violence.

The concluding part will provide the reader with an overview of one of the possible criticisms of algorithmic justice namely that of the enclosure of the status quo, of not only the existing law, but of the subsequent existing order and power balance as well. We further argue that such an enclosure, as it technologically stands, is incompatible with a legitimate state's power over what is to be considered just and unjust. This conclusion is not be taken as an absolute criticism of the use of AI-based technology in adjudication, but it is to be taken as a guiding principle in the design of such systems that benefit the population as a whole, not merely those in power.[8]



## 2. THE QUESTIONS OF HOW

As it stands we do not have any working examples of such 'robojudge' decision-making systems[9] that we are trying to describe, which on one

[7] It is worth noting that most current decision-making does make use of such human intermediary but their roles are nevertheless more symbolic, and are therefore often called 'mere rubberstampers'. Regarding the issue of 'rubber stamping' and the nominal human-in-the-loop element, see Michael Vealle and Lilian Edwards, 'Clarity, surprises, and further questions in the Article 29 Working Party draft guidance on automated decision-making and profiling' (2018) 34(2) Computer Law & Security Review 398.

[8] See generally Justin Joque, *Revolutionary Mathematics: Artificial Intelligence, Statistics and the Logic of Capitalism* (Verso 2022); Julie E. Cohen, *Between Truth and Power: The Legal Construction of Informational Capitalism* (OUP 2019).

[9] The sensational articles talking about already existing robojudges are in fact not what we would consider a true robojudge, such systems are mostly working in an assistive capacity to human judge, or are dealing with simple repetitive tasks of a more administrative

hand is good news because it gives us the time to discuss the potential issues that should be reflected in its design phase, on the other hand it also means we can only make educated guesses as to what would such systems look like and what would its technical specifications be based on the current state of the art.[10] When thinking about automation of legal decision-making we have essentially two approaches to consider. One where the programmer "crafts by hand" the whole decision-making algorithm, which is due to the complexity of matter almost unimaginable and given other methods at our disposal, could be considered old-fashioned, if not inefficient and unrealistic. And the other takes advantage of all the recent developments in the field of artificial intelligence and utilises some form of machine learning.[11]

And even though the approach of machine learning is itself an umbrella term for several other approaches and we may reasonably expect newer ones to appear and be utilised in the future, they all do and will share one common element that is crucial for the ensuing discussion of the impacts on the development of law and that is the need for *past* data - utilized in the process of the machines' "learning" - this article further considers automation based on machine learning. The process is described by Mitchell as one such process where:

> "A computer program is said to learn from experience E with respect to some class of tasks T and performance measure P, if its performance at tasks in T, as measured by P, improves with experience E."[12]



nature. See, for example, Victor Tangermann, 'Estonia is designing a "robot judge" to help clear backlog of cases' (*Futurism,* 25 March 2019) <https://futurism.com/the-byte/estonia-robot-judge> Accessed 2.1.2024.

10 And even if we would want to consider some similar systems with more limited capacity, such as the aforementioned COMPASS, the systems and their inner workings are protected by IP rights and trade secrets, thus making their transparency less than ideal. This has been one of the cornerstones of some judicial cases, such as in the case of *State v. Loomis*, where the defendant tried to argue precisely such inability to familiarize himself with the system that makes a decision about him, due to its trade-secret nature. See 'State v. Loomis' (2017) 130(5) Harvard Law Review 1530.

11 David Restrepo-Amariles, 'Algorithmic Decision Systems: Automation and Machine Learning in the Public Administration' in Woodrow Barfield (ed.) *The Cambridge Handbook of the Law of Algorithms* (CUP 2020) 273.

12 Tom M Mitchell, *Machine learning* (McGraw Hill 1997) 2.

The experience E can, and usually does, come from collected past data, or as Mitchell gives us an example of a system that is trying to learn to recognize handwriting using computer vision. In this scenario task T is recognizing handwritten words, measure P is the percentage of correctly recognized words and experience E is a database of handwritten words with already assigned labels. Similarly, in the case of self-driving cars, the experience E is recordings of human drivers.[13] Not unlike a human child for most of the tasks, the system learns the required behaviour by observing the previous performance of the said task. Therefore, we can assume that creating legal artificial intelligence, or more precisely automated legal decision-making system would require host of previous decisions that would act as the training data (or experience E). Future decisions of this system would then be based on the patterns discovered and reproduced by the system in the training data.

Such an approach brings with it a host of (legal) issues, and not only in the case of robojudges, as we will discuss later. As described above, the learned behaviour comes from previous historical examples of such, thus the system ought not to be doing something a human has already not done, or has not implied as possible by previous behaviour. This has however been already proven not the case. Not to mention cases where machines would recognize previously unseen or unthought pattern and choose it as the modus operandi for a given task[14], we have already experienced issues, when a machine learning algorithm would cause havoc by merely replicating, and amplifying previous human behaviour.[15]

Such an approach of utilising past data to 'cement' the existing ways – essentially replicating Baudrillard's observation on the dream of functional self-sufficiency that exhibits itself in a closing-off, that is

[13] ibid 3-4.

[14] Elisabeth Gibney, 'Self-taught AI is best yet at strategy game Go' [2017] Nature https://doi.org/10.1038/nature.2017.22858.

[15] Jeffrey Dastin, 'Insight - Amazon scraps secret AI recruiting tool that showed bias against women' (*Reuters*, 11 October 2018) <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G> Accessed 2.1.2024.

expressed and reached in automation of phenomena[16] – presents us with the central and rather akin question of the possibilities for the development of the law, in the environment that creates itself only from what already once was and at best, feeds itself its own outcomes.[17] Since we have a brief overview of the underlying logic of the technological process, we also need to have a brief overview of the 'underlying legal process' that is being imitated by the automation, and its elements that are perhaps problematic, such as the development of law afforded to it by its open-textured nature.

## 3. FUZZY WORDS

Regardless of your view on the nature of law and its origin, the general sentiment is that law is not static, nor it should be if it wants to serve its societal function since society itself is not static. Several theoretical notions describe this "living" nature of law, be it either the notion of its open texture[18], the notion of law, or more precisely legal instruments as living instruments.[19] Both of these allow the law, or the language that makes up for the law, to be interpreted in its own time, to carry the meaning that is attributed to it by society in its current state. Such observation of function seems to represent an innate property of the language as such. Or as it has been observed by Eco, for the use of language in the specialized realms - even though his example is that of an aesthetic communication[20] in which the vagueness of it allows



16 Buadrillard (n 2) at 1, 118-19

17 Which, technically brings with it the issue of algorithmic staleness by utilising its own data for training, leading to the ultimate consequence of model collapse. See Matyas Bohace and Hany Farid, 'Nepotistically Trained Generative-AI Models Collapse' (*arXiv,* 20 November 2023) <https://arxiv.org/abs/2311.12202> Accessed 2.1.2024.

18 Timothy A O Endicott, *Vagueness in Law* (OUP 2000) 37.

19 William H Rehnquist 'The Notion of a Living Constitution' (2006) 29(2) Harvard Journal of Law & Public Policy 401, 415.

20 Umberto Eco 'Towards a semiological guerilla warfare' in Umberto Eco, *Travels in Hyperreality* (Picador 1987) 135.

the observer to always reinterpret the art based on temporal and societal settings. In the realm of law, this brings to mind the example of the European Convention on Human Rights, which is probably most famously connected to the notion of the living instrument,[21] and its interpretation by the European Court of Human Rights[22], which allows it to 'not stereotyped as at the date of the treaty but must be understood in the light of the progress of events and changes in habits of life'[23] and thus the court was for example able to reinterpret the meaning of 'marriage' in the case of same-sex couples[24] without the actual need to change the word in itself, which the Court cannot do.

The other important concept, that of open texture (of law) was most notably introduced by HLA Hart (see his example of the 'No vehicles in the park' act).[25] This hypothetical act demonstrated the need for utilising the linguistic concept of open texture[26] [of language] in the legal field, to achieve a balance between having provisions that are neither too broad for being understandable, thus depriving the citizen of legal certainty, nor too specific and casuistic, therefore useless from the lawmakers' perspective. This example then shows us how a certain level of linguistic uncertainty, or open texture, is necessary for law to overcome the "ignorance of the lawmaker"[27]lawmakers did not have



21 George Letsas 'The ECHR as a living instrument: its meaning and legitimacy' in Andreas Follesdal, Birgit Peters, Geir Ulfstein (eds.), *Constituting Europe: The European Court of Human Rights in a National, European and Global Context* (Cambridge University Press 2013) 106.

22 European Convention on Human Rights: A Living Instrument (European Court of Human Rights 2020) <https://edoc.coe.int/en/european-convention-on-human-rights/8528-theeuropean- convention-on-human-rights-a-living-instrument.html> Accessed 2.1.2024.

23 *Christine Goodwin v The United Kingdom* App no 28957/95 (ECHR 11 July 2002), *Stafford v The United Kingdom* App no 46295/99 (ECHR 28 May 2002).

24 Masuma Shahid 'Equal marriage rights and the European Courts' (2023) 23 ERA Forum 397.

25 Herbert L A Hart, *The Concept of Law* (Clarendon Press 1994) 124.

26 The term was originally developed by Waismann as a property of the general language. Friedrich Waismann 'Verifiability' (1947) 10 Journal of Symbolic Logic 3. It has later found its way into the specialized area of law Brian Bix 'H. L. A. Hart and the ''Open Texture'' of Language' (1991) 10(1) Law and Philosophy 51.

27 Bix, Law, Language and Legal Indeterminacy, 22-25.

in mindInevitably then, there is a conflict between legal certainty and the adaptability of the law.[28]

Due to the ability of language to be subject to interpretation, these two concepts help law advance and reflect gradual changes in society. The change, as much as guided by societal development, is ultimately done via a change in judicial interpretation and application. The question to tackle is whether in the envisioned system of algorithmic judicial decision-making there is such a possibility that would allow the law to reflect any change or whether the law would pose itself be a useful tool for solidifying the existing power structures, and what the implications are for individual justice and the states' role in legitimizing it.

## 4. ONLY WHAT ONCE WAS

As previously mentioned, the system we are discussing is for most parts theoretical as of now, as we do not have any specific example to work off. There are only certain partial implementations, such as the bail settings systems[29], the prediction syoftware used by lawyers[30] to judge the viability of court outcomes, or various semi-automated tools used in negotiation or mediation[31].

A relevant analysis of the possible implementation of AI in the field of mediation has been provided by Kevin Ongenae who, without directly referencing it, noted the impact of automated decision-making (done by AI Arbitrators) claiming that if law is a living thing, AI Arbitrators



[28] This, of course, has been much debated, with many other notable legal philosophers such as Lon Fuller contributing to the discussion, however, for the purposes of this paper the very basic description of this concept is sufficient.

[29] Shara Tonn, 'Can AI help judges make the bail system fairer and safer?' (*Standford Engineering,* 19 March 2019) <https://engineering.stanford.edu/magazine/article/can-ai-help-judges-make-bail-system-fairer-and-safer> Accessed 3.1.2023.

[30] See services such as LexMachina from LexisNexis at https://lexmachina.com/ or the Pre/Dicta software at https://www.pre-dicta.com/.

[31] Hannes Westermann, Jaromir Savelka and Karim Benyekhlef, 'LLMediator: GPT-4 Assisted Online Dispute Resolution' (*arXiv,* 27 July 2023) < https://arxiv.org/abs/2307.16732> Accessed 2.1.2024.

might just kill it.[32] He bases this claim on the analysis of changes in policy and decision-making practice of courts, thus making it relevant for this paper, claiming that a system that has learned to make decisions based on patterns in previous decisions will not be able to adapt to any new issues, policy changes and precedent overturns, which can happen abruptly, as demonstrated on the case law of CJEU.[33] Such policy and precedent changes, if made, for example, by a different non-algorithmic body, would be irrelevant since they would not be picked up by the automated system.[34] Dervanović makes a similar analysis in the case of (hypothetical) AI lawyers, where she specifically addresses the notion of a living instrument, or as she refers to it, the dynamic interpretation of the ECtHR, noting that the principle of carrying out decisions solely on patterns from previous data makes impossible such interpretation that changes accordingly with the societal development.[35] In the face of the challenges posed by algorithmic decision-making and given the open texture of the law, Gowder proposes a solution in the form of 'DeepVehicle',[36] where the act would be defined not by natural language but by the algorithmic parameters itself.[37] Even ignoring the disaster this would constitute for legal certainty and the understandability of law by the general population, the issue of the open texture of the law persists, since the algorithm, regardless of the way it is defined, can still operate only within the boundaries of previous cases, thus it will not be able to recognize new cases or, quite notably, outliers. This issue would then be further worsened by the feedback loop when this



[32] Kevin Ongenae, 'AI Arbitrators... Does not compute' in Jan de Bruyne and Cedric Vanleenhove (eds.) *Artificial intelligence and the Law* (Intersentia 2021) 120.

[33] ibid.

[34] Since the system is designed to work with data available up to the time of its conception, usually even earlier since the data needs some work done, like clearing, scaling and labeling.

[35] Dena Dervanović, 'I, Inhuman Lawyer: Developing Artificial Intelligence in the legal profession' in Marcelo Corrales (eds.), *Robotics, AI and the Future of Law* (Springer Nature 2018) 209, 234.

[36] Referencing both the no vehicle act of Hart as well as Deep Learning as a method of machine learning.

[37] Paul Gowder, 'Is legal cognition computational? (When will DeepVehicle replace Judge Hercules?)' in Ryan Whalen (ed.), *Computational Legal Studies* (Elgar 2020) 215.

automated decision would be used as a new input, thus only amplifying the inherent data biases, such was the case with the aforementioned Amazom HR algorithm. Or as Crawford puts it

> To understand what is at stake, we must focus less on ethics and more on power. AI is invariably designed to amplify and reproduce the forms of power it has been deployed to optimize.[38]

Lastly, this issue is not only the result of the said feedback loop, but also of the fact that machine learning systems, in their search for patterns, do not carry out decisions based on causation but instead look and choose a mere correlation.[39] Such a process leads us to question the possibility of delivering justice, as opposed to just rather effectively churning out decisions. I will further explore the implications of this observation in the following section.

It is easy to see how the automation of the laws' authority serves as an ideal tool for the conservation of the existing power structures and their order. Furthermore, what makes this quite alarming is the exact perfection of the process, which should according to Baudrillard exist in automation, however, in this case, it is not the perfection of law or legal decision-making, but the perfection of the hegemonical structure, since it allows the system to develop and adapt without it ever truly changing; indeed, it only cements its own position.[40]



[38] Kate Crawford, *The Atlas of AI: Power, Politics and Planetary costs of Artificial Intelligence* (Yale University Press 2021) 224.

[39] Dervanović (n 34) at 6, 110.

[40] Which interestingly out of all places, has been brought to our attention by the OpenAI - company responsible for ChatGPT in their accompanying technical paper see '..... AI systems will have even greater potential to reinforce entire ideologies, worldviews, truths and untruths, and to cement them or lock them in, foreclosing future contestation, reflection, and improvement.' Josh Achiam et al, 'GPT-4 Technical Report' (*arXiv,* 15 March 2023) <hhttps://arxiv.org/abs/2303.08774> Accessed 2.1.2024

## 5. SUBJECTIVE JUSTICE AND OBJECTIVE LAW

The two main contentions that have been raised so far regarding the technical limitations of algorithmic justice, namely its a) sole reliance on the historic data and b) inference of patterns and correlations as the main decisive points as opposed to causal and individual inference, leads us to the last consideration of this article –and that is that such does not mean the *end of law* as such, but rather its persistence and the end of justice, by its inability to be individualised. This argument will be developed further. Thus, as I will argue, the only thing that will-remain will be violence (and law). This could come as an effect of the Derridean enclosure of the horizon of justice but could be the unforeseen effect of losing our sense of the just in the face of the efficient, in the search for technological means, indeed the effect of the collapsing of the legal and the just.[41]

In this regard, I would like to invoke Jacques Derrida and his *Force de loi*. In this work, Derrida claims that we all share a common axiom: for an individual to act justly or unjustly the individual needs to be autonomous and to have free will, because only then can the individual decide based upon some kind of law or rule, we thus say that the individual is able to act *(un)justly*. He says that such acts of just behaviour must be of a programmable or calculable nature. Derrida claims that this is what we have come to see as a just behaviour, this calculable decision based on a set of rules. Further, and what is important for us, he claims that this is not right in a sense of justice but more in a sense of what is legitimate or expected, in accordance with the law. So we know that such decision, based on calculation, on a set of rules is legitimate and in accordance with the law, but is it right (in the sense of justice)? Derrida in this work claims that this 'mere' rule following is only the base for carrying out justice. Justice comes into this process at the level of the individual interpretation carried out by the judge, who ought to act as if *no law has existed before.* Or, as Derrida puts it quoting Stanley Fish, justice can be found only in a 'fresh judgement'

[41] John P McCormick, 'Derrida on Law; Or, Poststructuralism Gets Serious' (2001) 29(3) Political Theory 395, 398.

that as much as it is based upon the existing legal acts it is also new in the sense of being the result of a rediscovery or a reinterpretation of the act. This reinterpretation is the needed individualisation of the general act necessary for the accomplishment of individual justice.

A simple application of existing acts and previous interpretation is, as Derrida calls it, a transformation of the judge into a computational machine. Derrida makes one more point that could be useful for our analysis – that of the place of individualisation and a rediscovery as a prerequisite of justice. Earlier in this work, he shows us that a direct *addressing* is the necessary precondition of justice, thus law must not be applied only as a general set of rules, it needs to be directly addressed to its subject(s). This addressing of law towards its subject must not be done by mistake, must be direct and immediate, and most importantly, unique. There is then the conflict between the norm, which is always general, and justice which is always individual(ised). Law applied in a non-individual(ised) manner is still a legitimate law, but it ceases to be just, it is then not in the Kantian sense an act that is done with respect towards the law, but an act that merely follows it. Furthermore, Derrida states, on the importance of undecidability that we may never be sure if a previous decision even took place, as in we may never know the particular circumstances thusly we may never judge whether it was a decision in *particular* and relevant case, or rather we may never be able to discern which cause or calculation played a role. Since as per Derrida, the act of application of the law is act of interpretation that is contingent, subjective and based on conditions that cannot be fully accounted for. Essentially, we are never (truly) able to figure out the precise elements of a decision[42], thus any pattern discerned by a learning algorithm in a large amount of data is an approximation at best, or a random but statistically fit outcome at worst.[43]

This philosophical argument seriously calls into question the use(fulness) of past data as a learning dataset, since not only

[42] Not to mention that the past decision does not have to contain the rule. See Legrand, P. The same and the different. In Comparative Legal Studies: Traditions and Transitions, (Lagrand and Munday, eds.) 240-311.

[43] Jon Venn, *The Logic of Chance* (Dover 2011) 176.

the employed statistical methodology cannot discern the relevant calculation, but it is not even looking for such causal effect. Further, the methods are based upon the regression to the mean, which effectively makes them biased against the already decided cases that were, for one or another reason, an outlier.

In his first aporia, Derrida warns us against a calculable adherence to the laws in place. This again seems to be a point of contention we can, and perhaps should, bring up when discussing algorithmic justice. Namely that one may not even properly follow the law, because of its inherent fuzziness and that the rules themselves follow a pattern discovered in the previous instances of the individualization of the law, which in itself is impossible (to be just) as described in the second aporia, but to further the point, the first aporia mostly speaks to the necessary individualisation as a condition sine qua non of justice. If the judge is to decide justly, she must not only take into account the rules but must rediscover them, the judgment must be new in each instance of the application of the rule, it must be made anew. The law must be not told but *addressed*.

No such rediscovery is possible in a system that is closed in itself, in its own feedback loop, for there simply is nothing new to discover, every judgment that will be carried out has already been carried out. Thus, the law is closed in itself, it falls in and on itself, which makes the law perfectly preserved, therefore the law survives but what is missing is justice, without the much needed individualization, or the possibility of judging as though there never already was a law. [44] This closing in on itself is essentially a different perspective on the same issue and outcome as what was argued by the above-mentioned authors, such as Crawford or Gowder, who, attempting a more technical analysis, noted the 'death of the living instrument' whose implications mirror our observation. Or as applied to the gradual developments of the law via its open texture – there will be law but there will be law no *more*.

[44] Derrida (n 4) at 2, 33.

## 6. IS THIS THE END

The title of this chapter does not mention whose end it ought to be. Is it the end of law (or justice) or is it the end of the possibility of algorithmic justice? In a very disappointing centrist fashion, I must answer that it is neither.

In the previous few paragraphs, I have argued for the two deaths of law in connection with its possible future algorithmisation (or any sorts of automation, for that matter). Perhaps unjustly simplifying the matter, we could conclude that both of them are a direct result of the employed technical means, more precisely of the need for past training data. This, as much as it is true at its core, does not properly describe the cause of the anticipated 'end(s) of law'. The first argument was the issue of law's development or its (reinterpretative) adaptation. The legal texts, or records of laws and rules in general, must rely on (natural) language with all of its pros and cons. One issue, that is most relevant to the problem of utilisation of past data in automated decision-making, is the concept of the open texture of law and natural language. Closely connected with that is a second problem, that of the law as a living instrument – as demonstrated by the European Convention on Human Rights. This concept describes law, and its instruments, as being dynamic which allows the various actors (especially the courts) to further and change their meaning alongside social changes, without the need to renegotiate the rules at the international level. Law is therefore not stuck in the past and in the iron cage of the singular set meaning of its language.

It is this precise development of meaning, reflecting the changes in the overall societal mood, that remains impossible to ascertain from the previous data (no less by a machine). That would be, presumably, the case with any sorts of automation, regardless of the usage of past data. The other option, that envisages the utilising of some sort of 'hard coding'[45] or direct design of the decision-making algorithm would

[45] As opposed to machine learning, this approach amounts to essentially drafting a "recipe", a series of steps to follow in each case by a human based on their understanding of the process.

probably be an even greater disaster since it does not allow for the required variability.

The first described 'end' is an end of law, the other one could be more fittingly described as the 'end' of justice - but not law. After all, *justice is a story that law cannot tell*. In this section I have mostly invoked the work of Jacques Derrida on the mystical force of law. In this work, he usefully depicts the horizon at which the clash of law and justice happens. When Derrida invokes the 'mechanic judge' or the 'judging as a machine' he does so only as a matter of metaphor, to describe automatic and thoughtless application of law (with no regards for justice).[46] Even though Derrida invokes the machine only as a metaphor, it still proves useful for our analysis. The way in which he describes the application of law by an (unjust) judge can well be used to describe the algorithmic application of law. Justice, he argues, cannot be simply read in a legal clause, but needs to be always rediscovered anew in each single cases as it has never been in existence before, justice is always at horizon not at hand, not in the past data. Further invalidating the usage of previous data sets by pointing out the individuality of each case since there is no way to ascertain the exact process and factors leading to the decision, since justice is always (at) the horizon, thus there exists no causal link between the past justice and the justice at hand. This rediscovery, which is the only way of carrying out justice is possible only via a necessary level of individualisation not only of the judgement, but of the law and justice themselves. This again, casts a shade of doubt on previously described statistical models of regression to the mean utilised in machine learning models and the possibility of having an individualised judgement at present from median values of the past. Now we return to the beginning of this paragraph where we have talked about the end of justice, not law, since for this to be legal the only thing required would be to pass a law that, perhaps under the guise of efficiency, allows for such usage of algorithmic methods. In

[46] Interestingly enough, such automated decision, i.e. a decision taken without a proper consideration for an individual case was denounced as a denial of justice by the European Court of Human Rights in the case of *Paradiso and Campanelli v. Italy* App no 25358/12 (ECHR, 24 January 2017).

such case the law would persist, what, however, would be missing is justice. And to return to Derrida's observation, (state) law represents violence, what makes this violence legitimate however, is precisely this justice behind (or in) it. Without justice thus, *whatever remains is pure violence*.

## 7. CONCLUSION

I presented some possible critiques of algorithmic justice that entitle us to speak about the end(s) of law; of course they are not the only imaginable critiques of the algorithmisation of justice. While Delacroix or Joque note some benefits of algorithmisation, the first author also points out some of the downsides that go hand in hand with the advantages, such as the 'atrophy of normative muscles'[47] by which she means our loss of the capacity to make normative judgments should we all together outsource them to computers. This grows more alarming if we consider the other negative effects of machine learning models, such as the feedback loop where at one point the training dataset is itself generated by the algorithm. Delacroix even warns that if we do not start making deliberate design choices in this regard we may soon find ourselves deprived of any possibility of human-triggered change to such systems.

What I have tried to demonstrate in this article is that the underlying technological characteristics of algorithmic justice represent an efficient tool of the hegemony to preserve the status quo. Using such tools to automate adjudication would rid the law of its ability to develop further, to 'not be stuck in its ways', and to always reflect the prevalent societal mood. Solely relying on the decisions that were made in the past, in order to discern a pattern to be applied to a new, and individual judgement, prohibits the process from accounting for a new set of

[47] Sylvie Delacroix, 'Automated Systems and the Need for Change' in Simon Deakin and Christopher Markou (eds), *Is law Computable: Critical perspectives on law and Artificial Intelligence* (HART 2020) 194

facts or other developments in society and law, thus making the rules to be ideally preserved in their current state, forever foreclosing any possibility of contestation[48]. From such observation I have tried to go one step further to demonstrate that besides the unprecedented possibility to preserve the existing power structures, such moves towards the automation have the ability to rid law of any justice, thus making it an absolute form of violence. Derrida in his observation notes that laws' violence is only legitimized by the justice inscribed in any judicial act. However, a necessary condition of justice is its individualization, every judgement must be made anew and for every individual decision the law must be always rediscovered. I have tried to demonstrate that in an automated decision-making system, where any decision is a mere statistical inference of all of the previous cases[49, 50], such necessary individualization and rediscovery is essentially impossible. Such system thus lacks any legitimation of its violence.

We may generally conclude that the algorithmisation of justice poses a much broader threat for society as a whole. However, to come back to its impact in the sphere of law, it does not yet represent the end of law. Not for law or justice. However, we must approach further development in this area with a great deal of caution and, importantly, a critical approach. This paper is not to be read as some kind of a neo-Luddite cry. Law is a very varied discipline, and while we cannot rely on algorithmic justice for hard cases, law is not just that. There are many easy cases and repetitive decisions of mostly administrative nature, such as decisions related to public registries, that are a perfect fit for some kind of algorithmisation, without risking all the aforementioned negative consequences on law and justice. Algorithmisation of justice is thus not to be seen as, and must not be, some kind of the End



[48] Josh Achiam, (n 39) at 7.

[49] The approach described in the earlier chapter, of statistical inference also accounts for conflicting past decisions. Based on the design of the machine learning algorithm a greater weight could assigned to newer cases thus effectively "overriding" the older yet more frequent cases, or it could be left to other statistical method depending on the choices made by the designer.

[50] The rediscovery is of course tied to the interpretation of the law and not to be taken as a completely free hand for the adjudicator to "rediscover" the justice as they please.

of history, where everything has already happened. Its true role lies in the more administrative side and thus could be seen as a part of the broad cybernetic state project.[51] Algorithmic justice must remain just, it must not become violence.



[51] See, generally, Raul Espejo, 'Cybernetics of Governance: The Cybersyn Project 1971-1973' in Gary S Metcalf (ed.), *Social Systems and Design. Translational Systems Sciences* (Springer 2014).