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ARTIFICIAL INTELLIGENCE, LEGAL CHANGE, AND SEPARATION OF POWERS

Andrew C. Michaels*

This article argues in favor of the proposition that Article III judges should remain human, a proposition which turns out to be more controversial than one might think. Some contemporary legal academic literature has been arguing, to varying degrees, that replacing human made law with artificial intelligence ("AI") will or should happen. Most directly, Eugene Volokh has recently posed an interesting thought experiment asking this basic question: if AI advances to the point where it can adequately mimic judicial opinion writing, should we accept an AI judge? Professor Volokh argues that we should, but this essay respectfully disagrees. Although AI technology is currently far from this point, this essay engages with Professor Volokh's thought experiment, in the hopes that it could lead to some valuable insights into the importance of humans in the legal system.

In Professor Volokh's view, the resulting judicial opinion is all that matters; he maintains that: "If a system reliably yields opinions that we view as sound, we should accept it, without insisting on some predetermined structure for how the opinions are produced."[1] This essay takes issue with that basic premise. The judiciary is more than just an opinion factory. There is significant value in the human involvement in the process leading to the production of the opinion.

Perhaps the most common argument along these lines is that the process fosters procedural fairness, which leads to deeper public acceptance of the result and the legitimacy of the court system.[2] But this article seeks to draw attention instead to some related but different reasons that the process itself has significant value, reasons that seem not to be as thoroughly considered in this literature.

1. Eugene Volokh, *Chief Justice Robots*, 68 DUKE L.J. 1135, 1138 (2019).

2. *See, e.g.*, Tim Wu, *Will Artificial Intelligence Eat The Law? The Rise of Hybrid Social-Ordering Systems*, 119 COLUMBIA L. REV. 1, 2 (2019).

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Rather than focusing on the therapeutic and psychological value of the right to be heard by another human, this essay instead focuses on the epistemic losses and societal risks that could result from an AI judiciary in terms of our ability to monitor, shape, understand, and think about the law. In other words, rather than focusing on the citizen's or *litigant*'s right to be heard, this essay focuses instead on *the law*'s ability to "hear" or be shaped by the human society that it rules.

By engaging in the process of arguing in front of a judge and constructing legal arguments that potentially affect the outcome of the potentially precedential case, the human legal community comes to understand and play a role in shaping the law. This spreads power in the sense that it gives judges, the legal community, and even to a lesser degree the public as litigants, some hand in shaping the law. Human involvement in the law also provides strong incentives for a substantial and well-informed legal community to pay close attention to the law. Under a system where humans collectively create the law, it is not some black box authority to be blindly obeyed; it can be questioned and shaped through reasoned argument. An AI judge, on the other hand, is much more of a black box unpersuadable authority, even if it does mimic humans by providing reasons in its judicial "opinion."

Professor Volokh focuses on the AI judge's ability to write a persuasive opinion, but overlooks the importance of the ability of the judge to be persuaded. A human judge can potentially be persuaded through reasoned legal argument, whereas it is not clear that the same can be said of an AI judge. It may be the relatively rare case that turns on the quality of argument before the human judge, but the fact that such cases can and do exist is important. Judicial persuadability contributes to the impression, and the reality, that the legal community and the public may play a role in shaping the law through argument, such that the law is a collective societal creation. Even if it were possible to construct a persuadable AI,[3] we would be faced with the vexing problem of having to decide upon what factors the AI should be persuadable. Thus, this Article argues that even if an AI judge could adequately mimic judicial opinion *writing*, there are nevertheless significant practical reasons not to accept AI as a replacement for human judges.

This Article proceeds with two main points. First, this Article discusses the proper role of the judiciary in legal change, that is, in shaping the law and adapting it to a constantly changing society. Currently, courts do more than simply apply the law; they also make law, though they do so in a more measured way than legislatures. They must

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3. *Cf.* Emily Berman, *Individualized Suspicion in the Age of Big Data*, 105 IOWA L. REV. 463, 502 (2020) (explaining that there are "factors relevant to legal decision-making that machines are simply incapable of taking into account").

balance respect for precedent and stability against the need for law to adapt to changing and unforeseen circumstances through adjudication. Judges sometimes must choose between incommensurable values. The differences of opinion that arise between judges or between litigants can have epistemic value in that they help to flesh out and publicize debates about what is the best law or policy. The human legal system creates a beneficial updating dialogue between the law and the human society that it governs, and there are significant benefits to having judges who are also a part of that society.

Second, it is far from clear that an AI judiciary would be able to effectively check the power of the other two branches. The argument for artificially intelligent law is shortsighted and overlooks certain long-term effects. Without human judges, we could lose much of the community of professionals paying attention to the law. We will have replaced legal thought with artificial legal thought. If we as a society don't know how to drive cars in the future, that may be fine, but if we forget how to think about the law, this could be problematic. For one thing, it could hinder our ability to adjust the law to changing societal circumstances. It would also make society less aware of the law. The diffusion of knowledge of the law throughout the human judiciary, legal community, and public, may be important to separation of powers.

The argument here is primarily against replacing the actual decision-making of the Article III judicial branch with AI. This article is not opposing AI as a tool to aid in research or as an AI staff attorney.[4] Nor is it opposing AI in the private sector, say, for medical purposes,[5] or even some private sector AI lawyers to the extent they are effective with human judges. Nor is this article even arguing against the use of AI for some decision-making in administrative agencies of the executive branch, or in arbitration. Replacing the judicial branch decision-makers with artificial intelligence is particularly problematic, so that is the focus here. The choice to draw the line at Article III judges is admittedly somewhat arbitrary, but this article argues that a line must be drawn somewhere, and that Article III is a reasonable place to draw it. The human legal community is in large part built around Article III judges, and it seems likely that as long as there are human judges, there will remain a demand for at least some human lawyers, as at least some human judges would likely find human lawyers more persuasive.[6] So at least some higher end

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4. Volokh, *supra* note 1, at 1148.

5. *Cf.* Jason Chung & Amanda Zink, *Hey Watson, Can I Sue You for Malpractice? Examining the Liability of Artificial Intelligence in Medicine*, 11 ASIA-PACIFIC J. HLTH L. & ETHICS 51 (2018).

6. *Cf.* Dana Remus and Frank Levy, Can Robots be Lawyers? *Computers, Lawyers, and the Practice of Law*, ABA LAW PRACTICE DIVISION 59 (July 20, 2016) ("The rule of law necessitates respect for and compliance with law from a variety of sources even absent active enforcement . . . and it requires

litigants would likely remain willing to pay for human lawyers to argue before the human judges, for example in difficult appellate cases that could reasonably go either way. Thus maintaining human Article III judges would at least maintain a portion of the human legal community built around them, while still allowing for the use of some legal AI in other ways.[7]

Part I briefly introduces the arguments that some contemporary legal scholars make in favor of replacing (to at least some degree) law with AI and offers some preliminary responses. Parts II and III then track the two main points set forth above: the role of the human judiciary in legal change and separation of powers, respectively. This Article concludes by considering some of the potential benefits of AI judges, and some alternative ways in which such benefits could be achieved.

I. THE ARGUMENTS FOR ARTIFICIAL LAW

In his recent essay, *Chief Justice Robots*, Eugene Volokh argues that if AI technology reaches the point that it can "create persuasive opinions, capable of regularly winning opinion-writing competitions against human judges," then "we should in principle accept it as a judge."[8] As Volokh recognizes, this is a "thought experiment," as AI technology is currently far from this point.[9] Nevertheless, such a thought experiment can provoke important discussions about the proper role of humans versus artificial intelligence in the legal field.

Professor Volokh's argument that we should replace judges with AI is contingent on them passing what he calls the "Modified John Henry Test," an opinion writing competition wherein "a computer program is arrayed against, say, ten average performers" in the given field, and if "the computer performs at least as well as the average performer," then it

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participation in the development and application of law, and its evolution over time. These are things that lawyers uniquely ensure and support, but that computers cannot and do not."). Frank Pasquale, *A Rule of Persons, Not Machines: The Limits of Legal Automation*, 87 GEO. WASH. L. REV. 1, 55 (2019) ("A robust and ethical legal profession respects that discretion, founded on the flexibility and subtlety of legal language, as a prerequisite for a just and accountable social order.").

7. My argument here is that at the very least, Article III judges should remain human, but many of the arguments here could also counsel against the use of say, AI law clerks. There are benefits to using human law clerks in that they learn and become members of the human legal community, which is important as discussed herein. Perhaps it should be left up to individual judges whether they want to continue to use human law clerks versus AI. In any event, at least the judges should remain human.

8. Volokh, *supra* note 1, at 1135 (aside from creating persuasive opinions, a second condition is that the software must "be adequately protected against hacking and similar attacks").

9. *Id.* at 1137. This paper thus falls more into what has been called the "futurist" category of AI literature. *See* Harry Surden, *Artificial Intelligence and Law: An Overview*, 35 GA ST. L. REV. 1305, 1306 (2019) ("A key motivation in writing this article is to provide a realistic, demystified view of AI that is rooted in the actual capabilities of the technology. This is meant to contrast with discussions about AI and law that are decidedly futurist in nature.").

passes the test and is an "adequate substitute for humans."[10] Whether the program passes the test is determined by "a panel of, say, ten human judges who are known to be experts in the subject," who must "evaluate everyone's performance without knowing which participant is a computer and which is a human."[11] This panel of experts will be herein referred to as the "evaluators," as in Professor Volokh's essay.

According to Professor Volokh, "prospective AI Supreme Court Justices should be measured against the quality of average candidates for the job – generally experienced, respected appellate judges."[12] Professor Volokh's criterion for evaluation is "persuasiveness," that is, "if the Henry Test evaluator panelists are persuaded by the argument for" the AI judge's chosen result. If (again, as a thought experiment) an AI judge can consistently pass this test, Professor Volokh argues that we should adopt it, because it is "likely to be much cheaper, quicker, and less subject to certain forms of bias," thus making the legal system "not only more efficient but also fairer and more accessible to poor and middle-class litigants."[13]

Although Professor Volokh makes this argument most directly, his view is not entirely an anomaly; some other legal scholarship has been trending in a similar direction. For example, Professor Aziz Huq argues that there is no right to a human decision, but instead merely "a right to a well-calibrated machine decision."[14] In the same vein, Professors Anthony Casey and Anthony Niblett have predicted that like self-driving cars, "laws, too, will be self-driving,"[15] and that advances in AI and communications technology will "be able to identify the rules applicable to an actual situation and inform the regulated actor exactly how to comply" such that "microdirectives will become the dominant form of law[.]"[16] They predict that "opportunities for statutory interpretation and filling the gaps in vague standards will dry up as citizens are simply instructed to obey simple directives."[17] Casey and Niblett recognize that "citizens who simply follow rules and directives may become robotic, mere automatons," but nevertheless state that the "trend towards micro-directives will be real as the cost of prediction and communication

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10. Volokh, *supra* note 1, at 1138-39.

11. *Id.* at 1139.

12. *Id.* at 1140.

13. *Id.*

14. Aziz Z. Huq, *A Right to a Human Decision*, 106 VA. L. REV. (forthcoming May 2020).

15. Anthony J. Casey & Anthony Niblett, *Self-Driving Laws*, 66 U. TORONTO L.J. 429, 442 (2016) [hereinafter *Self-Driving Laws*].

16. Anthony J. Casey & Anthony Niblett, *The Death of Rules and Standards*, 92 IND. L.J. 1401, 1404 (2017).

17. *Id.* at 1435.

falls."[18] When it comes to judges and the law though, the discussion is about the public sector, so whether the legal system *should* move in this direction is a normative question, one that Professors Casey and Niblett explicitly decline to address.[19]

Just as the person using GPS navigation does not learn their way around the roads,[20] the more we turn law over to machines, the more we as a society may forget how to think about law.[21] In other words, if a person uses GPS navigation, that person does not develop as much of an internal sense of direction. Likewise, the greater the role machines play in legal decision-making, the greater the risk that society collectively loses its ability to determine, understand, question, criticize, and potentially shape the law. Even if the AI judges are working initially, there is no guarantee that something will not eventually go wrong. To the contrary, as with all technology, something eventually will go wrong.[22] Contemporary society does seem to have some tendency to adopt new technologies before they are entirely ready.[23] But if society has lost its ability to "judge" the law, then it may have also lost its ability to adapt when the inevitable problems arise.

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18. *Self-Driving Laws*, *supra* note 15, at 438.

19. *See* Casey & Niblett, *supra* note 16, at 1405 ("Our analysis is positive rather than normative."). I have previously criticized this deterministic aspect of their work and so will not rehash the issue here. *See* Andrew C. Michaels, *Abstract Innovation, Virtual Ideas, and Artificial Legal Thought*, 14 MAR. J. BUS. & TECH. L. 1, 25 (2019). *Cf.* Richard M. Re & Alicia Solow-Niederman, *Developing Artificially Intelligent Justice*, 22 STAN. TECH. L. REV. 242, 247 (2019) ("over time, increasing use of AI adjudication will foster changes in values that are conducive to even greater use of AI adjudication, thereby creating a self-reinforcing cycle").

20. *See, e.g.*, Joseph Stromberg, *Is GPS ruining our ability to navigate for ourselves?*, VOX (Sept. 2, 2015, 11:31 AM), https://www.vox.com/2015/9/2/9242049/gps-maps-navigation ("we have good reason to believe that when we blindly follow GPS for direction, we're not exercising crucial navigational skills – and many of the scientists who study how the human brain navigates are concerned.").

21. Cf. Deborah Cassens Weiss, *'Beware the Robots,' Chief Justice Tells High School Graduates*, ABA J. (June 8, 2018 4:10 PM), https://www.abajournal.com/news/article/beware_the_robots_chief_justice_tells_high_school_graduates / [https://perma.cc/FBQ6-4PKT] ("'My worry is not that machines will start thinking like us,' Roberts said. 'I worry that we will start thinking like machines.'").

22. For a fictional example, *see* Futurama, *Fear of a Bot Planet* (FOX television broadcast Apr. 20, 1999) (Computer Judge: "Thank you prosecutor, I will now consider the evidence.". . . [Sorry A System Error Occurred], Robot Clerk: "Uh oh! He froze up again!" Robot Mayor: "Try control alt delete.").

23. *Cf.* Daisuke Wakabayashi, *Self-Driving Uber Car Kills Pedestrian in Arizona, Where Robots Roam*, N.Y. TIMES (Mar. 19, 2018); Clark D. Asay, *Artificial Stupidity*, 61 WM. & MARY L. REV. (forthcoming 2020)(manuscript at 4), https://ssrn.com/abstract=3399170 ("despite the incessant hype about and ever growing uses of AI, many AI experts lament a lack of any real progress in the AI space"); Brian Sheppard, *Incomplete Innovation and the Premature Disruption of Legal Services*, 2015 MICH. ST. L. REV. 1797, 1802 (2016) ("When a disruption occurs before all of the core functions of an industry have been innovated, there is a risk that this Incomplete Innovation will force the un-innovated core functions to become scarce or disappear.").

II. LEGAL CHANGE

Professor Volokh's Modified John Henry test for adoption does not adequately account for the role that the judiciary plays in shaping the law. Professor Volokh does recognize that "[l]aw development – whether common law development, constitutional law development, or interpretive development about statues – often requires prediction: Would a proposed legal rule do more good or harm?"[24] But in his view, "we humans don't set the bar very high," so "AIs don't need to have perfect clairvoyance or legal statesmanship" to beat us.[25] According to Professor Volokh, "success in the Henry Test will be the best measure of judicial quality," that is, "[i]f the evaluators are persuaded by the AI judge's prediction-based arguments more than by the human judges' arguments, why should we doubt the AI judge's abilities more than we doubt the human judges' abilities?"[26]

Professor Volokh's point that humans do not have perfect clairvoyance is certainly true, but human judges do not need it because they are able to update the law over time in response to changing and unforeseen societal circumstances in the society of which they are a part. It is not clear that an AI judiciary would be able to do the same thing, or at least, Professor Volokh's Modified John Henry test for adoption does not ensure that it would. Professor Volokh's test is based on persuasiveness to a panel of evaluators at a particular point in time. But what is persuasive at one point in time is not necessarily persuasive later on, as the factual realities and moral values of society shift.[27] Furthermore, no matter how many "test cases" the evaluators look at, the test cases will never adequately encompass the full range of possible fact situations that could and will arise in the future.

Although written almost a century ago, Benjamin Cardozo's *The Growth of Law* has a good deal of relevance to Professor Volokh's thought experiment. Responding to some agitation for a more rigid conception of stare decisis, then Judge (later Justice) Cardozo set forth a persuasive explication and defense of the judicial role in legal development.[28] According to Judge Cardozo, legislation alone is not a sufficient agency of legal growth, because "[u]nique situations can never

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24. Volokh, *supra* note 1, at 1183.

25. *Id.* at 1184.

26. *Id.*

27. *Cf.* E.I. duPont deNemours & Co., Inc. v. Christopher, 431 F.2d 1012, 1017 (5th Cir. 1970) ("'Improper' will always be a word of many nuances, determined by time, place, and circumstances.").

28. *See* BENJAMIN N. CARDOZO, THE GROWTH OF THE LAW 132-133 (1924) ("Stare decisis is not in the constitution, but I should be half ready to put it there, and to add thereto the requirement of mechanical and literal reproduction, if only it were true that legislation is a sufficient agency of growth. The centuries, if they have proved anything, have proved the need of something more.").

have their answers ready made as in the complete letter-writing guides or the manuals of the art of conversation."[29]   That is, situations that the legislature (or the prior precedent writing court) did not anticipate ex ante will inevitably arise, and it is one job of the courts to gradually adjust the law ex post on a case-by-case basis, while applying it to a particular controversy.[30] As Judge Friendly has also explained, it "is impossible for the legislator to foresee everything," and "a code, however complete it may appear, is no sooner promulgated than a thousand unexpected questions are presented to the judge."[31]

This is part of why precedential holdings are not (and should not be) rigidly set in stone, but rather can (and should) be gradually shaped by subsequent decisions, in light of changing circumstances and new information.[32]   Even lower courts sometimes "narrow ambiguous precedents that have become outdated in light of new events or technologies."[33] As Judge Cardozo put it: "adaption of rule or principle to changing combinations of events demands the creative action of the judge."[34] The fact that judges help shape the law supports the notion that we are governing ourselves through rule of law, rather than being commanded by some pure assertion of authority.[35] The law is something that human society creates, monitors, and updates, not an external governing force. The primary purpose of legal argument through briefing and oral presentation to a human judge is not just that it provides therapeutic benefits to the litigant, it is rather that it provides the opportunity to persuade the judge, and thus potentially shape the law, to the extent that the opinion rendered is precedential. As such, it is not only judges that currently shape the law, but also litigants, acting (usually) through lawyers. But this ability to shape the law depends on the human

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29. *Id.* at 133.

30. *Id.* ("Justice is not to be taken by storm. She is to be wooed by slow advances.").

31. Henry J. Friendly, *Reactions of a Lawyer – Newly Become Judge*, 71 YALE L.J. 218, 220 (1961).

32. *See* Andrew C. Michaels, *The Holding-Dictum Spectrum*, 70 ARK. L. REV. 661, 679 (2017) ("generalizations will not always be perfect; the courts cannot be expected to foresee or fully consider all potential fact situations falling within the generalizations that they necessarily make"); CARDOZO, *supra* note 28, at 138 ("The rule as announced must be deemed tentative. For the many and varying facts to which it will be applied cannot be foreseen."); ITHIEL DE SOLA POOL, TECHNOLOGIES OF FREEDOM 161 (1983) ("since precedent is the style of Anglo-Saxon law, the courts define a new technology as a special case of a familiar one.").

33. Richard M. Re, *Narrowing Supreme Court Precedent from Below*, 104 GEO. L.J. 921, 925 (2016).

34. CARDOZO, *supra* note 28, at 135.

35. *Cf. id.* at 137-38 ("This power of creation, if it is to be exercised with vision and understanding, exacts a philosophy of law, a theory of its genesis and growth and aim. Only thus shall we be saved from the empiricism which finds in an opinion not a prophecy to inspire, but a command to be obeyed."); Frederick Schauer, *Giving Reasons*, 47 STAN. L. REV. 633, 636-37 (1995) ("The act of giving a reason is the antithesis of authority. When the voice of authority fails, the voice of reason emerges. Or vice versa.").

judge being potentially persuadable. Professor Volokh's argument focuses on the AI judge's ability to write a persuasive opinion,[36] but it seems to overlook the importance of the ability of the judge to be persuaded. Indeed, Professor Volokh's conception of an AI judge seems to render persuasive argument by litigants unnecessary.[37] It might be possible to construct a persuadable AI, but then we are left with difficult questions regarding what factors the AI should be persuaded based on. In any event, these questions are not addressed by a test that merely asks whether the AI can *issue* persuasive opinions.

Professor Volokh recognizes the potentially controversial nature of his focus on "persuasiveness" as the key evaluation metric.[38] While persuasiveness may be ideal for a lawyer, the task of a judge writing an opinion is different. The judge must acknowledge the arguments on both sides and explain why the judge is choosing one side over the other (or choosing some middle ground) and then decide how broadly to write the decision with an eye towards both its ex ante precedential effects and consistency with prior precedent. Moreover, when the judge is faced with a difficult decision, the value of candor counsels that the judge should acknowledge the difficulty, even though this may hinder persuasiveness (depending on one's point of view).[39] An open acknowledgement of a "close case" may play a role in how the decision is interpreted in the future as the law continues to develop; for example, the decision may be read more narrowly as a result. A focus on persuasiveness does not necessarily capture the quality of measured carefulness that that is arguably just as if not more important in judges as they shape the law through precedential decisions.

Persuasiveness is also inherently subjective; indeed it is difficult to think of many things that are more quintessentially subjective. Deciding whether one is persuaded by an argument, like judging, often requires a choice between incommensurable values; it is not a matter of mere numerical calculation.[40] To the extent that lawyers and judges are all

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36. *See* Volokh, *supra* note 1, at 1140-41.

37. *See id.* at 1141 ("If we can create an AI brief-writer that can persuade, we can create an AI judge that can (1) construct persuasive arguments that support the various possible results in the case, and then (2) choose from all those arguments the one that is most persuasive, and thus the result that can be most persuasively supported.").

38. *Id.* ("And if the Henry Test evaluator panelists are persuaded by the argument for that result, that means they have concluded the result is correct. This connection between AI brief-writing and AI judging is likely the most controversial claim in the paper.").

39. *See* David L. Shapiro, *In Defense of Judicial Candor*, 100 HARV. L. REV. 731, 737 (1987) (calling candor "the sine qua non of all other restraints on abuse of judicial power"); GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES 178-81 (1982) (advocating a "choice for candor" and explaining that the "language of categoricals" is "particularly prone to manipulation").

40. *See* Rebecca Haw Allensworth, *The Commensurability Myth in Antitrust*, 69 VAND. L. REV. 1, 68 (2016) ("Inherent in the very idea of judging is the notion of judgment; courts are frequently

trained to think in a certain way,[41] or are an interpretive community,[42] some of the subjectivity is mitigated, but still much of it remains, which is why appellate judges often disagree and write dissents, despite generally being well trained in law. Professor Volokh's proposal would seem to merely shift these subjective judgments from the judges themselves (viewing the law in the context of a concrete dispute ex post), to the panel of Henry test "evaluators" (evaluating the predicted performance of the AI judges ex ante based on test cases).

To be sure, the ability of the judiciary to make law is moderated and constrained, it is not as drastic and sudden as ex ante legislation, which is reserved for the legislative branch.[43] As Judge Cardozo observes: "Law must be stable, and yet it cannot stand still."[44] This careful balance between stability and change is illustrated in the doctrine of retroactivity, which holds that a legal decision changing the law (e.g., overruling or narrowing a precedent) generally must be applied retroactively to other events taking place before the decision was rendered.[45] The doctrine of retroactivity serves as an important check on judicial law creation. If courts are forced to apply changes in the law retroactively and forced to confront the potential unfairness in that, they may decide to adhere to *stare decisis* and the prior rule rather than risk the unfairness of retroactive application, even if they would have ruled differently had they been writing on a clean slate.[46] As such, the doctrine of retroactivity

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delegated regulatory and adjudicative tasks that must choose between valid and important social values."); Joshua P. Davis, *Law Without Mind: AI, Ethics, and Jurisprudence* 1 (Univ. of S.F. Law Research Paper No. 2018-05, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3187513 (arguing that the "ultimate bulwark against ceding legal interpretation to computers – from having computers usurp the responsibility and authority of attorneys, citizens, and even judges – may be to recognize the role of moral judgment in saying what the law is.").

41. *See, e.g.*, FREDERICK SCHAUER, THINKING LIKE A LAWYER (2009).

42. *See* Stanley Fish, *Is There A Text in This Class*, HARVARD U. PRESS (1980), 147-174.

43. A. Benjamin Spencer, *Substance, Procedure, and the Rules Enabling Act*, 66 UCLA L. REV. 654, 676 (2019) ("The governmental act of prospectively conferring and defining the bundle of obligations and privileges that yield the entitlements described above is a legislative function (at least at the federal level) because such rights reflect basic policy decisions that shape our society.") (citing Am. Trucking Ass'ns v. Smith, 496 U.S. 167, 201 (1990) (Scalia, J., concurring) ("[P]rospective decisionmaking is incompatible with the judicial role, which is to say what the law is, not to prescribe what it shall be.").

44. CARDOZO, *supra* note 28, at 143. *See also* Charles E. Clark & David M. Trubek, *The Creative Role of the Judge: Restraint and Freedom in the Common Law Tradition*, 71 YALE L.J. 255, 275-76 (1961) ("judicial creation is an inevitable and vital part of our law . . . the process in its highest reaches is not discovery but creation").

45. Harper v. Va. Dep't of Taxation, 509 U.S. 86, 97 (1993) ("When this Court applies a rule of federal law to the parties before it, that rule is the controlling interpretation of federal law and must be given full retroactive effect in all cases still open on direct review and as to all events, regardless of whether such events predate or postdate our announcement of the rule.").

46. *See, e.g.*, Flood v. Kuhn, 407 U.S. 258, 278-79 (1972) ("All this, combined with the flood of litigation that would follow its repudication, the harassment that would ensue, and the retroactive effect of such a decision, led the Court to the practical result that it should sustain the unequivocal line of authority reaching over many years.").

encourages courts to make only minor and gradual shifts in the law,[47] leaving more drastic prospective changes for the legislative branch.[48] In this sense, it could be said that the retroactivity requirement gives teeth to *stare decisis*.[49] The doctrine of retroactivity thus has roots in the separation of powers and ensures that although the judiciary plays a role in legal development, it is a softer and more measured role than the legislature.[50] Professor Volokh's Modified John Henry test for adoption of AI judges does not ensure that they would be able to adequately fulfill this dynamic role in the long term.

The teachings of legal realism help to further highlight the fact that courts in many cases make policy choices in developing the law, working against the notion that law can be reduced to computing.[51] To be sure, the result in most cases is dictated by existing law, but a significant fraction of cases could go either way, and when faced with such forks in the road, judges must make a choice about in which direction the law will proceed.[52] Judge Cardozo also recognized "that every doubtful decision involves a choice between a nicely balanced alternative, and no matter how long we debate or how carefully we ponder, we shall never arrive at certitude."[53] These days, it is fairly uncontroversial to say that judges at

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47. Paul J. Mishkin, *The Supreme Court, 1964 Term*, 79 Harv. L. Rev. 56, 70 (1965) ("Ineluctable retroactivity would seem to operate as an 'inherent restraint' on judicial lawmaking because it compels the Court to confront in sharpest form possible undesirable consequences of adopting a new rule, as for example, when it appears that application of the newly framed doctrine may result in imposing liability or other burden on someone who acted in justified reliance on the old law.").

48. *Id.* at 65-66 ("Prospective lawmaking is generally equated with legislation. Indeed, the conscious confrontation of the question of an effective date – even if only in the form of providing explicit affirmative justification for retroactive operation – smacks of the legislative process; for it is ordinarily taken for granted (particularly under the Blackstonian symbolic conception) that judicial decisions operate with inevitable retroactive effect.").

49. Harper v. Va. Dep't of Taxation, 509 U.S. 86, 105 (1993) (Scalia, J., concurring) ("Prospective decisionmaking is the handmaid of judicial activism, and the born enemy of *stare decisis*.").

50. James B. Beam Distilling Co. v. Georgia, 501 U.S. 529, 549 (1991) (Scalia, J., concurring) (explaining that difficulties posed by retroactivity "are one of the understood checks upon judicial lawmaking; to eliminate them is to render courts substantially more free to 'make new law,' and thus to alter in a fundamental way the assigned balance of responsibility and power among the three branches").

51. *See* Mishkin, *supra* note 47, at 68 ("The insights of 'legal realism,' developing and spreading at a perhaps accelerating rate since at least the twenties, provided a necessary corrective to an overly rigidified conception of the Court as totally without choice or will, merely carrying out the supposedly preordained dictates of the Constitution.").

52. *See id.* at 60 (explaining that "it is certainly true that courts in general handle the vast bulk of cases by application of preexisting law," and that "informed estimates put the figure at close to 90%") (citing Friendly, 71 Yale L.J. at 222).

53. Cardozo, *supra* note 28, at 140. I am speaking here of classical legal realism, rather than what some have called "new legal realism." *See* Thomas J. Miles & Cass R. Sunstein, *The New Legal Realism*, 75 U. Chi. L. Rev. 831, 831 (2008) ("We are in the midst of a flowering of 'large-scale quantitative studies of facts and outcome,' with numerous published results. The relevant studies have produced a New Legal Realism – an effort to understand the sources of judicial decisions on the basis of testable hypotheses and large data sets.").

least sometimes do more than simply "call balls and strikes."[54] Indeed, the entire *Chevron* doctrine is based on the idea that for some questions of statutory interpretation, there is a range of reasonable answers to which courts must defer.[55] As such, "*Chevron* has been seen as a triumph of legal realism."[56]

There likewise is often room for reasonable disagreement in the interpretation of precedent. No single accepted test exists for determining exactly what is holding and what is dicta, and in many cases there is no easy way to decide.[57] There will always be some possible distinction from a precedent case, so whether a judge chooses to follow a case turns on whether the proffered distinction is a meaningful one, or whether it is merely a distinction without a difference, an inherently subjective inquiry.[58] The prominent legal realist Karl Lewellyn has gone so far as to say that the doctrine of precedent is "two-headed" or "Janus-faced" in that there "is one doctrine for getting rid of precedents deemed troublesome and one doctrine for making use of precedents that seem helpful."[59]

Professor Volokh acknowledges the legal realism objection to automated law, but his response is that it is dealt with by his focus on persuasion in the Modified John Henry test, which focuses on "which candidate most often persuades the evaluators," "without any need to decide what *the* supposedly correct answer is."[60] But when choosing between multiple possible acceptable answers, the judge is charting a path for the law, to the extent that the opinion is precedential. This path should be at least potentially influenced by the arguments presented to the judge that have been developed in the legal community in light of modern

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54. *See* William Blake, *Umpires as Legal Realists*, 45 PS: POL. SCI. & POL. 271, 271 (2012) ("During his confirmation, then-judge John Roberts analogized the role of a judge to the role of a baseball umpire. . . . Legal scholars have criticized Roberts from a legal realist perspective because the analogy misconstrues the nature of judging as formalistic.").

55. *See* Chevron, U.S.A., Inc. v. NRDC, Inc., 467 U.S. 837, 843 (1984) ("if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute."); *see also* United States v. Mead Corp., 533 U.S. 218, 229 (2001) (explaining that when Chevron applies, a reviewing court "is obliged to accept the agency's position if Congress has not previously spoken to the point at issue and the agency's interpretation is reasonable.").

56. Brian G. Slocum, *The Importance of Being Ambiguous: Substantive Canons, Stare Decisis, and the Central Role of Ambiguity Determinations in the Administrative State*, 69 MD. L. REV. 791, 836 (2010).

57. *See generally* Andrew C. Michaels, *The Holding-Dictum Spectrum*, 70 ARK. L. REV. 661 (2017) [hereinafter *The Holding-Dictum Spectrum*]. The same could be said for determining whether a case has been "implicitly overruled." *See generally* Andrew C. Michaels, *Implicit Overruling and Foreign Lost Profits*, 25 B.U. J. SCI. & TECH. L. 101 (2019).

58. *See The Holding-Dictum Spectrum*, *supra* note 57, at 685; Arthur L. Goodhart, *Determining the Ratio Decidendi of a Case*, 40 YALE L.J. 161, 165 (1930).

59. KARL LLEWELLYN, THE BRAMBLE BUSH 69-70 (1930).

60. Volokh, 68 DUKE L. J. at 1141.

circumstances and the facts of the case at hand. Thus the crux of the legal realism objection to legal automation lies in the question it poses as to *how* the law chooses between alternative acceptable answers.

Disagreements amongst judges as explicated in circuit splits and dissents have the beneficial epistemic effect of bringing these various plausible legal choices out into the open where they can potentially be understood and debated. In an AI judiciary, this debate could be relegated to taking place within a black box. Thus the potential uniformity of an AI judiciary may be overvalued.[61] Replacing the human judiciary with an automated one that instantaneously generates an answer would erase the period of suspended conclusion during which societal legal thought takes place.[62] The value of the legal process itself, and the practical advantages of the process being conducted by humans themselves, are discussed further in the next Part.

III. Separation of Powers

The role of the judiciary is not merely to develop and apply the law, but also to provide a check on the other two branches. This task can be difficult, for it has been observed that the judiciary is the "least dangerous" branch in that it has "no influence over either the sword or the purse," it has "neither force nor will, but merely judgment."[63]

Judgment alone can wield the power to serve as a check only to the extent that it diffuses broadly throughout the judiciary and to a lesser extent even beyond the judiciary.[64] If almost no one understands the law, it is hard to imagine any type of a substantial public response to lawlessness in, say, the executive branch. Professor Volokh's condition for adoption of AI judges, demonstration that the AI judges can write persuasive opinions, does not seem to provide any assurance that the AI

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61. *Cf.* Amanda Frost, *Overvaluing Uniformity*, 94 Va. L. Rev. 1567, 1574 (2008) ("If the lower courts reach varied but reasonable conclusions about the meaning of a federal statute, and the difference do not create significant disruption or inequality, then the Court should decline to resolve the conflict."). Carlos Nino, The Constitution of Deliberative Democracy 113 (1996) ("Intersubjective discussion and decision is the most reliable procedure for having access to moral truth, since the exchange of ideas and the need to justify oneself before others not only broaden one's knowledge and reveal defects in reasoning but also help satisfy the requirement of impartial attention to the interests of everybody concerned.").

62. *Cf.* Donald J. Kochan, *Thinking Like Thinkers: Is the Art and Discipline of an 'Attitude of Suspended Conclusion' Lost on Lawyers?*, 35 Seattle U. L. Rev. 1, 64 (2011) ("lawyers must be reminded that seldom is an outcome clear in a legal dispute, and as such, there is almost always a rival proposition to ponder.").

63. A Hamilton, Federalist Paper No. 78 (1788).

64. Cf. Benjamin N. Cardozo, The Nature of the Judicial Process 35 (1921) ("[T]he judgment of the lawyer class, will spread to others, and tinge the common consciousness and the common faith.").

judiciary could fulfill its role as a check. A machine's ability to write a persuasive opinion does nothing to indicate that it can serve as an independent check on the other two branches. Given that the other two branches would presumably maintain their lawmaking abilities, they would seem to have a large degree of control over an AI judiciary. It may be possible to construct some AI system that provides more of a check, but it would not be trivial to do so, and those arguing for legal automation do not attempt to address this problem.

In our current system, we have many judges applying the law, and although they occasionally disagree, usually they apply the law in more or less the same way, at least ideally; the law is not supposed to depend on the judge. This is a redundancy, but one that can be beneficial,[65] in that it fosters a community of people with incentives to pay attention to the law.[66] It stands to reason that when people are paying attention and notice legal changes or inadequacies, they are able to raise awareness and potential public outcry.

But if no one is paying attention, then no one notices when the law changes, and it stands to reason that those with the power to change the law are less constrained by public sentiment. Imagine a world in which all Article III judges were replaced by AI. Unless that AI judges were specifically programmed to prefer human lawyers, it seems likely that the number of human lawyers would be greatly diminished in such a world. Indeed, in Professor Volokh's argument, robot lawyers come before robot judges.[67] And if we didn't have human judges or lawyers, we probably wouldn't have human law professors or law students either, or at least we wouldn't have nearly as many.[68]

Professor Volokh does recognize the possibility that "there could be a procedure for discretionary review of the AI Supreme Court's decision by an all-human Highest Constitutional Council;"[69] so, to be fair, his proposal would perhaps not entirely eviscerate this legal community, but it would drastically weaken it. In Professor Volokh's view, members of this council "might well be chosen not for legal acumen but for their

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65. *See* John M. Golden, *Redundancy: When Law Repeats Itself*, 94 TEX. L. REV. 629, 629 (2016) ("The pervasiveness of legal redundancy has at least one straightforward explanation. Redundancy has much to offer.").

66. *See* Anthony D'Amato, *Can/Should Computers Replace Judges*, 11 GA. L. REV. 1277, 1299 (1977) ("A second cost will be to render areas of law uninteresting. . . . At present, many people are immediately interested, whether financially or from a teaching or research point of view, in conflicts of laws.").

67. Volokh, *supra* note 1, at 1148-51.

68. *Cf.* Re & Solow-Niederman, *supra* note 19, at 247 ("Increasing use of AI will also foster lay and even professional alienation from law as adjudication increasingly moves within the exclusive dominion of technical specialists.").

69. *See* Volokh, *supra* note 1, at 1190.

perceived moral qualities," and would come in to play in "only a small portion of all cases decided by appellate judges, or even by Supreme Court Justices."[70]

AI law might be more efficient, but we would have in large part lost the community of people whose job it is to pay attention to the law, which could become a problem when the law changes.[71] The legal community is at least paying attention and that would seem provide some degree of a check on those with the power to change the law, at least as compared with a world where people are not paying attention.   The loss of redundancy in switching from human judges to AI thus creates some risk that may not be worth the potential efficiency gains

Aside from merely monitoring the law, the legal community also plays a role in shaping the law, spreading power and supporting the notion that we, as a society, govern ourselves. The potential to shape the law is in part what provides members of the legal community with incentives to pay attention to the law. There would be little incentive to construct a quality legal argument if there were no possibility that doing so could shape the result, (and thereby potentially shape the law through precedent). Judges are responsive to lawyers, who are responsive to clients, such that power to potentially shape the law is spread throughout the legal community and society. This helps promote the sense that we as a society have some control over the laws that govern us; that we are governing ourselves rather than submitting to (or simply obeying) an outside authority.[72]

Those in the legal community have all been trained to think similarly, that is, like lawyers.[73] When we say that the result in ninety percent of cases is determined by law whereas maybe ten percent could go either way, what we mean is that for those ninety percent, no reasonable judge or lawyer would decide the other way, but this only works to the extent that most lawyers think in a similar way.   A judge writing an opinion is in part explaining their reasoning so that the legal community and society can better understand the decision and thus the law. A legal opinion is

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70. *Id.*

71. *Cf.* FRANKLIN FOER, WORLD WITHOUT MIND: THE EXISTENTIAL THREAT OF BIG TECH 72 (2017) ("The problem is that when we outsource thinking to machines, we are really outsourcing thinking to the organizations that run the machines.").

72. *Cf.* Youngstown Sheet & Tube Co. v. Sawyer, 343 U.S. 579, 646 (1952) (Jackson, J., concurring) ("ours is a government of laws, not of men, and . . . we submit ourselves to rulers only if under rules.").

73. *Cf.* Pierre Schlag, *Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (A Report on the State of the Art)*, 97 GEO. L.J. 803, 828 (2009) ("When one thinks of what lawyers must strive to do – which is mainly resolve difficult disputes and control the future though documentary writings – certain things emerge as crucial to their work. One is that they speak and think in a common language. . . . To the extent that 'all lawyers think alike,' they can with some certainty predict what other lawyers will do – both in litigation and in transactional contexts. This is arguably socially useful.").

thus in part a discourse between society and the legal system, and the fact that the judge is also a member of society and the legal community would seem beneficial to this discourse.

This discourse can deter abuses of authority, for even "simply anticipating the need to give reasons and enhance deliberative rigor," "reason-giving coveys respect for one's audience," and when "citizens can evaluate and critique public officials' reasons, they are better poised to ensure that the government acts in their best interests."[74] But if the legal community has no legitimate opportunity to question the AI judge's reasons through argument or on appeal and attempt to persuade, the value of reason giving is diminished.[75] To the extent that an AI judge is a black box, its true reasons are unknown (secret) or even unknowable, and to the extent that the AI judiciary is not persuadable such that there is no meaningful opportunity to challenge its reasons, the giving of reasons is largely "a hollow exercise."[76]

It is also worth considering whether an AI judiciary could comply with Article III's case or controversy requirement.[77] This requirement "is not just an empty formality;" rather, it "preserves the vitality of the adversarial process," such that the legal questions presented "will be resolved, not in the rarified atmosphere of a debating society, but in a concrete factual context conducive to a realistic appreciation of the consequences of judicial action."[78] Courts exercise an important lawmaking and policymaking function when they interpret the law so as to resolve legal questions, and it is beneficial for such interpretation to take place in the context of concrete factual disputes.

When exactly is the AI judge making its decision? Has it in some sense already made its decision before the case? One could perhaps argue that the decision is made when the machine is programmed, in which case, the decision would not be made in the context of an actual case or controversy as required by Article III. In other words, the human decision-making point is in the choice of the AI judge, rather than in deciding the concrete case as in our current system. To be sure, there is currently human decision-making involved in our choice of human judges, but we

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74. Ashley S. Deeks, *Secret Reason-Giving*, 129 YALE L. J. 612, 627-28 (2020); *see also* John Rawls, A Theory of Justice 580 (1971) ("[J]ustification is argument addressed to those who disagree with us, or to ourselves when we are of two minds.").

75. *See* Deeks, *Secret Reason-Giving*, 129 YALE L. J. at 675-76 (explaining that secret reason giving "imposes only a weak form of constraint" particularly "when the reason-giver merely goes through the motions of developing a reason," or "when those receiving the reasons feel as though they have little latitude to push back, critique, or otherwise signal dissatisfaction").

76. Id. at 676.

77. *See* U.S. CONST. Art. III §§ 1-2.

78. Massachusetts v. EPA, 549 U.S. 497, 517 (2007) (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 581 (1992) (Kennedy, J., concurring)).

generally do not know exactly how the human judges we choose will decide cases in the future, and sometimes their views shift over time. The computer code programming an AI judge could be seen as an incredibly detailed statute or "code",[79] one that pre-answers all possible questions, albeit in a black box way.[80]

To the extent that there is private intellectual property covering the code behind AI judges, the problems are compounded.[81] If and to the extent that we do start to turn the law into code, at the very least the code must be public and not owned as intellectual property. If the code is public, then lawyers together with computer scientists (or lawyers trained in computer science) could at least examine the code and thus the law, though it would not necessarily be easy to construct a system where computer scientist lawyers would have an adequate incentive and ability to do so. Just as judges do not own the opinions they write, the artificial judges themselves, or the code behind them, must not be owned; since the law is binding on citizens, it must remain free for all to examine and attempt to understand.[82] The Supreme Court has recently reaffirmed that "no one can own the law," given that every "citizen is presumed to know

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79. *Cf.* Grant Gilmore, *Legal Realism: Its Cause and Cure*, 70 YALE L.J. 1037, 1043 ("A 'code,' let us say, is a legislative enactment which entirely pre-empts the field and which is assumed to carry within it the answers to all possible questions: thus when a court comes to a gap or an unforeseen situation, its duty is to find, by extrapolation and analogy, a solution consistent with the policy of the codifying law.").

80. *See* Asay, *supra* note 23, at 29 ("because of the lack of transparency surrounding AI systems in a number of important industries, some scholars have complained that such AI systems are a 'black box'") (citing FRANK PASQUALE, THE BLACK BOX SOCIETY (2015)); Re & Solow-Niederman, *supra* note 19, at 262 ("Perhaps the most widely appreciated risk of AI decision-making is that it could function in ways that are hard or impossible for humans to comprehend."); Andrew D. Selbst & Solon Barocas, *The Intuitive Appeal of Explainable Machines*, 87 FORDHAM L. REV. 1085 (2018); Cade Metz, *Mark Zuckerberg, Elon Musk and the Feud Over Killer Robots*, N.Y. TIMES (June 9, 2018), https://www.nytimes.com/2018/06/09/technology/elon-musk-mark-zuckerberg-artificial-intelligence.html [perma.cc/B26Z-CMAV] (quoting Mark Zuckerberg testifying before Congress: "Right now, a lot of our A.I. systems make decisions in ways that people don't really understand."); Harry Surden & Mary-Anne Williams, *Technological Opacity, Predictability, and Self-Driving Cars*, 38 CARDOZO L. REV. 121, 127 (2016) ("A system is 'technologically opaque' if it is difficult for an ordinary person to understand what is going on inside that system.").

81. *Cf.* Sonia K. Katyal, *Private Accountability in the Age of Artificial Intelligence*, 66 UCLA L. REV. 54, 141 (2019) ("The future of civil rights in an age of AI requires us to explore the limitations within intellectual property and, more specifically, trade secrets."); JOSEPH RAZ, THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY 213 (1979) ("It is one of the important principles of the [rule of law] doctrine that *the making of particular laws should be guided by open and relatively stable general rules*.").

82. *See* Banks v. Manchester, 128 U.S. 244, 253 (1888) ("Judges, as is well understood, receive from the public treasury a stated annual salary, fixed by law, and can themselves have no pecuniary interest or proprietorship as against the public at large, in the fruits of their judicial labor. . . . The question is one of public policy, and there has always been a judicial consensus . . . that no copyright could under the statutes passed by Congress, be secured in the products of the labor done by judicial officers in the discharge of their judicial duties.").

the law," so "all should have free access to its contents."[83]   The same should be true of AI judges, particularly if they are not persuadable by humans. Although one cannot look inside the mind of a human judge, a lawyer does in our present system usually have the opportunity to attempt to address the judge's concerns.

In any event, the primary concern surrounding Article III is that an AI judiciary could not sufficiently check the other two branches. Although separation of powers is not explicitly in the Constitution, it is considered to be implicit in a number of provisions, including the clauses that vest each of the three branches with certain responsibilities.[84]   The Supreme Court has discussed the importance of the "constitutionally mandated balance of power" to checking "abuses of government power" by preventing "the accumulation of excessive power in any one branch," so as to "reduce the risk of tyranny and abuse."[85]

The separation of powers concerns discussed above make AI decision-making particularly problematic in the judicial branch. Although some machine decision-making is already being done in the executive branch or the administrative agencies,[86] this does not seem as problematic. One way of thinking about the executive branch is that it is entirely or mostly accountable through the President anyway,[87] so if the President chooses to delegate to AI rather than humans, that is seemingly their prerogative, and in any event, it doesn't raise separation of powers concerns. Moreover, given that administrative agencies do not make law through precedent in the way that courts do, many of the other arguments above would not apply as strongly to the agencies.

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83.   Georgia v. Public Resource.org, Inc., No. 18-1150, 590 U.S. __ , slip op. at *7-8 (2020).

84.   *See, e.g.*, Sapna Kumar, *Patent Court Specialization*, 104 IOWA L. REV. 101, 118 (2019) ("The term 'separation of powers' does not appear in the Constitution, but is instead inferred from the dividing of legislative, executive, and judicial power into separate Articles.") (citing Buckley v. Valeo, 424 U.S. 1, 124 (1976); Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 439-40 (1998)).

85.   Gregory v. Ashcroft, 501 U.S. 452, 458-59 (1991) (also discussing the importance of federalism and how the dividing of power between the Federal Government and the States similarly prevents abuse by providing "double security") (quoting THE FEDERALIST NO. 51 at 323 (James Madison) ("In the compound republic of America, the power surrendered by the people is first divided between two distinct governments, and then the portion allotted to each subdivided among distinct and separate departments. Hence a double security arises to the rights of the people.")).

86.   *See* Emily Berman, *A Government of Laws and Not of Machines*, 98 B.U. L. REV. 1277, 1280 (2018) ("Given its utility, it is not surprising that government decision-makers seek to harness machine learning's predictive power for public-sector use. These tools already have made significant inroads in the contexts of national security and law enforcement.").

87.   *See, e.g.*, Myers v. United States, 272 U.S. 52, 135 (1923) ("The ordinary duties of officers prescribed by statute come under the general administrative control of the President by virtue of the general grant to him of executive power, and he may properly supervise and guide their construction of the statutes under which they act in order to secure that unitary and uniform execution of the laws which Article II of the Constitution evidently contemplated in vesting general executive power in the President alone.").

Conclusion

Replacing judges with AI would entail drastic changes to law as we know it and it is not at all clear that the changes would be for the better. Nevertheless, proponents of AI law suggest three primary benefits: efficiency, consistency, and access to justice.

Regarding efficiency,[88] the judiciary is comparatively not that expensive,[89] and it seems like money well spent in preserving the voice of humans in the law that governs them. An automated judiciary might be faster, but the legal disagreements that arise from circuit splits and dissents may actually be beneficial for society in that they engage the legal community in protracted discussions about various sides of important legal issues.[90] In any event, efficiency arguments do not adequately account for the increased risks due to the loss of redundancy, nor do they answer the related separation of powers concerns.[91] Indeed, efficiency is not always paramount in rule of law, for the "doctrine of separation of powers was adopted by the Convention of 1787 not to promote efficiency but to preclude the exercise of arbitrary power."[92] And by for example adopting AI research tools or an AI staff attorney, some efficiency benefits could be achieved without going so far as to automate the Article III judges themselves.

Second, proponents argue that an AI judiciary would be less biased and

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88. *See* Volokh, *supra* note 1, at 1139 n.10 ("In some contexts, of course, automation may be better even if it's not as effective – for instance, it may be cheaper and thus more cost-effective. But if it's cheaper and at least as effective, then it would be pretty clearly superior."); Huq, *supra* note 14, at *37 ("Right now, the demand for human review in the teeth of its likely costs and available alternative responses, might seem little more than an aesthetic preference about the manner in which one interacts with state actors. I am not sure that is enough to get a right to human decision off the ground."); Casey & Niblett, *supra* note 16 at 1403 ("A new form of law, the microdirective, will emerge to provide all of the benefits of both rules and standards without the costs of either. These microdirectives will provide ex ante behavioral prescriptions finely tailored to every possible scenario.").

89. *Compare* Admin. Office of the U.S. Courts, The Judiciary Fiscal Year 2019 Congressional Budget Summary 5 (2018) ("The judiciary's appropriation request for fiscal year 2019 totals [$7.863 Billion]"); *with* Office of the Under Sec'y of Def. (Comptroller), National Defense Budget Estimates For FY 2020 at 1 (2019) (showing $685 Billion DOD Discretionary Budget Authority for 2019); *and* Joint Comm. on Taxation, Macroeconomic Analysis of the "Tax Cut and Jobs Act" as Ordered Reported by the Senate Committee on Finance on November 16, 2017 at 7 (2017) (estimating a net loss of over $1 trillion over fiscal years 2018-2027).

90. *See* John Dewey, How We Think 12 (1933) (explaining that reflective thinking "involves (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity.").

91. *See supra* Part IV; *cf.* Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1380 (2018) (Gorsuch, J., dissenting) ("A judicial hearing before a property interest is stripped away . . . can slow things down. But economy supplies no license for ignoring these – often vitally inefficient – protections.").

92. Myers v. United States, 272 U.S. 52, 293 (1923) (Brandeis, J., dissenting).

therefore more consistent.[93] An initial response is that there could also be bias built into the AI, as has been well documented in the literature.[94] There is not much reason to think that the biases of the AI judges would be any different or less than whatever the biases of the Modified John Henry test panel of evaluators. But even assuming that the AI judges would be better than humans on this score, that would still not do anything to address all of the concerns above. The better way to deal with bias would be for human judges to work on becoming more aware of it and compensating for it, or better yet, to diversify the judiciary, as these would be more well-tailored solutions to the problem of judicial bias. Another more well-tailored way to deal with judicial bias might be to reduce judicial discretion in situations (such as perhaps criminal sentencing) where the effects of bias tend to be particularly acute.[95] Bias in the judiciary is a problem, but automating the judiciary is an overbroad and inappropriate solution to that particular problem.

The third potential benefit offered is that the lower cost of legal services will improve access to justice.[96] The distinction between the public and private sectors matters here. In the private sector, if a new technology such as artificial intelligence is able to outcompete the incumbent human lawyers by performing adequately at a lower cost, this article presents no quarrel with allowing the market to choose such lower cost alternatives. To the extent that this happens, it could lower the cost of legal services, such that we could receive some of the access to justice benefits without going so far as to replace Article III judges. An AI arbitration system, so long is it is voluntarily agreed to, might be another way to possibly

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93. *See* Volokh, *supra* note 1, at 1140 ("And because such a program is also likely to be much cheaper, quicker, and less subject to certain forms of bias, it promises to make the legal system not only more efficient but also fairer and more accessible to poor and middle-class litigants."); Huq, *supra* note 14, at *6 ("machine decisions are often capable of classification with a smaller number of false positives and false negatives than humans, and have the potential to act with fewer distorting biases"); Casey & Niblett, 92 IND. L. J. at 1410 ("And the laws will be highly calibrated to policy objectives with no chance of judges introducing bias or incompetence."); *see also* Benjamin Alarie et al., Regulation by Machine 4 (Dec. 6, 2016) (unpublished manuscript), https://ssrn.com/abstract=2878950 ("In a world where taxpayers receive instantaneous rulings from regulators, the algorithm is the law. This new form of law is characterized by greater consistency than regulators and courts could previously offer. The biases of regulators, adjudicators, and judges are washed away, further reducing legal uncertainty.").

94. *See, e.g.*, Amanda Levendowski, *How Copyright Law Can Fix Artificial Intelligence's Implicit Bias Problem*, 93 WASH. L. REV. 579 (2018).

95. *Cf.* Berman, *supra* note 86, at 1283 (arguing that "government actors should exploit the benefits of machine learning when they enjoy broad discretion in making decisions, while eschewing the tool for decision-making when government discretion is highly constrained"); Re & Solow-Niederman, *supra* note 19, at 243-44 ("Already, human judges increasingly rely on algorithmic analysis when making bail and parole determinations that affect the freedom of many thousands of people every year.").

96. *See* Volokh, *supra* note 1, at 1147 ("Realistically, the only way we are likely to sharply increase access to expensive services, such as lawyering, is through technology."); *cf.* Alaire et. al., *supra* note 93, at *1 ("machine learning can predict how courts would decide legal disputes more cheaply and accurately than human regulators").

capture some access to justice benefits while maintaining a human Article III judiciary.

In short, the arguments for AI judges underappreciate and undervalue the human aspects of law. If there are advantages to AI judges, the advantages are limited and may well be outweighed by the substantial disadvantages, which include a questionable ability to dynamically adapt over time to changing circumstances, and possible detrimental effects regarding separation of powers. At the least, these potential drawbacks of an AI judiciary are worth taking seriously, and should be considered and addressed before any plan to move in the direction of judicial automation is put in motion.