JUDICIAL ECONOMY IN THE AGE OF AI

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Individuals do not vindicate the majority of their legal claims because of access to justice barriers. This entrenched state of affairs is now facing a disruption. Lawyers and non-lawyers alike are adopting artificial intelligence (AI) tools to perform legal tasks—tools that sharply reduce the costs of generating legal materials. There is finally hope that AI might allow many more to access justice.

Paradoxically, what we gain in access to justice we might lose in the delivery of justice. The problem is not that AI tools are ineffective. Indeed, they are even more effective than most realize—affecting every stage of the naming, blaming, and claiming process. The problem is that this change necessarily increases the volume and verbosity of the caseload thus threatening judicial economy; the balance of scarce judicial resources in relation to shifts in demand for legal services.

Historically, judges and legislatures have often met challenges to judicial economy by adjusting "legal thermostats": ad-hoc adaptations to procedural rules and even substantive doctrines meant to curb the flow of litigation. But these adaptations invariably imply the shrinking of substantive rights. We run the risk, then, that litigants who finally gain access to justice will find narrow rights and stringent administrative procedures. To avoid this trajectory, I advocate a proactive framework of AI integration. Instead of fighting a losing battle against the symptoms of AI adoption by litigants, the legal system should integrate AI tools to enhance and scale up the legal process itself. By thoughtfully

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and carefully incorporating these tools, we can ensure that we reap the fruits of greater access to justice, even in the face of a rapidly expanding caseload.

INTRODUCTION

Most legal disputes are not filed anywhere. While estimates on access to justice barriers are notoriously unreliable,[1] a recent study suggests that about 120 million legal problems are left unresolved every year.[2] Around 75 percent of low-income Americans suffer significant civil legal issues, but 92 percent of these problems receive little to no legal aid.[3] One commentator estimates that one hundred million Americans live with "civil

1. *See generally* Rebecca L. Sandefur, *Paying Down the Civil Justice Data Deficit: Leveraging Existing National Data Collection*, 68 S.C. L. REV. 295 (2016) ("In the arena of civil justice, we face a severe data deficit."). On the various barriers to access, see *infra* Section I.C.

2. INSTITUTE FOR THE ADVANCEMENT OF THE AMERICAN LEGAL SYSTEM, JUSTICE NEEDS AND SATISFACTION IN THE UNITED STATES OF AMERICA 8, (Sept. 1, 2021) [hereinafter JUSTICE NEEDS], https://iaals.du.edu/sites/default/files/documents/publications/justice-needs-and-satisfaction-us.pdf [https://perma.cc/7VW8-Q3WM]. For comparison, one estimate considers that 100 million cases are handled by state courts every year. State of the State Courts: 2022 Presentation, NCSC (2022), https://www.ncsc.org/__data/assets/pdf_file/0019/85204/SSC_2022_Presentation.pdf [https://perma.cc/5D6L-YMQK].

3. LEGAL SERVS. CORP., FY 2025 BUDGET REQUEST 5, [hereinafter FY 2025 BUDGET REQUEST] https://lsc-live.app.box.com/s/oi1atcgn8xmvofc70aildz3bhg5p0zn5 [https://perma.cc/D7DE-9C78].

justice problems," many of which affect their "basic human needs."[4]

The barriers to justice are legion, but most can be expressed in terms of cost.[5] Lawyers charge an average of $292 per hour,[6] with common disputes costing between $2,754 and $6,370.[7] On the other side of the cost spectrum, commercial actors will spend roughly $2 million in outside legal fees to litigate in full cases.[8] Diverse faces and narratives lie behind these numbers, such as Eloisa Veles a Queens resident who recently lost her factory job.[9] A local family hired her as a housekeeper, promising $600 per week, only to "stiff" her and pay $300 when the time came. More telling than the incident itself is how it is described: Eloisa did not have her contract breached, her rights violated, or her money stolen—she was "stiffed."[10]

The sheer size of the investment required to close the gap bedevils attempts to resolve access to justice problems. Even doubling legal aid budgets has done little to narrow the gap.[11] Due to resource constraints, 1.8 million people are turned down

4. Rebecca L. Sandefur, *What We Know and Need to Know about the Legal Needs of the Public,* 67 S. C. L. REV. 443, 446 (2016).

5. *See generally* DEBORAH RHODE, ACCESS TO JUSTICE (2004). *See also* Gillian K. Hadfield, *Legal Markets,* 60 J. ECON. LIT. 1264, 1291 (2022) [hereinafter *Legal Markets*] ("The principal reason that so few individuals and small businesses avail themselves of legal services is cost and availability."). *See also* Gillian K. Hadfield, *Higher Demand, Lower Supply? A Comparative Assessment of the Legal Resource Landscape for Ordinary Americans*, 37 FORDHAM URB. L.J. 129 (2010) (noting that access to justice affects not just poorer Americans but also middle America). On sociolegal barriers, see discussion *infra* Section I.C.

6. LEGAL TRENDS REPORT, CLIO 14 (2023), https://clio.drift.click/2023-ltr [https://perma.cc/RG3K-HTRP].

7. *See* JUSTICE NEEDS*, supra* note 2, at 47.

8. LAWS. FOR CIV. JUST. REFORM GRP. & U.S. CHAMBER INST. FOR LEGAL REFORM, LITIGATION COST SURVEY OF MAJOR COS. 14 (2010), https://www.uscourts.gov/sites/default/files/litigation_cost_survey_of_major_companies_0.pdf [https://perma.cc/AC3L-268A].

9. Noam Scheiber, *Stiffing Workers on Wages Grows Worse with Recession*, N.Y. TIMES (Sept. 3, 2020), https://www.nytimes.com/2020/09/03/business/economy/wage-theft-recession.html [https://perma.cc/2AMX-M3Q3].

10. I discuss legal consciousness as a barrier to justice. *See* discussion *infra* Section I.C.

11. According to the Legal Services Corporation data, between 2013–2022, total funding for legal aid has increased (inflation adjusted) from $1 billion to $1.76 billion. *See* LEGAL SERVS. CORP., BY THE NUMBERS 2022: THE DATA UNDERLYING LEGAL AID PROGRAMS 11 (2023) [hereinafter BY THE NUMBERS 2022], https://lsc-live.app.box.com/s/h2bajpr3gps4s4a1iio6fwiddhmu1nwb [https://perma.cc/UQ7R-LZLE]; Nora Freeman Engstrom & David Freeman Engstrom, *The Making of the A2J Crisis*, 75 STAN. L. REV. ONLINE 146, 153 (Apr. 2024). ("[E]ven a vast increase over current commitments would barely dent the current crisis.").

annually.[12] To put this in perspective, the rate of legal aid lawyers to eligible clients is 1 to 15,625.[13]

Recently, Nora and David Freeman Engstrom have sought to center the problem of access to justice around legal tech.[14] While others have already noted legal tech as a potential barrier,[15] they draw on the debt collection litigation literature to fashion a somewhat different argument.[16] As this literature demonstrated, this is an area where there is a systemic access issue for low-income defendants, who often cannot afford to mount an effective defense even when one exists, resulting in a default-judgment mill against them.[17] The Engstroms frame the asymmetry in power as resulting from an underlying asymmetry in legal tech adoption patterns.[18] While firms zealously adopt legal tech, they only see "anemic adoption" by individuals.[19] In particular, they claim that large firms systemize and automate litigation, whereas individuals are still reliant on "analog tools."[20] While this argument is too strong to be true, it does have a kernel of truth to it.[21] Or at least it used to.

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12. FY 2025 BUDGET REQUEST, *supra* note 3, at 4.

13. Hanna Kozlowska, *There's a Devastating Shortage of Lawyers in the U.S. Who Can Help the Poor with Eviction or Child Custody Cases*, QUARTZ (May 12, 2016), https://qz.com/681971/for-every-10000-poor-people-in-the-united-states-theres-less-than-1-lawyer-who-can-help-them-with-an-eviction-or-child-custody-case [https://perma.cc/U3UC-VKXH].

14. *See* Engstrom & Engstrom, *supra* note 11. *But see Legal Markets*, *supra* note 5, at 1303 (arguing that regulation favors traditional lawyering across the board at the expense of legal tech).

15. *See Legal Markets*, *supra* note 5.

16. *See generally* Yonathan A. Arbel, *Adminization*: *Gatekeeping Consumer Contracts*, 71 VAND. L. REV. 121 (2018) (discussing robo-signing and other problematic creditor practices in debt collection cases and offering administrative-technological solutions); Daniel Wilf-Townsend, *Assembly-Line Plaintiffs*, 135 HARV. L. REV. 1704, 1773 (2022) ("Assembly-line plaintiffs show no sign of slowing down. Because of both the increases in consumer debt and the improvements in their litigation technology, they continue to grow . . . .").

17. Wilf-Townsend, *supra* note 16, at 1773.

18. Engstrom & Engstrom, *supra* note 11, at 159.

19. *See id.* at 162. This asymmetry is also discussed in Yonathan A. Arbel & Roy Shapira, *Theory of the Nudnik: The Future of Consumer Activism and What We Can Do to Stop It*, 73 VAND. L. REV. 929, 962 (2020) (focusing on the concern that firms employ advanced tools to defang litigation-prone consumers at very early stages of their claiming process).

20. *See* Engstrom & Engstrom, *supra* note 11, at 163.

21. Most litigants rely on the Internet and other digital tools to amass information, communicate about it, and draft and file litigation. *See, e.g.*, Margaret Hagan, *Data on People's Reliance on the Internet for Legal Problems*, A BETTER LEGAL INTERNET (Nov. 2, 2022), http://betterinternet.law.stanford.edu/2022/11/02

We are now witnessing a sea change in the patterns of technological adoption. Most are by now familiar with the occasional news story of a hapless lawyer using AI to comedically bad outcomes.[22] The narrative involves a work-shy lawyer submitting an AI-generated and hallucination-riddled brief to an exasperated judge, who then admonishes and sanctions the lawyer. Such widespread stories seem to draw their memetic power from commonplace Shakespearean perceptions of our profession. Incidentally, they also reify an elitist notion that only artisanal lawyering is real lawyering. And perhaps most alluring, they affirm a comforting thought: Getting down to brass tacks, AI is but a cold machine that will not be able to usurp our jobs.

Reassuring and entertaining as such surface themes are, they also distract from the broader reality that they unwittingly reveal. These stories display how AI is being deployed in practice, with two surprising patterns. First, they are being adopted even by small law firms who, at least traditionally, are rarely early adopters of cutting-edge technologies. Second, they are being adopted *despite* broad knowledge that these tools are imperfect. The point being that even if these tools are only sometimes reliable, they are always convenient. And this convenience and accessibility seem to drive many end users.

The expected outcome of democratizing litigation technology is a sharp pruning of the cost of producing legal materials.[23] As such, the technology presents a heavyweight contender to the many barriers to justice that plague the system. The expected, indeed, desired, effect is a litigation boom, driven by those currently denied access to justice. And while our first instinct might be to celebrate the dismantling of access to justice

/data-on-peoples-reliance-on-the-internet-for-legal-problems [https://perma.cc/A65A-PG7D]; *see also* Benjamin H. Barton, *The Future of American Legal Tech: Regulation, Culture, Markets*, *in* LEGAL TECH AND THE FUTURE OF CIV. JUST. 21, 29 (David Freeman Engstrom ed., 2023) ("Nor has legal aid shied away from using technology to forward its mission.").

22. *See, e.g.*, Benjamin Weiser, *Here's What Happens When Your Lawyer Uses ChatGPT*, N.Y. TIMES (May 27, 2023), https://www.nytimes.com/2023/05/27/nyregion/avianca-airline-lawsuit-chatgpt.html [https://perma.cc/V6ZM-64RV]; Molly Bohannon, *Lawyer Used ChatGPT In Court—And Cited Fake Cases. A Judge Is Considering Sanctions*, FORBES (June 8, 2023), https://www.forbes.com/sites/mollybohannon/2023/06/08/lawyer-used-chatgpt-in-court-and-cited-fake-cases-a-judge-is-considering-sanctions [https://perma.cc/HP4U-7PDD].

23. For cost comparisons between human lawyers and state-of-the-art AI models, see *infra* pp. 8–9 and note 35. The point here is static, but there are important dynamic effects, given that costs will decline across the industry.

barriers, realism about judicial economy cautions great care. The question we must ask ourselves is whether a legal system already critiqued for being clogged and dilatory, a system whose judges are overworked and under-resourced, will be capable of handling the impending AI boom in litigation.[24] What changes will be made to our laws, rules, and standards to accommodate such a spike? What will be the knock on effects of such a disruption to the status quo? Ultimately, would we find ourselves with a system with a truly greater degree of access to justice?

My prescriptive thesis, in a nutshell, is this: We should not sit and wait until a litigation boom forces our hand. The early evidence suggests that AI is being integrated within legal practices across the country. The legal system, I shall argue, should keep pace. True, the AI systems of today are still unreliable. Yet this should not be a deterrent, but a catalyst. It should serve as a catalyst for forward-looking, proactive integration that is subject to rigorous understanding of judicial needs, system constraints, and AI testing. The goal is not only to stanch a rising wave of litigation or stretch the justice dollar a bit further; it is to proactively leverage the technology to scale up and improve the delivery of justice without sacrificing justice in individual cases.

This Essay seeks to sound the alarm about judicial economy in the age of AI, consider how judges and legal administrators might respond, how threats to judicial economy could jeopardize rights, and then offer constructive steps to mitigate those undesired side effects while expanding access and quality in the delivery of justice. The Essay is organized around three principal contributions.

First, the Essay argues that as AI erodes access barriers it can bring about a litigation boom. The size of this boom is commensurate with the access to justice gap, if not larger. Existing estimates suggest that there is a considerable volume of unmet demand for legal services.[25] I argue, drawing on legal sociology, that these estimates likely understate the true AI potential.[26] Beyond visible barriers like court and lawyer fees,

24. *See Justice Delayed Judge and Staff Shortages are Leaving Americans in Limbo*, THE ECONOMIST (July 13, 2023), https://www.economist.com/united-states/2023/07/13/judge-and-staff-shortages-are-leaving-americans-in-limbo [https://perma.cc/6XZF-AJX8].

25. *See* BY THE NUMBERS 2022, *supra* note 11.

26. *See* discussion *infra* Section I.C.

sociolegal literature suggests that there are much less visible barriers at very early stages. These barriers are succinctly captured by the naming-blaming-claiming (NBC) model of litigation, which is a tripartite process of transforming individual claims.[27] For an individual to even see themselves as having a valid legal claim that is entitled to redress, they must undergo three stages of reconceptualizing the "accident" or "misfortune" they suffered as a legal wrong for which another might be held responsible. These stages act as filters, and when individuals lack the tools to name, blame, and claim, their claims will be in a perpetual stage of arrested development. As discussed and illustrated below, AI can assist with these pent-up claims by shepherding individuals through the process, helping them articulate their misfortune in legally cognizable terms.

Less rosy, existing estimates predominantly focus on unaddressed meritorious claims.[28] However, the same filtering mechanisms that obstruct access to justice also serve beneficial purposes by excluding abusive litigation aimed at harassing individuals with trumped-up charges.[29] The erosion of access barriers would lead to a litigation boom of both types of litigation, and the net effect is difficult to anticipate with any confidence.

Second, the Essay draws on control theory—the study of dynamic systems capable of maintaining desired states despite internal and external disturbances—to consider the implications of a potential AI litigation boom.[30] The entire equilibrium of judicial economy hangs in the balance between litigation patterns and judicial resources.

One repeated lesson from legal history is that technological and social shocks that threaten judicial economy are met with adjustments of various procedural and substantive doctrines.[31]

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27. The model was developed by William Felstiner. *See* William L. F. Felstiner et al., *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming . . .*, 15 LAW & SOC'Y REV. 631 (1980). It has since become a mainstay of socio-legal analysis.

28. *See* BY THE NUMBERS 2022, *supra* note 11.

29. Paul Ohm and Brett Frischmann developed a framework for thinking about the positive effects of friction as tools of governance, and many of litigation barriers can be conceived along similar lines. *See* Brett Frischmann & Paul Ohm, *Governance Seams*, 36 HARV. J.L. & TECH. 1118 (2023).

30. *See infra* Part II. Control theory is devoted, loosely speaking, to the study of maintaining desired states in dynamic systems. Home thermostats are a common example of tools used by control theory to maintain temperature equilibrium in light of changing outside temperature.

31. *See* discussion *infra* Part II.

Even though these doctrines are ostensibly about substantive and procedural rights, they double as what I call "legal thermostats." This effect can be broad and deep. Orin Kerr famously argued that the entire body of Fourth Amendment law, often seen as erratic and "embarrassing,"[32] can be rationalized as a series of "equilibrium adjustments" the courts make in response to new technologies. Here, I generalize this insight to a broader phenomenon of legal thermostats and provide illustrations of how they are used across the justice system.

By trying to achieve homeostasis, judges may feel compelled to adjust the thermostats that are at their disposal. They would reach out, by necessity, to procedural and substantive rights. They would be pressured to require, perhaps, more demanding standards of proof, or may require more exacting evidence, or may expand the scope of what qualifies as *de minimis*. The degree of thermostat adjustment may be so large that, from the viewpoint of any individual litigant, there would be no sense of progress. They would overcome initial barriers only to crash on ever more limited rights. If we stay the course, it seems that we might squander the opportunity to make a real dent in the access to justice problem by simply reshuffling it.

The third and most practical contribution lies in considering the menu of reactions judges and judicial administrators can make to take advantage of this specific moment. The proposed course of action involves a proactive approach that works to integrate AI into the judicial process itself. There is a host of AI tools, some currently in production and others to come, that could streamline, facilitate, and even improve the processing of legal claims by the legal systems. They can be integrated at both the case management level and inside the chambers themselves. Integrating these tools into the legal process will allow the system to scale up and meet the challenge, without compromising the substantive rights of litigants. Grounding the case for judicial integration in the problematic nature of the realistic alternatives helps motivate adoption even if AI tools are imperfect. Doing so proactively today will help mitigate the harms and ensure responsible adoption.

32. *See* Orin S. Kerr, *An Equilibrium-Adjustment Theory of the Fourth Amendment*, 125 HARV. L. REV. 476 (2011).

I. THE AI LITIGATION BOOM

How much of a dent can we realistically expect advanced AI systems to put in the access to justice problem? This Part opens by first evaluating the technical skills of current-generation AI systems to establish that they can perform many legal tasks "adequately." Obviously, adequately is the load-bearing part of the sentence, but part of the goal here is to show that it covers a fairly broad range of legal capabilities.

The discussion then considers the adoption patterns among end users, ordinary folks who currently face access issues, as well as the size of the access to justice gap. It leverages these analyses to provide a qualitative and semi-quantitative sense of the size of the gap that could be bridged. The combination of cheap but capable AI systems with this large gap leads to the expectation of an AI litigation boom effect in the coming years.

A. AI Legal Efficacy

Any sufficiently advanced technology can appear indistinguishable from magic.[33] In practice, much commentary on AI seems to fall into this trap, leading commentators down one of two erroneous paths: either believing in AI omnipotence (AI *can* do *everything*) or in AI as a cheap magic trick (AI *can't* do *anything*). In reality, AI tools are both, neither, and in-between these poles. The goal of this Section is to avoid a simplistic view of AI and discuss examples of the current state of the art in legal AI.

Evaluating rapidly developing technology is an exercise in writing on ice. The evidence of capabilities known to us today shows tentative floors, while limitations are tentative ceilings.[34] We do not know which limitations are here to stay, and which can be resolved with future development. We only know that we are still in early stages of development, and that we are still seeing constant improvements.

33. ARTHUR C. CLARKE, PROFILES OF THE FUTURE: AN INQUIRY INTO THE LIMITS OF THE POSSIBLE 36 (1962).

34. *See* Yonathan A. Arbel & Samuel Becher, *Contracts in the Age of Smart Readers*, 90 GEO. WASH. L. REV. 83 (2022) (discussing the capabilities of smart readers as well as the risks associated and the need to regulate and integrate with caution).

The first piece of evidence comes from a recent study that evaluated AI on contract review tasks.[35] The models were presented with a contract and some necessary context, and then asked to locate and determine legal issues. Comparing against the benchmark of practicing lawyers, the researchers found that GPT-4 (the current model powering ChatGPT) "exhibited a level of accuracy in identifying legal issues that was on par with that of [j]unior [l]awyers."[36] To complete their tasks, models use only 8 percent of the time it would take a junior lawyer to perform them. Critically, where the lawyer would charge an average of $74.26 for the task, the model's operating cost was a single quarter.[37]

While the models were relatively accurate, they were not perfect, and their failure modes prove interesting. Relative to senior lawyers, models showed "a preference for precision over recall,"[38]—that is, they preferred to be accurate rather than comprehensive. This offers greater confidence in the issues identified, but risks overlooking some issues. This type of failure mode, however, is not much different than that exhibited by junior lawyers, who also showed a similar preference for precision over recall, as evidenced by their comparable F-scores in issue determination (0.86 for junior lawyers versus 0.87 for GPT-4-1106).[39] In addition, the authors provide two illustrative examples of mistakes. On close review, these mistakes appear transient and model-specific rather than fundamental. Indeed, when I presented these examples to newer models (Claude Opus

35. Lauren Martin et al., *Better Call GPT: Comparing Large Language Models Against Lawyers*, ARXIV (Jan. 24, 2024), https://arxiv.org/html/2401.16212v1 [https://perma.cc/GC33-3H9J]. There are other claims, less open to scrutiny, about artificial intelligence and machine learning systems replacing lawyers in various repetitive tasks. For example, JP Morgan reports of a software that reviews contracts and "reviews approximately 12,000 new wholesale contracts per year and replaced '360,000 hours' of staff time between lawyers and loan officers." Hugh Son, *JPMorgan Software Does in Seconds What Took Lawyers 360,000 Hours*, BLOOMBERG (Feb. 27, 2017), https://www.bloomberg.com/news/articles/2017-02-28/jpmorgan-marshals-an-army-of-developers-to-automate-high-finance?embedded-checkout=true [https://perma.cc/J548-GSUB].

36. Martin et al., *supra* note 35, at 12.

37. *See id.*

38. *Id.*

39. *Id.* at 8. An F-score (or F1 score) is a measure used to evaluate how well a test or model performs, particularly in balancing two key aspects: precision (how many identified items are correct) and recall (how many correct items were identified). *Id.*

3 and Google Gemini Pro), both answered them correctly without any tuning.[40]

A related study evaluated the ability of large language models (LLMs) to serve as "smart readers" that assist consumers with their contracts, privacy policies, and other legal documents.[41] It found that smart readers reduce the length of contracts by 66.9 percent; reduce reading time by 14 minutes and 41 seconds; improve text readability by reducing reading levels from college-level to fifth-grade level; and, finally, do so without compromising the essential information in the original documents.[42] There were failures, but at least some are attributable to the length of the documents, which the LLMs examined could only read in parts (this problem has since been mostly mitigated).[43]

A different study evaluated the performance of LLMs on tax code questions.[44] These questions involve logical complexity (e.g., exploring taxation of vested reversible, transferable shares, and cost basis following a sale of inherited property) but also tend to have a fairly crisp, unique answer. They find that GPT-4 achieves around 77 percent accuracy on questions related to the Code of Federal Regulation (C.F.R.) (with as much as 100 percent on basic tax problems), and 53 percent on general United States Code questions.[45] Critically, for the interpretation of these numbers, the questions involve four to ten possible

40. *Presenting Claude and Gemini with a contract and some context and asking it them to identify the legal issues*, CLAUDEAI, https://claude.ai/chat/77338278-0036-469c-8d22-615c331f8c58 [https://perma.cc/7VTX-9FG4]; GEMINI, https://gemini.google.com/app/560bd35270464077 [https://perma.cc/PL6Q-Y579].

41. *See* Yonathan A. Arbel & Samuel Becher, *How Smart are Smart Readers? LLMs and the Future of the No-Reading Problem*, *in* THE CAMBRIDGE HANDBOOK ON EMERGING ISSUES AT THE INTERSECTION OF COM. LAW AND TECH. (Nancy Kim & Stacey-Ann Elvy eds., 2024) [hereinafter *How Smart are Smart Readers*]; Arbel & Becher, *supra* note 34, at 94–106; *see also* Noam Kolt, *Predicting Consumer Contracts*, 37 BERKELEY TECH. L.J. 71 (2022).

42. *How Smart are Smart Readers*, *supra* note 41, at 1.

43. *Id.* at 10–11; *see also* Kolt, *supra* note 41, at 109–117.

44. *See* John J. Nay et al., *Large Language Models as Tax Attorneys: A Case Study in Legal Capabilities Emergence*, 382 PHIL. TRANS. R. SOC'Y A, October 4, 2023, https://doi.org/10.1098/rsta.2023.0159 [https://perma.cc/HGZ4-CRHG]. Importantly, the design employs retrieval-augmented generation and prompt-engineering techniques. *Id.*

45. I focus here on the few-shot experiment. The relative weakness on the U.S. Code is probably associated with the weakness of the retrieval augment generation method, which is degraded on large corpora of text. For the data taken directly from the data files, see John Nay, *LLM Tax Attorney*, GITHUB, https://github.com/JohnNay/llm-tax-attorney/tree/main/data [https://perma.cc/4GTQ-NXET].

answers, so chance accuracy would only be between 10 and 25 percent.[46]

These results are consistent with the other ones just discussed in that they show a high but inconsistent level of performance. Unfortunately, this study did not include a human benchmark, so we cannot tell how much better or worse these numbers are relative to a professional. However, given that the questions rely on legal and financial fluency, it is safe to assume that they considerably exceed the accuracy levels of the average lay tax preparer, and possibly even of the average non-tax lawyer. This highlights the margin of substitution point: LLMs will replace not your white shoe lawyer, but your neighborhood H&R Block representative or estate planner.

A persistent failure mode in these studies is "hallucinations"—the invocation of non-existent facts, such as precedents, and their presentation as facts.[47] One study found that "legal hallucinations are alarmingly prevalent" in LLMs, occurring 58 percent (ChatGPT using GPT-3.5) to 88 percent (Meta's Llama 2) of the time when asked specific questions about federal court cases.[48] Two factors ameliorate this concern, however. False sources, while a severe problem, can often be checked with relatively little work, often involving a short Internet search for verification. Moreover, while our current understanding suggests that *some* degree of model inaccuracy is inevitable, advances in modeling have shown promise in reducing this problem significantly.[49]

Assessed more holistically, two recent papers tried to determine whether models can act as generalist lawyers by comparing the performance of humans to models on the bar exam. A technical report by OpenAI famously reported that

46. *Id.*

47. *See generally* Jia-Yu Yao et al., *LLM Lies: Hallucinations are not Bugs, but Features as Adversarial Examples*, ARXIV (Aug. 4, 2024), https://doi.org/10.48550/arXiv.2310.01469 [https://perma.cc/M2ZB-M6YF] (demonstrating that nonsensical prompts composed of random tokens can also elicit the LLMs to respond with hallucinations).

48. Matthew Dahl et al., *Large Legal Fictions: Profiling Legal Hallucinations in Large Language Models*, ARXIV 6 (June 21, 2024), https://arxiv.org/abs/2401.01301 [https://perma.cc/Z2AX-39RD].

49. *See* Ziwei Xu et al., *Hallucination is Inevitable: An Innate Limitation of Large Language Models*, ARXIV (Jan. 22, 2024), https://arxiv.org/abs/2401.11817 [https://perma.cc/QC9U-553B]. For mitigation techniques, see S.M. Towhidul Islam Tonmoy et al., *A Comprehensive Survey of Hallucination Mitigation Techniques in Large Language Models*, ARXIV (Jan. 8, 2024), https://arxiv.org/abs/2401.01313 [https://perma.cc/UM7G-JU6W].

GPT-4, at launch and without modifications, has passed the Uniform Bar Exam at the 90th percentile.[50] This puts GPT-4 above the median test-taker.[51] Digging more deeply, Eric Martinez argued that these results are confounded by the timing of the specific comparison exam (February), which included many repeat test-takers with lower scores.[52] Applying several corrections, he concludes that, when compared to exam passers in the July administration, GPT-4 performance is estimated to be at the median of test takers, and bottom 15th percentile on the essay section.[53] This aligns with an earlier study of GPT-3.5 showing that on law school exams GPT-3.5 performed at a C plus level.[54] But even with these more refined analyses, it is clear that GPT-4 is already *adequate* at many tasks, even if adequacy is a fairly low bar.

It is worth bearing in mind that we should be cautious about extrapolating from bar performance and law school exams to real-world performance. At the same time, we also cannot completely discount their relevance given the critical gatekeeping role bar exams play in our regulatory apparatus.[55] Moreover, bar exams offer one of the sharpest ways to test performance differentials between models and highly-motivated, quasi-experts.

Finally, and most importantly, are the real-world studies of AI effectiveness. These are early days, so caution is advised. One study asked a trained lawyer and a GPT-4 model to draft a complaint letter to the employer. Eighty percent of human referees, in a blind test, preferred the model's letter the trained

50. Daniel Martin Katz et al., *GPT-4 Passes the Bar Exam*, 382 PHIL. TRANS. R. SOC'Y A 12 (2024), https://doi.org/10.1098/rsta.2023.0254 [https://perma.cc/BHE2-DB68].

51. The median score in February 2023 was 131.5. *The Multistate Bar Examination (MBE)*, THE BAR EXAMINER, https://thebarexaminer.ncbex.org/2023-statistics/the-multistate-bar-examination-mbe [https://perma.cc/3VU4-QZ5N].

52. Eric Martínez, *Re-evaluating GPT-4's Bar Exam Performance*, *in* INST. L. & A.I., https://.ssrn.com/abstract=4441311 [https://perma.cc/T3Y6-3VWM].

53. *Id.*

54. Jonathan H. Choi et al., *ChatGPT Goes to Law School*, 71 J. LEGAL EDUC. 387, 391 (2022).

55. Kyle Rozema, *Does the Bar Exam Protect the Public?*, SSRN 2–3 (Aug. 22, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3612481 [https://perma.cc/8S69-G87R] (showing that the "bar passage requirements have a modest, negative effect on public sanctions.").

lawyer's.[56] Another study recruited legal aid lawyers, and gave them access to GPT-4, with some of them getting access to other AI tools.[57] The lawyers reported a productivity increase, although they remained worried about these tools. It is worth noting that most participants appreciated GPT-4 but found the other tools fairly unhelpful.[58]

To conclude, if we can provide an estimate of the general capability of AI models in 2024, it will be in the spirit of Martinez's ultimate conclusions.[59] Rigorous testing shows that these systems are fast and cheap, but perform below the level of median lawyers. This conclusion should be made alongside the observation made at the outset—that is, what we see today are tentative floors and ceilings. In fact, the tests discussed not only do not account for future developments, but they also do not fully take advantage of *present* developments, such as deep prompt engineering, fine-tuning on specific datasets, or ensembling.[60]

But perhaps most deeply, the faults we find in LLMs should always account for, and be measured against, the realistic alternatives that ordinary people actually have. A clear lesson from the work of Rebecca Sandefur is that socio-legal research should consider the "importance of doing nothing."[61] As her work shows, the most common responses to a problem are—in order of frequency—some form of self-help, turning to a third-party or a lawyer, and doing nothing.[62] In fact, poor households are twice as likely as middle-income households to do nothing.[63] We are not measuring AI tools in a vacuum; they are responding to a social reality where the poor do nothing or

56. Lena Wrzesniowska, *Can AI Make a Case? AI vs. Lawyer in the Dutch Legal Context*, INT'L J.L., ETHICS, & TECH., at 26 (Aug. 15, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4614381 [https://perma.cc/6YK5-9LY6] (reporting an experiment with 25 legal professionals who favored the models' responses for reasons of tone, clarity, style, argumentation, and evidence use).

57. *See* Colleen V. Chien & Miriam Kim, *Generative AI and Legal Aid: Results from a Field Study and 100 Use Cases to Bridge the Access to Justice Gap*, 57 LOY. L.A. L. REV. 903 (2025), https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?article=3210&context=llr [https://perma.cc/JJV2-9BAC].

58. *Id.*

59. *See* Martínez, *supra* note 52.

60. Pranab Sahoo et al., *A Systematic Survey of Prompt Engineering in Large Language Models: Techniques and Applications*, ARXIV (Feb. 5, 2024), https://arxiv.org/pdf/2402.07927 [https://perma.cc/R8BC-ZP3R].

61. *Id.*

62. Rebecca L. Sandefur, *The Importance of Doing Nothing: Everyday Problems and the Importance of Inaction*, *in* TRANSFORMING LIVES: L. AND SOC. PROCESS 115, 115 (Pascoe Pleasence et al. eds., 2006).

63. *Id.*

rely on their own devices to resolve legal problems. This insight deeply contextualizes the finding that LLMs are "only" as effective as somewhat middling lawyers.

B. AI Uptake

How are people reacting to this new technology? The potential seems quite large, with a Goldman Sachs report from 2023 claiming that AI will automate 44 percent of legal tasks within ten years of broad adoption.[64] Various reports show that law firms are experimenting with AI tools in their practice.[65] For example, Allen & Overy deployed a model called Harvey and quickly found that 25 percent of the firm's practice used the tool daily.[66]

Industry surveys provide a broader picture. A survey in 2023 found that 82 percent of lawyers believed that AI can be applied to legal work, while also showing more hesitancy on the appropriateness of doing so with only 51 percent answering in the affirmative.[67] An American Bar Association survey from 2023 reported usage among 11 percent of lawyers,[68] a Lexis survey reported 16 percent,[69] and a survey of legal aid lawyers found 21 percent usage.[70]

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64. JAN HATZIUS ET AL., *The Potential Large Effects of Artificial Intelligence on Economic Growth*, GLOB. ECON. ANALYST (Goldman Sachs Econ. Rsch., New York, N.Y.), Mar. 26, 2023, at 6, https://www.gspublishing.com/content/research/en/reports/2023/03/27/d64e052b-0f6e-45d7-967b-d7be35fabd16.html [https://perma.cc/77WG-7KAV].

65. Frank Fagan, *A View of How Language Models Will Transform Law*, TENN. L. REV. (forthcoming 2025) (manuscript at 26).

66. Bob Ambrogi, *As Allen & Overy Deploys GPT-based Legal App Harvey Firmwide, Founders Say Other Firms Will Soon Follow*, LAWSITES.COM (Feb. 17, 2023), https://www.lawnext.com/2023/02/as-allen-overy-deploys-gpt-based-legal-app-harvey-firmwide-founders-say-other-firms-will-soon-follow.html [https://perma.cc/9ZYM-DV5H].

67. *New Report on ChatGPT & Generative AI in Law Firms Shows Opportunities Abound, Even as Concerns Persist*, THOMSON REUTERS (Apr. 17, 2023), https://www.thomsonreuters.com/en-us/posts/technology/chatgpt-generative-ai-law-firms-2023 [https://perma.cc/AXK4-8HGJ].

68. Darla Wynon Kite-Jackson, *2023 Artificial Intelligence (AI) TechReport*, AM. BAR ASS'N (Jan. 15, 2024), https://www.americanbar.org/groups/law_practice/resources/tech-report/2023/2023-artificial-intelligence-ai-techreport [https://perma.cc/L9CW-S4GT].

69. LEXISNEXIS, INTERNATIONAL LEGAL GENERATIVE AI REPORT: DETAILED SURVEY FINDINGS 6 (2023), https://www.lexisnexis.com/pdf/lexisplus/international-legal-generative-ai-report.pdf [https://perma.cc/AG4X-H6ER].

70. Chien & Kim, *supra* note 57, at 20.

While these surveys suggest only small-to-moderate adoption, lawyers also see broad room for integration of AI tools into their practice. Among the most common use cases, lawyers reported creating drafts, brainstorming ideas, summarizing complex documents, and assisting in writing emails.[71] It is quite reasonable to expect that, as AI tools develop specifically to meet the needs of law firms, and as more lawyers graduate from law schools after using AI tools, the levels of integration will consistently increase. This is especially true given client pressure to reduce billing through the integration of these tools.[72]

Equally remarkable is the rate of change: slowly, then suddenly. A recent survey on AI adoption in the workplace (not specifically legal) has shown that 75 percent of knowledge workers use AI at work.[73] What is remarkable is that 46 percent of workers started using AI tools less than six months ago (i.e., late 2023).[74] This spells a staggering rate of adoption. It is highly unlikely that law firms will lag behind for much longer.

These findings speak to a number of issues. They show the utility and competence of AI tools, at least when employed by a legal professional. They show the broad range of tasks AI tools can accomplish. They suggest a productivity gain in lawyering which may or may not translate to lower cost or more voluminous legal filings. They further suggest a possible trickle-down effect, where the tools and techniques used by elite lawyers will make their way to lawyers across the country and maybe even be commercialized for retail use. And lastly, they show a path towards integration by legal professionals in their workflows—a path trodden by law firms but that could later be replicated, *mutatis mutandis*, by judicial chambers and court case management systems.

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71. Caroline Hill, *ILTA's Blockbuster Technology Survey for 2023 Reveals All on Collaboration Toos Adoption, Governance, and Plenty on Gen AI*, LEGAL IT INSIDER (Sept. 29, 2023), https://legaltechnology.com/2023/09/29/iltas-annual-tech-survey-2023-reveals-all-on-collaboration-tools-adoption-governance-and-yes-lots-on-gen-ai [https://perma.cc/8GAM-ET7L].

72. Logan Lathrop, *Law Firms Leveraging AI: Maximizing Benefits and Addressing Challenges*, HARV. J.L. & TECH. DIG. (Nov. 20, 2023), https://jolt.law.harvard.edu/digest/law-firms-leveraging-ai-maximizing-benefits-and-addressing-challenges [https://perma.cc/VMJ7-XFSD].

73. *AI at Work Is Here. Now Comes the Hard Part*, MICROSOFT WORKLAB (May 8, 2024), https://www.microsoft.com/en-us/worklab/work-trend-index/ai-at-work-is-here-now-comes-the-hard-part [https://perma.cc/TF5Z-GDFY].

74. *Id.*

C. AI Impact on Access to Justice

Having seen the evidence of uptake of AI in the legal industry, we now turn to examine AI's broader impact on access to justice. Before doing so, it should be recognized that "access to justice" is a large umbrella term. It hides certain political complexities about *whose* access matters,[75] the extent to which this justice is *legal*, and whether access is jeopardized by factors that are formal, substantive, representative, or even psychological.[76] Still, at its core stands the basic proposition that the halls of justice should be open to all and that barriers to justice are regressive in nature, contributing to a regime where the haves come out ahead of the have-nots.[77]

Evaluating the impact of AI on litigation patterns would require some understanding of what these access barriers are. People find difficulty accessing legal justice due to a large number of barriers, some financial, others psychological, political, and social, but many can be reduced, in some way or another, to a cost-based explanation. What's remarkable about AI is that it produces a *holistic* shock to the access to justice problem, one that includes the reduction in the cost of legal services but goes beyond it to the social and psychological barriers as well. Let us examine some of these effects in detail.

Legal sociology teaches the critical importance of upstream filters. "[D]isputes are not things: they are social constructs."[78] For a mischief to be conceived as a legal dispute, it must undergo at least three transformations given by the naming-blaming-claiming (NBC) model.[79] That is, the injured

75. *See, e.g.*, Martha Minow, *Access to Justice*, 2 AM. J.L. & EQUAL. 293 (2022) (focusing on "low-income Americans"); Bob Glaves, *What Do We Mean When We Say Access to Justice?*, CHI. BAR FOUND., (July 11, 2023), https://chicagobarfoundation.org/bobservations/what-do-we-mean-when-we-say-access-to-justice [https://perma.cc/ZW9K-AM67] (focusing on "[a] person or entity facing a legal issue . . ."). The United States Institute of Peace alternates between "individual," "people," and "citizens." *Access to Justice*, *Guiding Principles for Stabilization and Reconstruction: The Web Version*, U.S. INST. OF PEACE (Nov. 1, 2009), https://www.usip.org/guiding-principles-stabilization-and-reconstruction-the-web-version/rule-law/access-justice [https://perma.cc/62S4-S7ES].

76. For example, the United States Institute of Peace emphasizes that access to justice is absent when people "fear" the system or see it as "alien." *Id.*

77. Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 LAW & SOC'Y REV. 95 (1974).

78. Felstiner et al., *supra* note 27, at 631.

79. *Id.* at 633–36.

party must perceive that they were injured; that a recognizable actor injured them (rather than an act of Fortuna); and then be able to conceptualize that accident in terms of a legal assertion of rights against the violator.[80] While data is scarce, sociologists believe that these filters have a dramatic effect: "we know that most of the attrition occurs at [the NBC] early stages."[81] An important facet is distributional; the NBC filter asymmetrically affects poor claimants, as the ability to name, blame, and claim is predicated on access to educational, social, and plain, vanilla capital.[82] If the NBC filter is as powerful as sociologists claim, and if it is as regressive in effect as commonly believed, its removal would have broad implications for both substantive rights and litigation patterns.

Generative AI takes the NBC filter head on. To illustrate the way generative AI would work in practice, I presented a simple query to a model: "[M]y landlord wants me to pay to fix the mold in the basement and I don't know what to do."[83] The model responded with some fairly generic reminders that landlords are responsible for the habitability of their residences, that it is advisable to read the lease, and that it might be appropriate to consult a legal professional. To a lawyer, burdened with the curse of knowledge, this may not seem to be very informative. But this response *quickly* and *cheaply* takes the user through all three of the NBC stages.[84]

This example is humble, perhaps anecdotal, but I believe it points at a deeper, hard to measure but nonetheless radical change in the NBC model. Many people have had a moment where the simple phrasing of their issues by a knowledgeable or experienced acquaintance has helped put their issue in context and motivated them to take an action that they would not have taken otherwise. As AI systems become integrated into our daily flow, as people come to consult them as often as they do Google or other Internet sources, such framing effects can have large impacts on the legal consciousness of ordinary people. Coupled

80. *Id.*

81. *Id.* at 636.

82. *Id.* at 637.

83. *Landlord Mold Responsibility Query*, CHATGPT (Aug. 31, 2024), https://chatgpt.com/share/7dfbd694-4832-45c1-acce-471b94e4500f [https://perma.cc/6QJR-GUMC].

84. *Id.* ("You should not be responsible for paying to fix mold in the basement, as it is typically the landlord's responsibility to ensure the property is habitable and safe.").

with their demonstrated (albeit imperfect) legal fluency, such models could remove many invisible upstream barriers on the way to justice.

Beyond the early stages, AI continues to contribute to every aspect of the litigation journey. After reaching the claiming stage, people will want to consider their legal strategy. Today, people surveyed report that they seek lawyers for legal information in only 29 percent of their cases, often depending on the Internet and family or friends for orientation.[85]

In all those other cases, people can turn to AI systems to help them with legal strategy, including matters such as whether to send a demand letter, talk to a lawyer, write to a government agency, and so on. When individuals turn to AI tools, they can use them as powerful smart readers, tools that not only summarize the information but also make it accessible to one's specific sociolinguistic needs.[86]

The next step in the journey for those who choose litigation consists of producing written materials. The models can draft the required communications, demand letters, complaints, and other litigation materials. If they choose to file pro se, individuals can use AI to produce responses to motions to dismiss, help draft their pleadings, and generally help navigate throughout the legal process. Even questions like "Where do I send my documents?" that may be trivial to a lawyer, could greatly benefit individuals in their journey. Notably, these advantages help even for people who are represented. And while they do not guarantee that they actually win their cases, they give people more access to justice than they ever had before.

There is also considerable scope for more traditional machine learning techniques in the litigation journey. In a recent overview, Frankenreiter and Nyarko offer a broad exploration of the utility of narrower predictive and classification models.[87] They provide persuasive use cases related to automated review of documents to identify privileged information using a model to predict case outcomes, and in turn informing the selection of attorneys and venues.[88] More

85. JUSTICE NEEDS, *supra* note 2, at 160 (showing legal aid services account for additional 8 percent and court provided information for additional 7 percent).

86. *See* Arbel & Becher, *supra* note 34.

87. Jens Frankenreiter & Julian Nyarko, *Natural Language Processing in Legal Tech*, *in* LEGAL TECH. AND THE FUTURE OF CIV. JUST. 70, 70 (David Freeman Engstrom ed., 2023).

88. *Id.* at 74.

generally, the extraction of legal data from troves of documents presents a compelling and highly useful use case.[89] As it comes to barriers in access to justice, consider how such models can help individuals conduct research, choose a court to file in, and more generally, reduce some of the uncertainty of litigation, which itself is a barrier to justice.

In considering the prospects of a litigation boom, we just saw that AI can greatly reduce many access to justice barriers. If the access to justice literature correctly mapped the barriers and their size, we have a strong reason to expect an AI litigation boom in the coming years. Exactly how large it would be is hard to gauge with any accuracy, but if it is true that only 8 percent of the legal needs of low-income people are addressed and that seventy-five million cases every year receive no legal resolution, then the potential is large indeed.[90] Third-party financing ameliorated the liquidity barrier that prevented litigants with strong cases from filing them, and this had the effect of a litigation spike.[91] Moreover, it is not just the raw number of cases that matters; AI systems are excellent providers of *verbose* materials, making it effortless to write briefings and other filings that are long-winded. All of this contributes to a large potential AI litigation boom.

It is true that the quality of some of these filings may not be high, but that's hardly a reason to doubt their adoption and impact. The economic incentives are simply too strong, and the temptation of convenience too large. Even if the quality is not quite there, convenience usually takes the upper hand.

To be sure, there are some trends that would work to mitigate the litigation boom. It is possible that rates of AI-generated filings will be lower, or high only among those already prone to litigate their cases. It is also possible that the higher risk of litigation would lead people to adapt their behavior into greater compliance, or that would-be defendants will settle at earlier stages. AI labs, by pressure of regulation or

89. *Id.* at 75.

90. *See* Sandefur, *supra* note 1; JUSTICE NEEDS, *supra* note 2, at 57; FY 2025 BUDGET REQUEST, *supra* note 3; *Legal Markets*, *supra* note 5, at 1785.

91. U.S. CHAMBER OF COM. INST. FOR LEGAL REFORM, THIRD PARTY FINANCING: ETHICAL & LEGAL RAMIFICATIONS IN COLLECTIVE ACTIONS (Oct. 2020), https://instituteforlegalreform.com/wp-content/uploads/2020/10/Third_Party_Financing.pdf [https://perma.cc/CW26-3SDF] (Third-party financing is meant to alleviate the liquidity constraints of litigants, and its effect is said to be to "increase[] the volume of litigation in any jurisdiction where it is available.").

exposure to unauthorized practice of law rulings, might also try to prevent their models from producing effective materials. Such possibilities exist, but it is unlikely that they will be able to prevent the load on judicial resources that AI systems will have.

Some barriers to justice actually serve salutary purposes, as counterintuitive as it may sound. If we admit that some filings are vexatious, abusive, or meritless, then some filters may serve important social goals in deterring them.[92] To provide one common example, consider debt collection litigation. Despite a common view that these lawsuits are frequently abusive, matters could actually be worse. Professional debt buyers who buy large debt portfolios are effectively deterred by access friction from filing claims for amounts below $500, and often $1,000.[93]

We see, then, that AI has the potential to radically remove filters and barriers on the way to justice. They help litigants at every stage of the litigation journey, from forming the requisite legal consciousness to creating legal strategies and then implementing them. Many of the beneficiaries of these improvements would be low-income individuals, currently priced out of the market for legal services. But it is also recognized that some strategic players, such as debt collection firms, would come to use them to scale up their operations. Both sides will contribute to a single likely outcome: an AI litigation boom.

II. LEGAL THERMOSTATS

An AI litigation boom is the likely consequence of the arguments this Essay just reviewed. Even if one takes a more hedged view, it is clear that the forces that drive the supply of litigation will grow significantly stronger in the presence of AI—and that AI tools are continuously improving. A rapid increase in case volume can have systemic repercussions on substantive justice throughout the legal system. This is partly because

92. To be sure: the fact that barriers to the legal system serve a positive function do not make them net positive. They also filter many truly important cases and their effect is likely regressive. The point here is only that they *also* chill low-quality cases.

93. Dave T., *Debt Collection Agencies: What Is The Minimum Amount They Would Sue For?*, MAN VS. DEBT (Sept. 22, 2022), https://manvsdebt.com/debt-collection-agencies-what-is-the-minimum-amount-they-would-sue-for [https://perma.cc/25N4-5ZVF].

justice delayed is justice denied, and partly because judges are ultimately humans with only so many hours in a day.[94] Bert Huang demonstrated that a rise in administrative cases can lead to "lightened scrutiny" of civil appeals.[95] Not because judges work any less hard—they likely work even harder—but because there are physical constraints on what we can honestly expect of even the most diligent public servant.

What will happen to judicial economy in the age of AI? How can our current system—already burdened by its workload—support a dramatic uptick in the number of cases? This Part lays out the argument that past reactions to litigation surges have been accompanied by adjustments that tended to affect primary and procedural rights.

A useful way to think about judicial economy comes from control theory.[96] The core principle of control theory involves the design and analysis of dynamic systems capable of maintaining desired states despite internal and external disturbances. This is achieved using control components, such as controllers, sensors, and actuators, to endogenously regulate system behavior towards an exogenously set desired state.

Consider the example of a thermostat. The thermostat is programmed with a desired temperature (set point). It continuously measures the actual temperature (process variable) using temperature sensors (sensors) and compares it to the setpoint. If the actual temperature deviates from the setpoint, the thermostat activates the heating or cooling system (actuators) to adjust the temperature back to the setpoint. This feedback loop, where the system's output influences future inputs to maintain the desired state, is a hallmark of closed-loop control systems. This contrasts with an open-loop system, such as a simple fan, which operates without feedback and cannot adjust to changing conditions.

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94. Christoph Engel & Keren Weinshall, *Manna from Heaven for Judges: Judges' Reaction to a Quasi-Random Reduction in Caseload*, 17 J. EMPIRICAL LEGAL STUD. 722, 722 (2020) (finding that "[j]udges working in courts with reduced caseload invested more resources in resolving each case.").

95. Bert I. Huang, *Lightened Scrutiny*, 124 HARV. L. REV. 1109 (2011); *see also* Shay Lavie, *Appellate Courts and Caseload Pressure*, 27 STAN. L. & POL'Y. REV. 57 (2016).

96. For an introductory textbook, see KATSUHIKO OGATA, MODERN CONTROL ENGINEERING (5th ed. 2010), https://wp.kntu.ac.ir/dfard/ebook/lc/Katsuhiko%20Ogata-Modern%20Control%20Engineering-Prentice%20Hal%20(2010).pdf [https://perma.cc/B62V-XV5P]. *See also* ROBERT H. BISHOP & RICHARD C. DORF, MODERN CONTROL SYSTEMS (13th ed. 2022).

Judges, much like operators of a thermostat, play a critical role in regulating the flow of litigation through their control over procedural and substantive doctrines. These doctrines *effectively* act as control mechanisms within the legal system,[97] allowing judges to adjust their strictness or leniency in response to the demands of the judicial environment. Just as a thermostat modulates temperature by activating heating or cooling mechanisms, judges modulate the volume of cases by fine-tuning these legal doctrines. This adjustment process is guided by feedback from the legal system, such as fluctuations in case volume or available judicial resources, and continues until the flow of litigation aligns with the desired equilibrium or setpoint.

Critically, these judicial adjustments inevitably affect substantive rights, raising concerns about the propriety of using legal rights as levers for managing judicial resources.[98] Despite these concerns, it remains evident that such administrative adjustments are a common practice employed by judges to maintain judicial economy.

A few illustrations communicate the point.[99] The most salient is court fees. Courts in the United States charge a variety of fees, including filing fees to initiate a case, fees for serving documents, court reporter fees, jury fees, and fees for accessing court records. Filing fees vary based on the type of case and jurisdiction but can range from under $100 for small claims cases to over $400 for civil cases in federal court.[100] Court fees

97. In a contemporaneous article, Abramowicz considers the use of "automatic stabilizers" to consider doctrinal changes in light of potential productivity changes in lawyering due to AI. Michael Abramowicz, *The Cost of Justice at the Dawn of AI* 61–62 (Geo. Wash. Univ. Legal Stud., Research Paper No. 2024-37, Geo. Wash. Univ. L., Public Law Research Paper No. 2024-37), https://ssrn.com/abstract=4543803 [https://perma.cc/YJ4L-QMT4]. In various ways, his article completes the analysis proposed here.

98. Compare Ronen Avraham & William H.J. Hubbard, *Civil Procedure as the Regulation of Externalities: Toward a New Theory of Civil Litigation*, 89 U. CHI. L. REV. 1 (2022), which emphasizes an externality control view of civil procedure, with Marin K. Levy, *Judging the Flood of Litigation*, 80 U. CHI. L. REV. 1007, 1010–11 (2013).

99. While my focus here is on procedural mechanisms, substantive standards also encode judgments on judicial resources, but this argument is beyond the current scope.

100. For example, in Colorado where the 2024 Ira C. Rothgerber Jr. Conference: AI and the Constitution took place, filing fees range from only thirty-one dollars to nearly three-hundred dollars for small claims and civil cases in federal court. Court filing fees vary from state to state. *See, e.g.*, *List of Fees*, COLORADO JUDICIAL BRANCH (Jan. 2025), https://www.coloradojudicial.gov/self-help/list-fees [https://perma.cc/N4DF-R8VM].

work well when they deter cases whose probability of winning is so low that the potential payout falls below the fee. The *de minimis* rule has a somewhat similar function because it filters out cases with actual values on the premise that their social value is also low. The problem is that fees and these types of rules also screen out socially important and valuable litigation,[101] and the results tend to be quite regressive.[102] We know that even small access barriers can have large effects. Something like the distance from the courthouse, which might seem like a small concern, has a significant effect on the participation rate of the poor—even for life-changing litigation.[103]

Another prime illustration of thermostats comes from pleading standards. Consider *Twombly* and *Iqbal*, two of the most important procedural decisions in modern law.[104] They mark the move from a negative "no set of facts" standard to a positive one requiring a showing of plausibility.[105] This reflects a heightening of pleading standards, and its direct implication is chilling the filing of lawsuits. The motivation behind this reform, in large part, was the growing costs of discovery that were enabled by the old standard.[106] Critics have argued that such changes affect access to justice.[107] The empirical evidence shows that these decisions have had little impact on filing activity by all but pro se plaintiffs.[108] In other words, it is

101. Shmuel I. Becher et al., *Toxic Promises*, 63 B.C. L. REV. 753, 777 (2022).

102. Joseph Shapiro, *As Court Fees Rise, The Poor Are Paying the Price*, NPR (May 19, 2014), https://www.npr.org/2014/05/19/312158516/as-court-fees-rise-the-poor-are-paying-the-price [https://perma.cc/HK7K-XP8S].

103. David A. Hoffman & Anton Strezhnev, *Longer Trips to Court Cause Evictions*, 120 PROC. NAT'L. ACAD. SCI. NO. 2 (2023), https://doi.org/10.1073/pnas.2210467120 [https://perma.cc/27FU-ABD2].

104. Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007); Ashcroft v. Iqbal, 556 U.S. 662 (2009).

105. Edward D. Cavanagh, *Making Sense of* Twombly, 63 S.C. L. REV. 97, 98 (2011).

106. *Twombly*, 550 U.S. at 559 ("[I]t is only by taking care to require allegations that reach the level suggesting conspiracy that we can hope to avoid the potentially enormous expense of discovery . . . ."); *see also* Asahi Glass Co. v. Pentech Pharms., Inc., 289 F. Supp. 2d 986, 995 (N.D. Ill. 2003) (Posner, J., sitting by designation) ("[S]ome threshold of plausibility must be crossed at the outset before a patent antitrust case should be permitted to go into its inevitably costly and protracted discovery phase.").

107. Matthew A. Shapiro, *Distributing Civil Justice*, 109 GEO. L.J. 1473, 1516 (2021) ("[H]eightened pleading requirements and limits on discovery, have been widely criticized for restricting access to justice . . . .").

108. William H. J. Hubbard, *The Effects of* Twombly *and* Iqbal, 14 J. EMPIRICAL LEGAL STUD. 474, 474–513 (2017).

unrepresented individuals who are bearing the brunt of the heightened pleading standard and face more dismissals.

Most procedural thermostats are more indirect. *Lone Pine* orders are an example.[109] These are orders set out in large toxic tort cases that call plaintiffs to present preliminary evidence on questions of injury and causation within a deadline or risk dismissal.[110] These orders are clearly meant as a mechanism "to identify and cull potentially meritless claims."[111] Critics have decried their inconsistency,[112] expressed concern that they turn into "pseudo-summary judgment motions,"[113] and overall worry that they create a burden that is "unrealistic" and are an "exercise [that] is onerous and unrewarding."[114] Nonetheless, courts find them necessary to manage litigation.[115]

Consider next as a procedural thermostat the doctrine of exhaustion of administrative remedies in the context of prisoner's rights.[116] This broadly applied doctrine requires plaintiffs to navigate agency processes to completion before seeking judicial relief. While this doctrine abides by various logics, litigation control is one of them. As a response to the spike in inmate filings of the early 1990s,[117] Congress enacted The

109. *See generally* Nora Freeman Engstrom, *The Lessons of* Lone Pine, 129 YALE L.J. 2 (2019).

110. *See, e.g.*, Claar v. Burlington N.R.R. Co., 29 F.3d 499, 500 (9th Cir. 1994) ("The district court issued a case management order consolidating the twenty-seven cases for pretrial purposes. The order required plaintiffs to submit affidavits describing their exposure to the chemicals they claim harmed them, and affidavits from physicians listing each plaintiff's specific injuries, the particular chemical(s) that in the physician's opinion caused each injury, and the scientific basis for the physician's conclusions.").

111. Baker v. Chevron USA, Inc., No. 1:05-CV-227, 2007 WL 315346, at *1 (S.D. Ohio Jan. 30, 2007).

112. Engstrom, *supra* note 109, at 37.

113. Adinolfe v. United Tech. Corp., 768 F.3d 1161, 1168 (11th Cir. 2014).

114. Engstrom, *supra* note 109, at 52.

115. *See, e.g.*, Acuna v. Brown & Root Inc., 200 F.3d 335, 340 (5th Cir. 2000) ("It was within the court's discretion to take steps to manage the complex and potentially very burdensome discovery that the cases would require.").

116. Kaiser Found. Hosps. v. Superior Ct., 128 Cal. App. 4th 85, 99–100 (2005); Woodford v. Ngo, 548 U.S. 81, 88, 93 (2006) ("[T]he doctrine of exhaustion of administrative remedies requires that where a remedy before an administrative agency is provided by statute, regulation, or ordinance, relief must be sought by exhausting this remedy before the courts will act."); *see also*, Pozo v. McCaughtry, 286 F.3d 1022, 1025 (7th Cir. 2002) ("To exhaust remedies, a prisoner must file complaints and appeals in the place, and at the time, the prison administrative rules require.").

117. Margo Schlanger, *Inmate Litigation*, 116 HARV. L. REV. 1555, 1578–87 (2003) (on the reasons for the spike). Russell Gold highlights that these filters tend

Prison Litigation Reform Act.[118] Senator Orrin Hatch, Chair of the Senate Judiciary Committee, explained: "This landmark legislation will help bring relief to a civil justice system overburdened by frivolous prisoner lawsuits."[119] The Supreme Court likewise noted in *McCarthy v. Madigan* that exhaustion "serves the twin purposes of protecting administrative agency authority and promoting judicial efficiency."[120]

Empirical evidence suggests that the exhaustion requirement does indeed filter out a significant number of potential claims. In a study of discrimination cases filed to the EEOC, Professor Bullock finds that only 16 percent of claims are eventually filed in a federal court.[121] Bullock's study relies on a nature of suit designation by the administrative office of the court. A different estimate can be reached by analyzing the actual text of filed cases. Data collected by Lex Machina shows that from 2009 to the middle of 2017 there were 17,270 lawsuits filed for employment discrimination.[122] During the same time period, the EEOC reports the total number of discrimination-related charges (excluding retaliation) to be 474,220.[123] Of these, 73.66 percent were dismissed or closed with a finding of no reasonable cause, unsuccessful conciliation, or administrative closure. This translates to roughly 349,310 unresolved cases. Conceding that combining datasets involves a great degree of nuance that is missing here, the ratio of *unresolved* discrimination claims to the EEOC that transform into actual lawsuits is 3.6 percent.

Standards of proof also operate as procedural thermostats. Consider what is necessary to prove to win a retaliation claim

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to track claims by marginalized individuals. Russell M. Gold, *Power over Procedure*, 73 ALA. L. REV. 1, 105–06 (2022).

118. Prison Litigation Reform Act of 1995, Pub. L. No. 104-134, §§ 802–809, 110 Stat. 1321 (1995).

119. 141 CONG. REC. S26553 (daily ed. Sept. 27, 1995) (statement of Sen. Orrin Hatch).

120. McCarthy v. Madigan, 503 U.S. 140, 143 (1992).

121. Blair Druhan Bullock, *Frivolous Floodgate Fears*, 98 IND. L.J. 1135, 1160 (2023).

122. Karl Harris, *Lex Machina Launches Legal Analytics for Employment Litigation*, LEX MACHINA (July 12, 2017), https://lexmachina.com/blog/lex-machina-launches-legal-analytics-for-employment [https://perma.cc/GSK6-4GBA].

123. For more on this data, see *EEOC Data Collection*, EEOC (2023), https://www.eeocdata.org [https://perma.cc/U2YT-VHB8]. For code and analysis, see Yonathan Arbel, *Judicial Economy in the Age of AI*, GITHUB (2024), https://github.com/yonathanarbel/Judicial-Economy-in-the-Age-of-AI [https://perma.cc/8FKR-9YJT].

under Title VII of the Civil Rights Act.[124] Spurred by concerns about a deluge of lawsuits, the U.S. Supreme Court decided that the standard of proof would be the but-for test, rather than the more plaintiff-friendly motivating factor test.[125] It argued that "[l]essening the causation standard could also contribute to the filing of frivolous claims, which would siphon resources from efforts by employer[s], administrative agencies, and courts."[126]

A final illustration of procedural thermostats comes from statutes of limitations. There are, by one count, around seven categories of rationales for these laws.[127] One of them is to protect the integrity of evidence, which aims to "prevent[] surprises through the revival of claims that have been allowed to slumber until evidence has been lost, memories have faded, and witnesses have disappeared."[128] But Congress sometimes uses statutes of limitations as a means of controlling the volume and quality of litigation,[129] and so do some courts.[130]

The common usage of these procedural thermostats reveals something general about the use of regulatory frictions in the age of AI. Most of these thermostats work by adding friction to the process. The (reasonable) expectation is that adding friction would deter some people from filing, and the (often unverified) hope is that those unfiled cases are those with lesser merit.[131] The problem is that some of these frictions are quite vulnerable to the introduction of AI tools. The reasons why people fail to meet statutes of limitations requirements are varied, but some

124. 42 U.S.C. §§ 2000(e)(1)–(17).

125. *Id.*

126. Univ. of Tex. Sw. Med. Ctr. v. Nassar, 570 U.S. 338, 358 (2013). For a critique, see Daiquiri J. Steele, *Rationing Retaliation Claims*, 13 U.C. IRVINE L. REV. 993, 1003 (2023) ("While courts should be good stewards of judicial resources, docket reduction should not take precedence over ensuring equal justice under the law."); *see also* Sandra F. Sperino & Suja A. Thomas, *Fakers and Floodgates*, 10 STAN. J.C.R. & C.L. 223, 229 (2014).

127. *See generally* Tyler T. Ochoa & Andrew Wistrich, *The Puzzling Purposes of Statutes of Limitation*, 28 PAC. L.J. 453, 460–99 (1997).

128. Ord. of R.R. Tels. v. Ry. Express Agency, 321 U.S. 342, 349 (1944).

129. *See, e.g.*, Sperino & Thomas, *supra* note 126, at 229 (arguing that "Congress inserted numerous procedural and substantive provisions in Title VII that limit the number of claims" which includes the short time to claim).

130. Ochoa & Wistrich, *supra* note 127, at 495–99.

131. Is it the case that a discrimination lawsuit filed after 320 days is less meritorious than one filed within 290 days from the offending act? Compare, however, the logic expressed in cases such as *Chase Security Corp. v. Donaldson*, 325 U.S. 304, 314 (1945), where the court sees statutes of limitation as tools that "are by definition arbitrary, and their operation does not discriminate between the just and the unjust claim, or the voidable and unavoidable delay."

of them depend on access to lawyering and litigation financing.[132] AI can ameliorate such barriers because it can shepherd people and help them process the wrong they suffered through the NBC process and then assist them in constructing legal documents. Similarly, AI tools can significantly reduce the costs, hurdles, and frictions associated with exhausting administrative remedies. AI-powered tools could quickly identify relevant agencies, help navigate their process, and draft complaints. Finally, the same tools also apply to pleading standards. Plausibility standards do not only filter cases that are implausible. They also filter cases where people were negligent or unskilled in framing their arguments or lacked the requisite polish, which is one reason why the effect is seen among pro se litigants.[133] These filtering functions of pleading standards are fragile to AI tools that can mass produce elaborate briefs for even the most tenuous of cases. What adjustments await when the old methods of adjusting the thermostat stop working?

III. LEGAL STRATEGIES THAT DEAL WITH THE AI LITIGATION BOOM

If the diagnosis by access to justice advocates is correct, the prognosis is clear. To the extent AI tools remove frictions and costs in access to justice, we should expect a commensurate increase in civil litigation. And because the size of the access to justice gap is so large, a doubling in the volume of litigation is not implausible.[134] Moreover, litigation would also adjust on

132. For a psychological account of delay, see Andrew J. Wistrich, *Procrastination, Deadlines, and Statutes of Limitation*, 50 WM. & MARY L. REV. 607 (2008).

133. Hubbard, *supra* note 108, at 512 (2017) (explaining the "differential effect for pro se plaintiffs" as "unsophisticated parties may have a poor sense of whether their facts entitle them to relief, and thus more pro se complaints may be marginal under a plausibility pleading standard.").

134. Ideally, when scholars make prescriptions based on their understanding of the future trajectory of the world—as I do here—they should offer some concrete, refutable predictions on how they perceive future trends to evolve. Here, it's important to acknowledge problems of missing data on present litigation patterns, scope and type of barriers, levels of unmet needs, and so on. Still, if it turns out in five to eight years that there was no discernible and practically meaningful AI effect on litigation patterns, the reader should consider this Essay's central claim disproven. *See also* Yonathan Arbel (@ProfArbel), X (Aug. 22, 2020, 6:17 PM), https://twitter.com/ProfArbel/status/1297327039670898688 [https://perma.cc/S3MY-MGBD].

other dimensions, with verbosity of filings being one expected effect. With more filings that are longer and more intricate, the expected net effect is easily summarized: a litigation boom.

Historically, courts have reacted to threats to judicial economy by adjusting the thermostat through pulling and pushing on the levers available to them. The goal of this Part is to situate thermostat adjustment as one of several possible strategic reactions to the expected AI litigation boom. It concludes with a discussion of the policy I consider most prudent: proactive integration. AI has shortcomings and reliability issues, but, as explained, some are exaggerated and others manageable, and all should be evaluated vis-à-vis the other realistic alternatives we have on the menu. By using whatever time we have left until the AI litigation boom, we can carefully build, test, and deploy AI tools as part of the judicial process.

A. Strategy 1: Legal Thermostats: Fees, Pleading Standards, and Substantive Standards

The first strategy available to courts is the one that repeats the historical pattern: adjustment of the legal thermostat by adapting various doctrines that double as litigation control levers.[135] Judges and judicial administrators may feel it is necessary for them to require even higher fees to offset the demand for legal resources, to demand even more elaborate pleading standards, or perhaps go as far as narrowing substantive rights. These levers can decrease litigation levels,[136] but they also make it harder to vindicate legitimate claims. As every lawyer knows, being right and being able to prove one's case are not the same.

Fees are a crude lever. To meet a litigation surge, judicial administrators can increase filing fees, increase bond requirements, and modify other requirements. Pulling on this lever is almost guaranteed to chill filings and reduce lawsuits. But the downside is obvious: Requiring higher fees will narrow access to those who cannot afford them, not just those who file a low-quality lawsuit. A plausible rejoinder is that if a plaintiff is very likely to win then they should be able to borrow against their future winnings and thus still access the gates of justice.

135. *See supra* Part II.

136. Note, however, that they also invite more accidents, and the net effect on litigation levels depends on a broader set of variables.

The rise of the litigation financing industry would be evidence in favor of this rejoinder. Yet this rejoinder is facile. Not only is access to capital a challenge for many low-income individuals, the risk of losing a meritorious claim is especially threatening if one has loans to repay.[137] In between those liquidity constraints and the "chance of ruin," fees are a very crude tool of filtering lawsuits and have disproportionate impact on the poor.

Pleading standards may seem like a lighter touch intervention.[138] Conceptually they can be thought of as a "proof-of-work" mechanism. Proof of work is familiar from blockchain technology, where it is used to validate claims made by certain network participants.[139] In order to be a trusted validator of blockchain transaction, a blockchain miner has to show that it had solved a complex math assignment. The proof-of-work mechanism adds friction to the process of validating transactions but is a necessary component of the network as it is effective in filtering out fraudsters. But despite their common association with blockchain, such mechanisms are far more general and common than many realize. In the current context, the litigation process can be thought of as having a front end (initial claim processing) and a back end (trial). Litigants, presumably, have a sense of the merits of their case. The proof-of-work mechanism leverages it to set higher front-end requirements. A person who puts in the drafting work and sinks in the necessary cost to meet plausibility standards in the front end likely has a higher estimate of their case than a person who would be discouraged by such costs. This is because the back end costs are only borne by people who would pursue the case to its completion. Thus, we can see the *Twombly-Iqbal* logic as enforcing a proof-of-work mechanism: requiring more work on

137. *See generally* Yonathan A. Arbel, *Payday*, 98 WASH. U. L. REV. 1 (2020).

138. One adjustment, wisely pointed out by the editors of the *University of Colorado Law Review*, is word limits. There is a complex menu of word limits and word regulation for the production of legal materials. *See, e.g.*, FED. R. APP. P. APPENDIX: LENGTH LIMITS STATED IN THE FEDERAL RULES OF APPELLATE PROCEDURE, https://www.ca6.uscourts.gov/sites/ca6/files/documents/rules_procedures/Appendix.pdf [https://perma.cc/DAQ2-DE52]. That word limits are crude tools of managing judicial economy goes without saying: it takes long to write short, to paraphrase Pascal. Blaise Pascal, *Provincial Letters:* Letter XVI, to the Reverend Fathers, the Jesuits, CHRISTIAN CLASSICS ETHEREAL LIBRARY, https://ccel.org/ccel/pascal/provincial/provincial.xviii.html [https://perma.cc/RQP2-HAPK]. Not all can afford to do so, and this tool is not AI-proof as AI systems are excellent summarizers.

139. For an introduction, see Michael Abramowicz, *Cryptocurrency-Based Law*, 58 ARIZ. L. REV. 365, 379 (2016).

the front end but serving the litigants later, thus acting as an effective proof-of-work filter.

Assuming for a moment that this assumption is correct in general, AI tools present a particular problem. Normally, the crafting of effective pleadings requires an effective counsel and an investment of time. A judge can relatively quickly discern plausibility when the case involves low-effort filings. But AI models are incredible writing assistants;[140] they can rapidly and easily convert vague claims to elaborate legal arguments, using perfect grammar and compelling structure. This does not make the claims any more valid, but it does make the production cheaper and later validation harder. Recall that *Twombly-Iqbal* mainly affects pro se litigants, and so they have the greatest opportunity to benefit from such a tool.[141] Ironically, hallucinations can contribute to the facial plausibility of the filings, even when the underlying claim lacks any support.

Consider, as illustration of hallucination, a request that the AI produce a claim for workplace discrimination. Commentators note that plausibility requirements hamper many such claims.[142] The model, however, could simply generate a set of (semi-fictitious) facts and legal arguments that, while not true, will seem true on their face. If the litigant is not careful and scrupulous enough in reviewing them, it could pass initial muster. As a result, filtering mechanisms that rely on proof of work will become less effective than before. This could result in escalation of front-end investments until the point where AI cannot provide sufficient utility.

Finally, judges can simply demand more doctrinally for filings. They can recharacterize strict liability as negligence or, more subtly, change the meaning of reasonable person to meet a desired level of stringency. Such changes can be hard to notice in real time and even harder to causally relate to any thermostat adjustment. Yet, they serve as a way to conserve judicial resources and are available to decision-makers who feel strained by the volume of litigation.

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140. *See generally* Lu Sun et al., *MetaWriter: Exploring the Potential and Perils of AI Writing Support in Scientific Peer Review*, 8 PROCS. OF THE ASS'N FOR COMPUTING MACHIN. ON HUM.-COMPUT. INTERACTION, no. CSCW1-94, Apr. 2024, at 1, https://doi.org/10.1145/3637371 [https://perma.cc/Q829-GKUT].

141. *See supra* Part II.

142. *See, e.g.*, Joseph A. Seiner, *Plausible Harassment*, 54 U.C. DAVIS L. REV. 1295, 1310 (2021).

Whatever form these adjustments take, the worrisome implications are the narrowing of civil rights and, functionally, a large subsidy to wrongdoers who could get away with more socially pernicious activity. Less obvious is the problem that these mechanisms are not very AI-proof, so their effects will be unstable and will require constant adjustments.

To finalize our accounting, the net effect of increased access to justice could be worse delivery of justice. Litigants who can, for the first time, afford to enter the halls of justice, will be denied justice within it. Higher fees, pleading standards, or ever more demanding substantive changes can undo all the access to justice gains AI will bring to underserved litigants. Worse, some of the thermostats will be ineffective or will need to be adjusted further and further because AI can circumvent conventional proof-of-work mechanisms. While thermostat adjustment is the most likely, perhaps even inevitable, trajectory, I believe it will be undesirable to rely on it.

B. Strategy 2: Sit and Wait

Sometimes it is easiest to cross the bridge when you get there, and perhaps policymakers will want to wait a while longer before taking concrete action. Judges and judicial administrators are careful by nature, and a rapidly expanding and advertised technology such as AI raises understandable concerns about unjustified hype and empty promises. Technological uncertainty remains a significant hurdle for any planner. While it is evident that AI is transforming the production of legal materials, the full extent of this shift and its implications—particularly the potential for a litigation boom—are not yet fully understood. Historical precedents with earlier waves of legal technologies, such as LexisNexis and LegalZoom, suggest that whatever changes these technologies brought, the legal system was able to adapt without catastrophic disruptions. Moreover, given the current imperfections in AI technologies, prudence might dictate a period of observation and gradual adaptation. Thus, judges and judicial administrators may wish to wait before they make any adaptations to legal processes, procedures, and doctrines.

Further complicating the decision is the pattern of AI adoption. We do not know yet who the dominant users would be: pro se litigants? white shoe law firms? non-practicing patent entities? automated litigation agents? The answers may affect

our normative evaluation of the technology. Should AI tools follow the trajectory of previous legal tech innovations, we might witness a surge in litigation activities by firms and commercial entities rather than underserved individuals.[143] There is also the potential for negative uses, such as harassment or unmeritorious litigation initiated by individual plaintiffs, which could distort the justice system and detract from its core functions.

Despite these considerations, I argue against a passive stance. Current trends, though based on preliminary data, indicate a clear trajectory toward increased AI integration within legal practices.[144] The unreliability of AI, rather than a deterrent, should be a catalyst for judicious development and testing. This proactive approach would not only allow for refinement of the technology but also prepare the judicial system to harness AI's benefits effectively.

Moreover, even assuming the legal system could absorb the impact of AI without significant structural changes, proactive adaptation could still soften the shock of the transition and enhance its efficiency and effectiveness. Innovations such as video conferencing and digital legal research have already demonstrated the benefits of integrating technology in legal processes even when there was no imminent threat to the volume of litigation.[145]

In conclusion, while the allure of a cautious approach is understandable given the unknowns associated with AI, there are strong reasons to adopt a more proactive engagement. This strategy ensures that the judicial system is not merely reactive but remains at the forefront of technological integration, enhancing its capacity to deliver justice effectively.

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143. *See* Engstrom & Engstrom, *supra* note 11.

144. *See supra* Section III.E.

145. Victor D. Quintanilla et al., *Accessing Justice with Zoom: Experiences and Outcomes in Online Civil Courts*, MAURER SCH. OF L., at 2 (2023), https://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=4087&context=facpub [https://perma.cc/S9U8-5UKF] (finding evidence that a non-represented plaintiff expressed preference for remote hearings, and other evidence of procedural and distributional justice). There are also problems that are associated with remote justice. *See, e.g.*, Alicia Bannon & Janna Adelstein, *The Impact of Video Proceedings on Fairness and Access to Justice in Court*, BRENNAN CTR. FOR JUST. (Sept. 10, 2020), https://www.brennancenter.org/our-work/research-reports/impact-video-proceedings-fairness-and-access-justice-court [https://perma.cc/A848-DZEN].

C. Strategy 3: Ban and Mark

There is a growing sentiment, mostly expressed to me in private conversations with judges, that generative AI should be banned in the courtroom. Alternatively, some favor a requirement that lawyers disclose when they are using AI-generated materials.[146]

The judicial skepticism is understandable, but I believe it is wrong to follow it in the long term. A ban would kill our ability to democratize access to the justice system in the crib.[147] It would perpetuate the asymmetries that currently exist, working disproportionality against those who have the most to benefit from the technology.

Disclosure regimes are a hopeless enterprise. As far as we know, and to the displeasure of school administrators everywhere, there is no *reliable* technology that can watermark AI-produced texts. Detection of AI-generated texts is probabilistic and error-prone, and it may—at best—only cover the least sophisticated of its users.[148] The share of those hapless users is small, and their culpability is no worse than their more sophisticated peers. But most importantly, the expected level of AI integration in law practices suggests that disclosure will be as meaningful as requiring litigants to disclose if they used a search engine or a computer. It will communicate no actionable information to the judge and will become as helpful as "here comes the plaintiff" and other legal boilerplate. Overall, I would caution those judges and judicial administrators who, in good faith, worry about rising rates of litigation against trying a hopeless "ban-and-mark" regime.

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146. Maura R. Grossman, Paul W. Grimm & Daniel G. Brown, *Is Disclosure and Certification of the Use of Generative AI Really Necessary?*, 107 JUDICATURE 69, 70 (2023), https://judicature.duke.edu/articles/is-disclosure-and-certification-of-the-use-of-generative-ai-really-necessary [https://perma.cc/4ZYP-WB7S] (Judge Michael M. Baylson was in favor, issuing standing orders requiring lawyers to disclose use of AI).

147. On the democratizing arguments, see *supra* Section I.C.

148. *See, e.g.*, Manshu Zhang et al., *The Three-Dimensional Porous Mesh Structure of Cu-Based Metal-Organic-Framework—Aramid Cellulose Separator Enhances the Electrochemical Performance of Lithium Metal Anode Batteries*, 46 SURFACES & INTERFACES 104081 (2024) (retracted), https://doi.org/10.1016/j.surfin.2024.104081 [https://perma.cc/943F-DKML] (a retracted article which opens its introduction with "Certainly, here is a possible introduction for your topic . . ."). The original version is stored in Reddit, https://i.redd.it/zq0raef1aaoc1.jpeg [https://perma.cc/G5AN-QZTN].

D. Strategy 4: Massive Funding

Justice costs money. If the problem of judicial economy is that there is a growing demand for justice—as I have argued throughout—then clearly the most direct way of solving the problem is by increasing the resources available to the legal system.

How many resources should go to justice, and at the expense of what other social programs, is a political question that exceeds my proffered expertise. What is meaningful for evaluating the prospects of a budget increase, however, is the estimated size of funding. If there is room for a two-fold or a five-fold increase in the volume of litigation, then this gives a general sense of the magnitude of the budget required to handle it. Of course, not all—not even the majority—of this potential will translate into lawsuits. Society adapts to technological change along many dimensions, and there are many other ways to avoid legal disputes. But the realism of a budget increase that would even approximately double the number of judges and judicial administrators appears quite tenuous in our current political reality.

One fact that lends *some* realism to this proposition is that civil legal aid benefits today from roughly $2.7 billion in overall budgets.[149] If one feels particularly bullish on AI technology and its ability to replace legal aid through its automation, perhaps it is conceivable that some of these budgets could be redirected towards the legal system.[150]

Yet, even if AI is so potent as to completely substitute the need for legal aid (a tenuous proposition, given that legal aid does more than drafting briefs), there is not enough money there. The federal court system alone is budgeted at $9.4 billion per year, so even if were to somehow completely dismantle the legal aid project, we could at most afford a 30 percent increase in

149. ALAN W. HOUSEMAN, INT'L LEGAL AID GRP., LEGAL AID IN THE UNITED STATES: AN UPDATE FOR 2023 (May 2023), https://clp.law.harvard.edu/wp-content/uploads/2023/05/USA-National-Report-ILAG-Conference-2023.pdf [https://perma.cc/94B8-KAL7]. According to the Legal Services Corporation (LSC) data from 2022, the total funding for LSC-funded organizations was $1.72 billion. BY THE NUMBERS 2022, *supra* note 11, at 13–14.

150. Houseman, *supra* note 149, at 4 (noting that since 2000, LSC has funded more than 859 projects totaling over $81 million in Technology Initiative Grants.).

funding.[151] But in a world where AI is sufficiently competent to perform as well as legal aid, the rise in demand will be much larger. At best, we would only scratch the surface of demands on the legal system, while hollowing out legal aid.

E. Strategy 5: Integration

If none of the above strategies can effectively and equitably meet the AI litigation boom, the legal system still has one other important course of action available to it: integration. The objective would be to implement AI in all aspects of the legal process, amplifying the productivity of judges and clerks, which would allow them to work at larger-than-ever scales. If done correctly, this strategy would offer a significant stretching of existing judicial resources, allowing judges to meet increased demand without resorting to adjustment of legal thermostats or sacrificing justice in individual cases.

Rather than a hypothesis, this seems to be organically happening. Judges have started admitting to using generative AI to draft opinions, although the backlash suggests that many others are still in hiding.[152] One British judge made the point succinctly and forcefully: "It is useful, and it will be used."[153] Likewise, Richard Re believes that judges will invariably find AI tools to be "irresistibly attractive."[154]

Most remarkably, in a groundbreaking decision, Judge Newsom of the Eleventh Circuit has written an opinion relying on AI for "generative interpretation." Drawing on our academic work on generative interpretation, he said:

> Those, like me, who believe that "ordinary meaning" is *the* foundational rule for the evaluation of legal texts should consider—*consider*—whether and how AI-powered large

151. ADMIN. OFF. OF THE U.S. CTS., THE JUDICIARY: FISCAL YEAR 2025 CONGRESSIONAL BUDGET SUMMARY, at i (Feb. 2024), https://www.uscourts.gov/sites/default/files/fy_2025_congressional_budget_summary.pdf [https://perma.cc/XS66-9ZSJ].

152. Hibaq Farah, *Court of Appeals Judge Praises 'Jolly Useful' ChatGPT After Asking It for Legal Summary*, THE GUARDIAN (Sept. 15, 2023), https://www.theguardian.com/technology/2023/sep/15/court-of-appeal-judge-praises-jolly-useful-chatgpt-after-asking-it-for-legal-summary [https://perma.cc/33W8-EMTM].

153. *Id.*

154. Richard Re, *Artificial Authorship and Judicial Opinions*, 92 GEO. WASH. L. REV. 1558, 1561 (2024), https://www.gwlr.org/wp-content/uploads/2024/12/92-Geo.-Wash.-L.-Rev.-1558.pdf [https://perma.cc/UVS6-YSF5].

> language models like OpenAI's ChatGPT, Google's Gemini, and Anthropic's Claude might—*might*—inform the interpretive analysis.[155]

Appeal notwithstanding, there is also significant resistance to integration, at least in its stronger forms. While scholars such as Eugene Volokh express cautious optimism about the automation of judgments—that is, "robo-judging"[156]—others are less sanguine. Aziz Huq speaks of a right to a "human decision,"[157] and experiments suggest a perceived fairness gap between human and artificial adjudicators.[158] These objections rely in part on empirical objections concerning the capacity of these systems to produce judgments that are as good as a human judge in terms of accuracy, bias, and gameability. They also draw on sensible ethical concerns regarding the ethics of adjudication by those who are neither citizens nor humans. The former set of problems is amenable to practical solutions, while the latter can be mostly remedied by including human judges who are in the loop.[159]

When we talk about integration, I would like to suggest that robo-judging should not be a central frame of thinking about the technology. While it is provocative and exciting, for sure, ultimately robo-judging is a distraction from the much more mundane but nonetheless powerful utility of AI in the service of justice. In the remainder of this Section, I want to highlight a few of these modalities.

The immense volume of text generated in litigation is staggering, and this will likely increase as parties begin leveraging advanced AI tools to augment their legal processes. To mete out justice, we need some way to compress all this

155. Snell v. United Specialty Ins. Co., 102 F.4th 1208, 1221 (11th Cir. 2024) (Newsom, J., concurring) (citing Yonathan A. Arbel & David A. Hoffman, *Generative Interpretation*, 99 N.Y.U. L. REV. 451 (2024), https://www.nyulawreview.org/wp-content/uploads/2024/05/99-NYU-L-Rev-451-1.pdf [https://perma.cc/3Y4S-LDH7]).

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

157. Aziz Z. Huq, *A Right to a Human Decision*, 105 VA. L. REV. 611 (2020); *see also* Kiel Brennan-Marquez & Stephen E. Henderson, *Artificial Intelligence and Role-Reversible Judgment*, 109 J. CRIM. L & CRIMINOLOGY 137 (2019).

158. Benjamin Minhao Chen, Alexander Stremitzer & Kevin Tobia, *Having Your Day in Robot Court*, 36 HARV. J. L. & TECH. 127 (2022).

159. Huq, *supra* note 157, at 4; *see also* Brennan-Marquez & Henderson, *supra* note 157, at 149.

information. In other words, we need a summarization machine, and it turns out that generative AI excels at this task.[160]

Document summarization is among the most explored areas within natural language processing using AI. This technology is divided into two main types: abstractive and extractive summarization. Abstractive summarization creates a new, condensed version of the text that conveys the core meaning of the text, potentially using its own words. Extractive summarization, on the other hand, identifies and compiles key phrases directly from the text.[161] Both approaches can significantly aid judges by highlighting essential information and reducing the amount of material they need to personally review.

An abstractive summary can direct a judge's attention to critical parts of a document, effectively serving as a sophisticated, automated, and high-level summary of a document. A file management system could mark a filed document as "exhibit 182A," the text "Sale agreement of the Tuscaloosa house." Unlike summaries written by any of the litigants, the AI has no incentive to highlight a specific frame—it seeks to offer a robust, useful summary to the best of its ability.[162]

Extractive summaries, on the other hand, are invaluable for identifying crucial elements within the text. An extractive summary of the sale agreement may include elements such as "seller shall deliver the property on or before January 1st." It could also include specific pieces of evidence, legal authorities, or specific quotes. These summaries are particularly useful in scenarios where precise language and specific details are pivotal.

Both abstractive and extractive summaries have their uses. To orient oneself in a stack of documents, abstractive summaries

160. *See generally Text Summarization*, PAPERS WITH CODE, https://paperswithcode.com/task/text-summarization [https://perma.cc/AV3F-KPF3] (presenting benchmarks on text-summarization tasks).

161. Nikolaos Giarelis, et al., *Abstractive vs. Extractive Summarization: An Experimental Review*, 13 APPLIED SCI. 7620 (2023).

162. The sort of biases that afflict AI systems are often irrelevant to summarization tasks. There are some implicit biases that can creep in nonetheless (such as assumptions that a doctor is male), but clerks may well be subject to similar biases and, in any event, the impact on any actual decision is highly attenuated. What is perhaps most important is that the models have no stake in the case at hand.

are essential; to locate leading phrases and arguments within a document, extractive summarization is powerful.

The implementation of such summarization technologies in case management systems is straightforward and cost-effective. It is expected to be as simple as any large automation project is, albeit, more costly and complicated than anticipated, but ultimately solvable.[163] It would be quite possible to integrate these systems at the case management level, ensuring that every submitted document includes an automated summary and extraction of key parts. This allows effective attention management on the part of the judge, a way to easily sort and find the appendix dealing with the copy of the sale contract the parties mentioned or the one document that covers Consumer Price Index adjustments.

There is a more advanced application, commonly known as "document Q&A." Documents, by their nature, are static entities. They contain information, and one has to read through the document to extract it. This becomes unwieldy when dealing with a lengthy document. Search engines offer a greater degree of interactivity. They allow one to filter pieces of a document based on keyword searches. Such keywords can be as simple as searching for "choice of law," or more advanced such as a search for "executive* /w3 decision?" Once located, the system will highlight the relevant text and orient attention to all the relevant "hits." The user is expected to sort through them and find the relevant one.

Using document Q&A is the next step.[164] It allows the judge to ask *specific questions* about the document, and, rather than using arcane keywords, the judge can use *ordinary language*. That is, after the AI ingests a filing, the judge can simply ask: "does this brief mention a meeting in Switzerland?"; "does the plaintiff mention the statute of limitations?"; or "list the executive decision the document mentions and what it means." The AI will then diligently provide an answer based on the content of the document. The answer itself will be in natural language, for example, "this document mentions a meeting in

163. Hofstadter's Law states: "It always takes longer than you expect, even when you take into account Hofstadter's Law." DOUGLAS R. HOFSTADTER, GÖDEL, ESCHER, BACH: AN ETERNAL GOLDEN BRAID 152 (20th anniversary ed. 1999).

164. On the use of document Q&A for legal applications, see Xiaoxian Yang et al., *Large Language Models for Automated Q&A Involving Legal Documents: A Survey on Algorithms, Frameworks and Applications*, 20 INT'L J. WEB INFO. SYS. 413 (2024).

Zurich between the CEO of Acme and the CFO of Alpha, although it doesn't discuss its purpose." Because the interface is simply plain language, it requires little training to learn how to use document Q&A.

Using document Q&A is a radical improvement over our current means of interacting with documents. Search engines direct users to not think about the question they want to answer but rather on what queries will most likely produce the context that will answer them. We search for "choice of law" not because we necessarily care about the term, but because we think the term will be in the context of the clause that determines the choice the parties have made. Along the way, we trudge along many irrelevant mentions of the term. Document Q&A allows the user to skip this stage. The judge can simply ask "what is the choice of law in this document?"

Document Q&A methods are not an all-knowing sage, of course. It is perhaps most productive to think of them as an always on-call, diligent, and earnest attorney of middling ability. They will try but often fail to answer complex or subtle legal questions, and their responses may be partial or unintentionally misleading. LLMs are not very good at saying "I don't know" or "I'm really not sure," and they may easily overstate the level of confidence in their answers. When they are fed very long documents, their ability degrades, which means that inexperienced users can expect too much of the LLMs. Users may also be tempted to use them in ways that push their limits, like asking "What are the credible claims in this document?" which relegates actual judgment to the LLM. Critically, LLMs will sometimes hallucinate facts that are not true. The model might say that the parties decreed Tuscaloosa, Alabama, as their choice of law, even though the agreement contains no such reference.

Both of these problems are important, but they only repeat the time-worn lesson that all tools have limitations rather than posing any fundamental objection to using tools. There are some helpful correctives to many of their shortcomings. In most general terms, these issues can be dealt with in ways similar to how judges currently utilize legal clerks and assistants. Judges benefit from their assistance yet maintain ultimate responsibility for decision-making. Judges learn which parts of the work they can entrust to their assistants, what type of quality assurance checks they must run, and which parts they should do only by themselves. If a model says that the meeting

took place in Zurich, and this fact is important, then the judge should verify it before proceeding to rely on this stated fact. Even though such measures take away some of the efficiencies of both clerks and AI models, they still allow the judge to focus their scarce attention efficiently. As is the case for human clerks, the net time saving from AI would generally be positive—and if not, the judge could choose not to use them.

Confidentiality is another concern. Many of the models are currently hosted in the cloud.[165] It will be inappropriate to share confidential information, especially when there is a risk that the owner of the model, often a commercial firm, will use the data for future model training. There are a few evolving solutions: on-premise model hosting, data encryption and salting, secure cloud services with proper data licensing requirements, and the like.[166] Several AI labs are developing enterprise solutions that are sensitive to such concerns.[167] Additionally, the formulation of legal standards tailored to the use of AI in the legal sector is critical to addressing these privacy issues and enhancing trust in AI applications.

A stronger form of integration relies on the aforementioned generative interpretation. LLMs are trained to develop complex representations of human language based on training with datasets that encompass trillions of words. These datasets are far more exhaustive than any amount of text a single human can read in a lifetime of dedicated seclusion. Recent work has shown that judges can use AI as a tool of textualist interpretation, drastically improving on tools such as dictionaries or corpus linguistics, not to mention the judge's private language sense.[168] Using generative interpretation a judge can probe the model's internal language representation and thus access a cheap, effective, and reproducible mode of ascertaining meaning.

165. As of today, all the leading LLMs are proprietary. *LMSYS Chatbot Arena Leaderboard*, HUGGING FACE (2024), https://huggingface.co/spaces/lmsys/chatbot-arena-leaderboard [https://perma.cc/K3HS-TBDD]. The competitive open-source models are large enough to need hardware normally not available on consumer-level computers.

166. *See generally* Justin Winter, *AI & LLM Data Privacy and Data Sovereignty: Navigating the Challenges*, AMAZEE.IO (July 2, 2024), https://www.amazee.io/blog/post/ai-llm-data-privacy-protection [https://perma.cc/LL9X-CM93].

167. *See, e.g.*, Balaji Chandrasekaran et al., *Foundational Data Protection for Enterprise LLM Acceleration with Protopia AI*, AWS: AWS MACH. LEARNING BLOG (Dec. 5, 2023), https://aws.amazon.com/blogs/machine-learning/foundational-data-protection-for-enterprise-llm-acceleration-with-protopia-ai [https://perma.cc/PZ6D-WAKY].

168. Arbel & Hoffman, *supra* note 155.

Moreover, LLMs are designed to account for meaning *in context*. Unlike any dictionary, LLMs can easily distinguish between various plausible usages of a specific word based on its broader context. The word 'run' has no fewer than 645 meanings, and a dictionary would present them all as equiprobable definitions.[169] An LLM will have no trouble distinguishing between meanings based on context. This is why some believe that generative interpretation is the future of textualist interpretation.[170]

There are some dangers involved in careless integration into the judicial practice, as recently developed by Richard Re's analysis of AI as an opinion-drafting co-pilot.[171] As noted here, there are clear efficiencies inherent in a drafting tool that can help a judge draft an opinion quickly, and today's technology is akin to adding a cadre of enthusiastic but somewhat dull clerks. Re's account, while acknowledging this utility, also raises red flags about their effect on the nature of the adjudicative role. The point is that in separating opinion writing from adjudication something—potentially very important—is lost. In Re's retelling, broad adoption will dull the edge of writing opinions, the rhetoric will turn to sophistry, the judgments will sound uniform with a majoritarian bent, judicial ownership will become diffused, and deliberation and reason will decline.[172] Moreover, the consumers of judicial opinions—the public and legal professionals—will come to view such opinions with a certain distaste: a fancy form of lifeless boilerplate.

While Re is critical of the way models are utilized, he is careful enough not to romanticize extant practices. He readily acknowledges that even today judges do not craft each decision from first principles and that they rely on precedent and clerks.[173] But he does view AI as a threat to the authenticity of the process.[174]

Re's arguments are reasonable enough and become ever more reasonable when integration of AI drafting becomes closer

169. Simon Winchester, *A Verb for Our Frantic Times*, N.Y. TIMES (May 28, 2011), https://www.nytimes.com/2011/05/29/opinion/29winchester.html [https://perma.cc/5F5M-ETTZ].

170. *See* Arbel & Hoffman, *supra* note 155.

171. Re, *supra* note 154.

172. *Id.*

173. Drawing on Posner, Re reminds us that the integration of previous waves of technology have already led to tensions. RICHARD POSNER, THE FEDERAL COURTS: CRISIS AND REFORM 102 (1985); *see also* Re, *supra* note 154, at 5.

174. *Id.*

to the robo-judging end of the spectrum. It has no real bite on the other extreme where AI is more akin to an overly engineered spell-check. Integration into authorship that helps the judge spot typos, come up with examples or metaphors, or offer variations on formulaic language are all activities that are barely exposed to his critique. Perhaps having AI suggest legal arguments on specific issues nears the other extreme, but the point is that there are simply so many steps along this spectrum where AI is either non-problematic or that, all things considered, its integration is still a net benefit. Judges should be acutely aware of the dangers of this road, but given the immense practical pressure that looms ahead, they should not abandon it altogether.

* * *

I have outlined here a few modalities of reaction to the AI moment and emphasized various modes of integrating AI into the legal process. Taken not as a method of outsourcing adjudication to algorithms, and in clear view of the limitations of AI, the recommendation that emerges from this analysis is one that favors integration. By integrating AI into the judicial process, judges will enjoy levels of support that are necessary to meet the AI moment and the potential sharp increase in litigation.

Some people are not comfortable putting algorithms near human-life affecting decisions. The message of this Essay is directed especially at them. Short of massive funding runs, the real decision the AI moment presents is not *whether* but *between* algorithms of sorts. As AI increases access, it will strain judicial resources. Judges may find themselves pushed to adjust the only thermostat available to them. Worse, politicians may seize the moment to adjust the thermostat against plaintiffs they disfavor on political grounds. They will say that this group uses AI to leech resources from those who really need them (and happen to belong to their favored groups).

Adjusting the legal thermostat by increasing fees, limiting substantive rights, and increasing standards of pleadings, among other similar means, effectively creates a blind algorithm. These measures deny access to people who can't meet them regardless of their need, their eventual ability to meet the requirements, or their case's merits. Such thermostat adjustments are often regressive and, ultimately, jeopardize

substantive and procedural rights, reinstating the barriers to justice that we can finally topple. A nuanced and thoughtful mode of integration involves algorithms, but ones that are artificially intelligent, and with thoughtful integration, could far outdo mechanical and potentially politicized thermostat adjustments.

IV. CONCLUSION

This Essay wrestles with what might seem at first blush to be an optimistic question: What if we could solve the access to justice problem? Implicit in much of the scholarship is the notion that reducing barriers would naturally translate to more justice for all. Here, we have adopted a more skeptical approach, based on control theory and historical lessons from past waves of litigation spikes. Commentators are not wrong because they think AI will reduce barriers; in fact, they might be underestimating how many barriers will be reduced or even dismantled. What they should see more clearly is that access to justice is just a prelude to the main act: the delivery of justice. AI will potentially lead to a litigation boom. As historical examples such as the Prison Litigation Reform Act remind us, the reaction to new demands on the legal system can result in the winnowing down of procedural and substantive rights.

I proposed here that an appropriate response is the proactive integration of AI tools into the legal process. At the moment, there is understandable hesitancy given stereotypes about the ability of machines to perform legal tasks, integration costs, and the model's bias and potential lack of reliability. Such arguments are both real and exaggerated. Bias and unreliability can be addressed effectively by careful integration into the lower-stakes aspects of the process, where verification is available. More importantly, relative to other alternatives such as substantive hurdles, which bluntly and mechanically suppress litigation, AI tools can offer considerable improvement.

This opens the stage for a new wave of tool-building scholarship coming from, and directed at, lawyers. Now that scholarship has established many of the shortcomings of algorithms and AI, what positive use cases are there? How could tools be developed with attention to their inherent limitations? There is a small wave of scholarship that tries to do that, but it is led by technologists and is published outside of law reviews. Legal scholars, cooperating with judges and judicial

administrators, should take the lead and collaborate with technologists.

Ultimately, judicial economy considerations pose a hard, but urgent, choice: We must decide how much justice we want to purchase and whether we want to stretch these dollars further by providing automation tools to judges.