

INTRODUCTION

Writing about artificial intelligence (AI) presents challenges. Indeed, the field has evolved rapidly and offers the potential for significant paradigm changes,¹ making it the focus of much academic and other writing.² But it can be hard to pin down exactly what AI *is*. Outside of “general description[s], no commonly agreed-upon definition of AI exists.”³ “AI” includes “technology . . . [that] focuse[s] upon automating specific types of tasks: those that are thought to involve intelligence when people perform them.”⁴ And the term is a catchall shorthand for different types of programs, especially machine learning algorithms,⁵ such as large language models⁶ (LLMs). Less technically, but perhaps more pervasively, AI is a “hot marketing term[]” that capitalizes on uncritical acceptance of and interest in promises about exciting new technology.⁷ Models labeled “AI” today are distinct from *autonomous* artificial intelligence,⁸ sometimes described as “artificial general intelligence”⁹ (AGI). Regardless of which form of “AI” is under discussion, AI’s penetrating impact and as yet uncertain consequences implicate

¹ See, e.g., Janna Anderson & Lee Rainie, *As AI Spreads, Experts Predict the Best and Worst Changes in Digital Life by 2035*, PEW RSCH. CTR. (June 21, 2023), <https://www.pewresearch.org/internet/2023/06/21/as-ai-spreads-experts-predict-the-best-and-worst-changes-in-digital-life-by-2035> [<https://perma.cc/AJP5-GACU>].

² See NESTOR MASLEJ ET AL., STAN. INST. FOR HUM.-CENTERED A.I., ARTIFICIAL INTELLIGENCE INDEX REPORT 2024, at 31 (2024), https://aiindex.stanford.edu/wp-content/uploads/2024/05/HAI_AI-Index-Report-2024.pdf [<https://perma.cc/238M-RF3Q>] (“Between 2010 and 2022, the total number of AI publications nearly tripled, rising from approximately 88,000 in 2010 to more than 240,000 in 2022.”).

³ Carla L. Reyes, *Foreword: Artificially Intelligent Innovation and Justice*, 27 SMU SCI. & TECH. L. REV. 3, 4 (2024).

⁴ Harry Surden, *Artificial Intelligence and Law: An Overview*, 35 GA. ST. U. L. REV. 1305, 1307 (2019).

⁵ See Hasan Mahmud et al., *What Influences Algorithmic Decision-Making? A Systematic Literature Review on Algorithm Aversion*, TECH. FORECASTING & SOC. CHANGE, Feb. 2022, art. 121390, at 2 (defining algorithms as “automated process[es] that [make] decisions . . . us[ing] data, statistics, and . . . computing resources” absent human intervention). “[T]erms such as artificial intelligence and machine learning” may be “used in exchange for algorithms in the context of algorithmic decision.” *Id.* at 4; see also Surden, *supra* note 4, at 1311 (explaining what machine learning is).

⁶ “LLMs are AI systems that are designed to understand and generate human language . . .” Harry Surden, *ChatGPT, AI Large Language Models, and Law*, 92 FORDHAM L. REV. 1941, 1942 (2024).

⁷ Michael Atleson, *Keep Your AI Claims in Check*, FTC: BUS. BLOG (Feb. 27, 2023), <https://www.ftc.gov/business-guidance/blog/2023/02/keep-your-ai-claims-check> [<https://perma.cc/CR9F-2LMF>].

⁸ Luciano Floridi, *AI as Agency Without Intelligence: On ChatGPT, Large Language Models, and Other Generative Models*, PHIL. & TECH., Mar. 2023, art. 15, at 1 (“The most famous LLMs . . . do not think, reason or understand; they are not a step towards any sci-fi AI; and they have nothing to do with the cognitive processes present in the animal world . . .”).

⁹ See, e.g., MILTON MUELLER, INTERNET GOVERNANCE PROJECT, THE MYTH OF AGI 4, 7 (2024) (summarizing “that when computer scientists talk about creating an AGI, they are really talking about creating life,” *id.* at 7).

complex societal issues, and writing about AI must often grapple with these precarious and broad considerations.¹⁰

The imagined potential of AI is classically awesome: inspiring both “dread” and “wonder.”¹¹ AI could improve biological research to “directly and unambiguously improve the quality of human life,” “cause a revolution in neuroscience” that could lead to cures for “most mental illness,” and, among many other possibilities, facilitate “fairness, cooperation, curiosity, and autonomy.”¹² Meanwhile, the reality of AI ranges from banal¹³ to “dystopian.”¹⁴ More than half of Americans surveyed reported “feel[ing] more concerned than excited about the increased use of artificial intelligence” in 2023.¹⁵ This trend may be related to the real and ongoing harm resulting from AI as applied in everyday life — for example, by delegating certain decisions to AI, government agencies “can cut the in-home care of 4,000 disabled people in Arkansas . . . , falsely accuse 40,000 people in Michigan of Unemployment Insurance fraud, or subject 4,000,000 people in Texas to . . . a labyrinthine

¹⁰ See, e.g., *infra* ch. IV, pp. 1633–34; *infra* ch. V, pp. 1664–65.

¹¹ *Awe*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/awe> [<https://perma.cc/TH4U-E63K>]; see also, e.g., Sam Altman, *Planning for AGI and Beyond*, OPENAI (Feb. 24, 2023), <https://openai.com/index/planning-for-agi-and-beyond> [<https://perma.cc/VZE9-XE25>] (“Successfully transitioning to a world with superintelligence is perhaps the most important — and hopeful, and scary — project in human history.”).

¹² Dario Amodei, *Machines of Loving Grace*, DARIO AMODEI (Oct. 2024), <https://darioamodei.com/machines-of-loving-grace> [<https://perma.cc/Y3HX-E7QQ>]; see also, e.g., Thorsten Rudroff, Perspective, *Artificial Intelligence as a Replacement for Animal Experiments in Neurology: Potential, Progress, and Challenges*, 16 NEUROLOGY INT’L 805, 805 (2024) (exploring how replacing animal experiments with AI in neurology research may address the “growing scientific, ethical, and economic challenges” of such research).

¹³ See, e.g., Parmy Olson, Opinion, *Mark Zuckerberg Wants to Feed You More AI Slop*, BLOOMBERG L. (Nov. 4, 2024, 12:00 AM), <https://www.bloomberglaw.com/product/blaw/bloomberglawnews/bloomberg-law-news/X9L4NOR8000000> [<https://perma.cc/32QY-WSGQ>] (describing the “AI slop” flooding the internet, from “images of Jesus made from shrimp” to ads for “a non-existent Halloween parade”).

¹⁴ Benj Edwards, *AI Company Trolls San Francisco with Billboards Saying “Stop Hiring Humans”*, ARS TECHNICA (Dec. 10, 2024, 3:43 PM), <https://arstechnica.com/information-technology/2024/12/ai-company-trolls-san-francisco-with-billboards-saying-stop-hiring-humans> [<https://perma.cc/PT5X-XKK5>]. For an exploration of the dystopian potential of automation, compare HERBERT MARCUSE, *Aggressiveness in Advanced Industrial Societies*, in NEGATIONS 187, 193 (MayFly-Books 2009) (1968) (“The real danger for the established system is not the abolition of labor but the possibility of nonalienated labor. . . . [A]nd with the new and terribly effective and total means provided by technical progress, the population is physically and mentally mobilized against this eventuality: [T]hey must continue the struggle for existence in painful, costly, and obsolete forms.”), with DAVID THEO GOLDBERG, DREAD: FACING FUTURELESS FUTURES 71 (2021) (“Studies of turnaround and delivery commitments at Amazon warehouses reveal that company management requires much quickened work rates for human workers in the production chain so that the robots are able to function efficiently.”).

¹⁵ Alec Tyson & Emma Kikuchi, *Growing Public Concern About the Role of Artificial Intelligence in Daily Life*, PEW RSCH. CTR. (Aug. 28, 2023), <https://pewrsr.ch/3QZ6H6D> [<https://perma.cc/3JL2-LUCE>]. Only ten percent reported feeling “more excited than concerned.” *Id.*

Medicaid enrollment system that even agency staff cannot navigate.”¹⁶ Building, training, and operating AI also inflicts environmental harms at each step of the process — from obtaining the “raw materials” to generating “electronic waste,”¹⁷ with a vast water footprint and energy usage as byproducts¹⁸ — without much regulation governing what tech companies must report along the way.¹⁹ Where a small number of companies come to dominate the development of and become synonymous with AI, commercial definitions of technological concepts²⁰ may take on an outsized weight in shaping the average person’s understanding of AI — for better or worse.²¹ Current and former employees at AI companies have voiced concerns about the “serious risks posed by [AI] technologies” especially given the “strong financial incentives to avoid effective oversight,” calling for greater regulation and protections for whistleblowers.²² Put differently, what society hopes for and fears about AI reflects expectations of how people will act — what human beings will do with AI, and to one another.²³

As a forceful tool for ordering relationships and allocating power, the law can act as a conduit or constraint for the aspirations and threats of AI. But, like AI,²⁴ the law is inextricably bound with human behavior

¹⁶ KEVIN DE LIBAN, TECHTonic JUST., INESCAPABLE AI 7 (2024), <https://static1.squarespace.com/static/65a1d3be4690143890f61cec/t/673c7170a0d09777066c6e50/1732014450563/ttj-inescapable-ai.pdf> [https://perma.cc/F9J6-8XSH].

¹⁷ *AI Has an Environmental Problem. Here's What the World Can Do About That.*, UN ENV'T PROGRAMME (Sept. 21, 2024), <https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about> [https://perma.cc/U37L-9A3J]. Furthermore, there is a cascade of exploitation and extraction across the supply chain. See Christopher Thomas et al., *The Case for a Broader Approach to AI Assurance: Addressing “Hidden” Harms in the Development of Artificial Intelligence*, AI & SOC'Y, May 2024, at 1, 3.

¹⁸ See Pengfei Li et al., Making AI Less “Thirsty”: Uncovering and Addressing the Secret Water Footprint of AI Models 1 (Jan. 15, 2025) (unpublished manuscript), <https://arxiv.org/pdf/2304.03271> [https://perma.cc/UQ67-WEPN].

¹⁹ David Berreby, *As Use of A.I. Soars, So Does the Energy and Water It Requires*, YALE ENV'T 360 (Feb. 6, 2024), <https://e360.yale.edu/features/artificial-intelligence-climate-energy-emissions> [https://perma.cc/DZ2C-L6MC].

²⁰ See, e.g., Thomas Maxwell, *Leaked Documents Show OpenAI Has a Very Clear Definition of “AGI,”* GIZMODO (Dec. 26, 2024), <https://gizmodo.com/leaked-documents-show-openai-has-a-very-clear-definition-of-agi-2000543339> [https://perma.cc/J559-YKGX] (reporting on leaked documents from OpenAI and Microsoft defining AGI as “an AI system that can generate at least \$100 billion in profits”).

²¹ See, e.g., *infra* ch. III, pp. 1629–30.

²² Jacob Hilton et al., *A Right to Warn About Advanced Artificial Intelligence* (June 4, 2024), <https://righttowarn.ai> [https://perma.cc/2FW2-RZFW].

²³ See, e.g., First Amended Class Action Complaint ¶ 1, Estate of Lokken v. UnitedHealth Grp., Inc., No. 23-cv-03514 (D. Minn. filed Apr. 5, 2024), 2024 WL 2853368 (alleging that a health insurance provider wrongfully deployed AI to “overrid[e] . . . treating physicians’ determinations as to medically necessary care based on an AI model that Defendants kn[e]w ha[d] a 90% error rate”); *infra* ch. 1, pp. 1579–80; *infra* ch. II, p. 1589.

²⁴ See, e.g., *Claude’s Constitution*, ANTHROPIC (May 9, 2023), <https://www.anthropic.com/news/claudes-constitution> [https://perma.cc/SPB9-E6K4] (explaining how Anthropic’s “AI

and biases.²⁵ AI “could . . . improve our legal and judicial system by making decisions and processes more impartial.”²⁶ Or it could be tweaked to recommend only detention in ICE custody determinations that would otherwise allow outcomes such as release.²⁷ Government actors such as judges may overestimate the “infallibility and neutrality” of an opaque process that produces, for example, a sentencing report,²⁸ and “calls for greater public accountability and transparency are unlikely to yield better results if these efforts amplify risk aversion and strategic behavior.”²⁹ If developers must take targeted steps to find the “less discriminatory” algorithm that “almost always exists,” does the will to “make[that] effort”³⁰ exist without a legal intervention?³¹ Who drives the law? Perhaps AGI may someday transcend the limits of human imagination and relational dynamics. Until then, the impact of AI and the accompanying role of law, for good or ill, will depend on how human beings treat one another and act as stewards of the future.

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The whirlwind rise of AI across countless facets of our lives complicates legal and governmental regimes designed for yesterday’s problems. AI destabilizes antidiscrimination law designed to address human action, threatens artists with obsolescence, affects the lives of people who have no avenue for participating in decisionmaking about what

assistant” Claude was trained to have an “intentional” “value system”); Geoffrey Irving & Amanda Askell, *AI Safety Needs Social Scientists*, DISTILL (Feb. 19, 2019), <https://distill.pub/2019/safety-needs-social-scientists> [<https://perma.cc/GDU9-6V2F>] (advocating for social science research into human values where “an AI system trained from human data might have no notion of truth separate from what answers humans say are best”).

²⁵ For instance, the Supreme Court once held that Pennsylvania could not criminalize kidnapping. *Prigg v. Pennsylvania*, 41 U.S. 539, 608, 625–26 (1842) (“It purports to punish as a public offence against that state, the very act of seizing and removing a slave by his master, which the Constitution of the United States was designed to justify and uphold.” *Id.* at 626.).

²⁶ Amodei, *supra* note 12. For example, LLMs, used rigorously and with careful prompting, may “have enormous potential” for assisting with legal tasks such as statutory interpretation. Christoph Engel & Richard H. McAdams, *Asking GPT for the Ordinary Meaning of Statutory Terms*, 2024 U. ILL. J.L. TECH. & POL’Y 235, 289; *see also* Snell v. United Specialty Ins. Co., 102 F.4th 1208, 1234 (11th Cir. 2024) (Newsom, J., concurring) (“AI is here to stay. . . LLMs might aid lawyers and judges in the interpretive enterprise.”).

²⁷ *Velesaca v. Decker*, 458 F. Supp. 3d 224, 228 (S.D.N.Y. 2020).

²⁸ Surden, *supra* note 4, at 1336; *see also* Julia Dressel & Hany Farid, *The Accuracy, Fairness, and Limits of Predicting Recidivism*, SCI. ADVANCES, Jan. 5, 2018, at 1 (“cast[ing] . . . doubt” on the worth of “algorithmic recidivism prediction”).

²⁹ Victoria Angelova et al., *Algorithmic Recommendations When the Stakes Are High: Evidence from Judicial Elections*, 114 AEA PAPERS & PROC. 633, 636 (2024).

³⁰ Emily Black et al., *Less Discriminatory Algorithms*, 113 GEO. L.J. 53, 57 (2024).

³¹ *See, e.g., id.* at 57–58; OFF. FOR C.R., U.S. DEP’T OF EDUC., AVOIDING THE DISCRIMINATORY USE OF ARTIFICIAL INTELLIGENCE 1–2 (2024), <https://files.eric.ed.gov/fulltext/ED661946.pdf> [<https://perma.cc/G5HQ-YKRQ>]; *cf.* *Papachristou v. City of Jacksonville*, 405 U.S. 156, 171 (1972) (“The rule of law, evenly applied to minorities as well as majorities, to the poor as well as the rich, is the great mucilage that holds society together.”).

those effects will be, promises profits that undermine prosocial structures in corporate governance, and presents myriad risks at individual and societal levels without adequate oversight to ensure accountability and protect democracy. Conversations about what comes next cannot wait; the Chapters in this issue of *Developments in the Law* consider these issues and more. In their effort to chart a path forward, the Chapters unearth unmet needs in existing forms of regulation, governance, and legislation. What does technology tell us about who we are and who we could be? Whom does the law serve, and how? The questions raised here are both timely and timeless.

Is AI-enabled discrimination like any other discrimination? This is an old question for new technology,³² and the way legislators have approached the issue in relation to AI provides an opportunity to reappraise the doctrinal approach to discrimination by humans as well as by machines. Chapter I examines how state and federal bills aimed at regulating discriminatory AI fit into the larger framework of antidiscrimination law. Based on an extensive review of recent proposed and enacted laws, the Chapter distills seventy-five AI-related bills into four general categories of regulatory methods. After analyzing each category, Chapter I reflects on what lawmakers seem to want antidiscrimination law to do — regulate the results or consequences of these systems. But given the Supreme Court’s anticlassification-focused equal protection jurisprudence, antidiscrimination arguments sounding in disparate impact may trigger constitutional scrutiny. A carveout might protect regulations specifically targeting AI, but that solution fails to address the crucial problem of facially neutral processes that facilitate systemic biases.

Chapter II interrogates the “double bind” AI creates for artistic communities — the artist’s urge to use a new tool for greater creativity while that very tool simultaneously threatens the same human artist with irrelevance. The Chapter explores the financial motives underlying the current copyright regime, which requires a human “spark” of creativity but can also operate to the benefit of corporate intellectual property (IP) owners at the expense of the original creators. AI unsettles this power dynamic with the rise of new corporate interests to compete over the ownership of IP. But only some art forms receive robust copyright protections, and different traditions have developed amongst artists whose works aren’t copyrightable or who may lack the resources to obtain and enforce copyright protections. Chapter II identifies how private law may operate as a gap-filler, with artists leveraging solidarity and humanity as the necessary ingredients for a legal right to vest (or for an audience to connect with in order to find art meaningful).

Following Chapter II’s consideration of specific professional contexts, Chapter III expands the discussion of affected communities to

³² *Infra* ch. I, p. 1563.

a global scale. This Chapter explores the importance of preserving democratic values in the governance of AI. It identifies these values within the ongoing debate about open- and closed-source models and operationalizes them in a proposed regulatory framework that cultivates communal participation in policymaking: co-governance. The Chapter recognizes that people want to be involved in the decisions that affect their everyday lives, and AI's unique and widespread significance points to the importance of broad involvement in governing how AI advances. Along these lines, AI's promise of change provides an opportunity to rethink institutional design, particularly for those institutions that may impose ill-fitting "one-size-fits-all" solutions on complex problems. Chapter III proposes co-governance as a method for regulating AI, arguing that the strategy embodies the democratic values people care about in the AI context, and that the success of co-governance in other areas, like participatory budgeting, shows how co-governance can build community and improve decisionmaking. These are important considerations where there is a real threat of industry capture, given the small number of powerful tech firms that may prefer to control AI access. Co-governance offers a tried-and-true method for reflecting community interests, whatever those may be, in both the accessibility of open-source models and the direction of broader regulatory goals.

On the topic of governance, corporations have experimented with uncommon forms of governance to channel the development of AI in a safe direction. While these corporate structures can control for traditional profit seeking by shareholders, Chapter IV investigates the mystery of "superstakeholders" — parties who wield unanticipated influence over the corporate board and may undermine a company's prosocial mission in unexpected ways. Therefore, traditional theories of "amoral" drift may not offer a full explanation for events such as OpenAI's firing-rehiring of Sam Altman and seeming pivot to profit. After reviewing the literature, the Chapter examines AI corporations' experiments with new governance structures. Chapter IV next explores powerful stakeholders in the AI context: Companies cannot, for example, alienate highly skilled employees who can easily leave, or Big Tech companies that are both investors and suppliers of necessary resources. The Chapter theorizes that equity compensation early in the startup process is of particular importance to the creation of superstakeholders whose personal incentives are misaligned with a corporation's prosocial vision. Chapter IV concludes with an analysis of methods for addressing this novel corporate challenge.

Revisiting themes raised in earlier Chapters, Chapter V sounds an alarm about inadequate oversight of AI. Drawing on examples of how a deregulatory approach to internet content has left injured individuals without legal recourse and even plausibly facilitated violence, the Chapter identifies accountability, transparency, and democracy as gaps in the internet's current regulatory framework — problems echoed in

the current context of generative AI, as well. Though AGI offers many benefits, its unique technological harms in the form of hallucinated material and deepfakes could be used to generate political misinformation or disrupt democracy. The Chapter contemplates different mechanisms for mitigating these potential harms. In the absence of comprehensive regulation, individuals may be able to turn to tort law — like defamation, products liability, and public nuisance — for remedies. Chapter V thus returns to the topic of governance and proposes considerations for legislators, focusing on transparency as the vessel for accountability as well as ethical uses for the technology. Finally, the Chapter raises the First Amendment as a wrench in the proverbial works, depending on whether generated content counts as speech, and, if it does, whose. Harkening back to Chapter II’s discussion of the creative “spark,” this Chapter argues that, contrary to prevailing wisdom, a precedential throughline exists to support content-neutral legislation.

Together, these Chapters seek to advance how the legal world is grappling with AI’s challenges and opportunities. This issue of *Developments in the Law* illustrates that many legal doctrines are not merely laboring to adapt to this swiftly evolving technology, but also struggling with questions about governance and fairness that arose long before AI did. Although this issue cannot offer definitive answers to every question under consideration, it hopes to stoke discussion within the academy about technology with the potential to dramatically influence our lives in the coming years.