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## Can AI Standards Have Politics?

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### ABSTRACT

How to govern a technology like artificial intelligence (AI)?  When it comes to designing and deploying fair, ethical, and safe AI systems, standards are a tempting answer.  By establishing the best way of doing something, standards might seem to provide plug-and-play guardrails for AI systems that avoid the costs of formal legal intervention.  AI standards are all the more tantalizing because they seem to provide a neutral, objective way to proceed in a normatively contested space.  But this vision of AI standards blinks a practical reality.  Standards do not appear out of thin air.  They are constructed.  This Essay analyzes three concrete examples from the European Union, China, and the United States to underscore how standards are neither objective nor neutral.  It thereby exposes an inconvenient truth for AI governance: Standards have politics, and yet recognizing that standards are crafted by actors who make normative choices in particular institutional contexts, subject to political and economic incentives and constraints, may undermine the functional utility of standards as soft law regulatory instruments that can set forth a single, best formula to disseminate across contexts.

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Associate Professor, George Washington University Law School.  Thank you to BJ Ard, Ryan Calo, Julie Cohen, Rebecca Crootof, David Freeman Engstrom, and Richard Re for helpful comments and suggestions.  I am grateful to the *UCLA Law Review Discourse* student editors, especially Annabelle Spezia-Lindner and Kitty Young, for their feedback and assistance in preparing this piece for publication.  This Essay reflects developments through April 2023, when it was substantively finalized for publication.  Any remaining errors or omissions are my own.
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## INTRODUCTION

Standards are meant to be, well, standard.  Neutral, stable.  The precise form of a standard may vary,[1] yet the underlying idea is simple and intuitive: To borrow the International Standard Organization's (ISO) definition, a standard provides a "formula that describes the best way of doing something."[2]  Conceptualized this way, standards can guide a technology's public and private adopters, even without formal legal constraints.[3]  Particularly for a technology like artificial intelligence (AI) that has a global impact and which is not (yet) directly regulated by sovereign states,[4] standards can establish processes that push the creators and operators of technological systems in salutary directions.  Consider, for instance, complex issues such as how to ensure the ethical development of AI[5] or how to address the

1.    *See Types and Nature of Projects*, IEEE STANDARDS ASS'N, https://standards.ieee.org/ develop/initiating-project/projtype [https://perma.cc/A2JH-QZSC] (noting that a standard can contain mandatory requirements, a recommended practice outlining preferred procedures, or a guide offering suggestions for working with a technology); *see also* Johann Laux, Sandra Wachter & Brent Mittelstadt, *Three Pathways for Standardisation and Ethical Disclosure by Default Under the European Union Artificial Intelligence Act*, at 19 (Oxford Internet Inst., Working Paper, 2023) (focusing on standard setting under the European Artificial Intelligence (AI) Act and assessing the "broad range of types and sub-types of deliverables" that standard setting organizations may offer).

2.    *Standards*, INT'L STANDARDS ORG., https://www.iso.org/standards.html [https:// perma.cc/2WAG-5JFP].  Unless otherwise indicated, this Essay adopts the International Standard Organization's (ISO) broad definition of a standard.

3.    *See* Laux et al., *supra* note 1, at 3–4 (discussing utility of standards for researchers, industry, and regulators); Carlos Ignacio Gutierrez & Gary Marchant, *Soft Law 2.0: Incorporating Incentives and Implementation mechanisms into the Governance of Artificial Intelligence,* OECD.AI (July 13, 2021), https://oecd.ai/en/wonk/soft-law-2-0 [https://perma.cc/K556-EZA7] (describing soft law interventions, including standards, for AI, and arguing that they may be effective alternatives to hard law).

4.    *See* Andrew Ross Sorkin, Ravi Mattu, Bernhard Warner, Sarah Kessler, Michael J. de la Merced, Lauren Hirsch & Ephrat Livni, *Why Lawmakers Aren't Rushing to Police A.I.*, N.Y. TIMES (Mar. 3, 2023), https://www.nytimes.com/2023/03/03/business/dealbook/ lawmakers-ai-regulations.html [https://perma.cc/FM94-XYQB].  It is, however, important to note that existing laws may well apply to AI systems.  *See* Rebecca Crootof, Margot E. Kaminski & W. Nicholson Price II, *Humans in the Loop*, 76 VAND. L. REV. 429, 437 (2023).

5.    There is no universal or simple definition of ethical AI.  One study of eighty-four global "principles and guidelines for ethical AI" concluded that there was no single, common principle, yet identified "an emerging convergence around the following principles: transparency, justice and fairness, non-maleficence, responsibility and privacy."  Anna Jobin, Marcella Ienca & Effy Vayena, *The Global Landscape of AI Ethics Guidelines*, 1 NATURE MACHINE INTELLIGENCE 389, 391 (2019). *See also* Jessica Fjeld, Nele Achten, Hannah Hilligoss, Adam Christopher Nagy & Madhulika Srikumar, *Principled Artificial Intelligence: Mapping*

problem of bias in AI applications.[6]   Organizations such as the Institute of Electrical and Electronics Engineers (IEEE) Standards Association might set forth standards in the form of "[p]rocesses that provide for traceability of ethical values in the concept of operations, ethical requirements, and ethical risk-based design."[7] Along similar lines, to contend with algorithmic bias in AI, a standards development project might "describe[] specific methodologies, [including but not limited to benchmarking procedures and instructional parameters,] to help users certify how they addressed and eliminated issues of negative bias in the creation of their algorithms[.]"[8]   Standards like these are meant to serve as a form of governance, offering plug-and-play guardrails for improving AI systems without incurring the costs of formal legal intervention.

The appeal of AI standards as governance tools is understandable: Standards can, in theory, serve as instruments that hold the technology accountable and ensure that it operates in service of human interests.   But relying on AI standards in this way blinks a practical reality: standards do not appear out of thin air.  They are constructed.  As such, standards are anything but objective, and as internet scholars and historians have emphasized for over a decade, they are anything but

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*Consensus in Ethical and Rights-based Approaches to Principles for AI*, BERKMAN KLEIN CTR. FOR INTERNET & SOC'Y 1, 5 (2020) (canvassing AI principles documents and identifying eight themes, including privacy, accountability, transparency and explanation, fairness and nondiscrimination, and human control of technology, that "may represent the 'normative core' of a principle-based approach to AI ethics and governance").

6.   Algorithmic bias is a complex and multifaceted issue with overlapping social and technical sources.  For a detailed analysis of systemic, statistical, and human sources of bias in AI, *see* REVA SCHWARTZ, APOSTOL VASSILEV, KRISTEN GREENE, LORI PERINE, ANDREW BURT & PATRICK HALL, NIST SPECIAL PUBL'N 1270, TOWARDS A STANDARD FOR IDENTIFYING AND MANAGING BIAS IN ARTIFICIAL INTELLIGENCE 3–13 (2022).

7.   *IEEE 7000–2021: IEEE Standard Model Process for Addressing Ethical Concerns During System Design*, IEEE STANDARDS ASS'N (Sept. 15, 2021), https://standards.ieee.org/ ieee/7000/6781 [https://perma.cc/BG86-T6DS]. *See also, e.g.*, *Artificial Intelligence: Overview*, NIST, https://www.nist.gov/artificial-intelligence [https://perma.cc/A3EE-QQGJ] ("Working with the AI community, NIST seeks to identify the technical requirements needed to cultivate trust that AI systems are accurate and reliable, safe and secure, explainable, and free from bias."). Standards like these are proliferating in AI governance today. *See Repository*, OCEANIS, https://ethics standards.org/repository [https://perma.cc/K6P2-6KXZ] (listing 77 entries); Jobin et al., *supra* note 5; Fjeld et al., *supra* note 5.

8.   *IEEE P7003: Algorithmic Bias Considerations*, IEEE STANDARDS ASS'N, https://standards. ieee.org/ieee/7003/6980 [https://perma.cc/75D3-GHFS].

neutral.[9]   Standards have politics.[10]   And these politics inform both the construction of the standard and its diffusion.

This Essay underscores how AI standards are inevitably political and contends that there is a fundamental tension at play: Acknowledging these politics is at odds with embracing standards as a neutral and stable form of AI governance. As one example, standards for ethical AI development cannot be objective and purely technical because they reflect a particular public or private actor's understanding of ethics.  Standards for fair or safe AI development and deployment similarly channel the sociotechnical commitments of their creators.[11] For instance, when an IEEE standard sets forth "[m]easurable, testable levels of transparency, so that autonomous systems can be objectively assessed, and levels of compliance determined,"[12] it is not merely contributing to a system of AI

9.   LAURA DENARDIS, PROTOCOL POLITICS: THE GLOBALIZATION OF INTERNET GOVERNANCE 10, n.9–10 (2009) (discussing scholarship that contests the myth that technical standardization is neutral and objective); Laux et al., *supra* note 1, at 4–7, and sources cited therein (analyzing the ways in which standards, including "purely technical" standards, implicate political and normative judgments). *See also* Corinne Cath & Luciano Floridi, *The Design of the Internet's Architecture by the Internet Engineering Task Force (IETF) and Human Rights*, 23 SCI. ENG'G ETHICS 449, 457 (2017) ("Although the IETF's architectural design principles are frequently presented as technical considerations, they also embody a socio-political conceptualisation of what many technical engineers view the Internet to be . . . .") (discussing LAWRENCE LESSIG, CODE: AND OTHER LAWS OF CYBERSPACE, VERSION 2.0 56 (2nd ed. 2006)); Michael Veale & Frederik Zuiderveen Borgesius, *Demystifying the Draft EU Artificial Intelligence Act*, 22 COMPUT. L. REV. INT'L 97, 105 (2021) (discussing safety standards development in the European Union and asserting that "[e]ven 'technical' safety standards entail value-laden choices about, for example, thresholds of acceptable risk, taken under uncertainty") (citing HEATHER E. DOUGLAS, *'Values and Practices', in* SCIENCE, POLICY, AND THE VALUE-FREE IDEAL 156–74 (2009)).

Moreover, as a rich body of scholarship in tech ethics and design has long made clear, no technology is ever neutral.  For a discussion of this premise in legal scholarship, see, as one example, Deirdre K. Mulligan & Kenneth A. Bamberger, *Saving Governance-by-Design*, 106 CAL. L. REV. 697, 704 (2018), which references a body of scholarship in "sociological, historical, and political studies that . . . demonstrate[s] how technology is not 'neutral,' but instead is thickly integrated with ethics and politics."  *See id.* at 744–45 for a discussion of "an extensive design literature" that embraces "Kranzberg's law:" "[t]echnology is neither good nor bad; nor is it neutral" (quoting Melvin Kranzberg, *Technology and History: "Kranzberg's Laws,"* 27 TECH. & CULTURE 544, 545 (1986)).

10.  *Cf.* Langdon Winner, *Do Artifacts Have Politics?*, 109 DAEDALUS 121 (1980) (arguing that technological objects—artifacts—have politics).

11.  *Cf.* Laux et al., *supra* note 1, at 6 ("Answering 'hard normative questions' . . . means endorsing specific interpretations or theoretical approaches for normative concepts (e.g., equality, transparency, dignity), or specifying acceptable or preferred trade-offs between competing interests.").

12.  *IEEE 7001–2021: IEEE Standard for Transparency of Autonomous Systems*, IEEE STANDARDS ASS'N (Mar. 4, 2022), https://standards.ieee.org/ieee/7001/6929 [https://perma.cc/S6PL-XUZX].

governance in a vacuum. If this standard is to provide any meaningful guidance at all, then it must define what transparency itself requires and embed particular normative values, even as it may appear to be embracing technical standards.[13] By way of further example, the National Institute of Standards and Technology's (NIST) decision to adopt a risk-based approach to AI standards reflects and perpetuates one understanding of how a sociotechnical system ought to operate in society.[14]

Successful AI governance requires recognizing the politics of AI standards and critically assessing how standard setting and standard deployment are bound up in questions of political economy.[15] Because these questions emerge in the context of specific institutional configurations, this Essay proceeds in two parts, each keyed to a different kind of public-private relationship. Part I draws from contemporary examples in the European Union (EU) and China to expose how institutional contexts and incentives can shape the AI standards development and diffusion process when such a process occurs with the backing of a state actor. Part II then turns to the United States and considers how private power and market forces factor especially forcefully into the standards development and diffusion equation in a jurisdiction without government backing for or legislative adoption of a single standard setting approach. The Essay concludes by cautioning that it may be premature to focus on how to diffuse standards without a working theory of the relationship between standards, the interactions between public and private actors, and normative objectives.

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13. I have developed versions of this point in prior work. *See* Alicia Solow-Niederman, *Administering Artificial Intelligence*, 93 S. CAL. L. REV. 633, 681 (2020). For further discussion of "governance-by-design" and its challenges for public governance, see Mulligan & Bamberger, *supra* note 9.

14. *See* Margot E. Kaminski, *Regulating the Risks of AI*, 103 B.U. L. REV. 101, 105 (2023) ("Framing the potential harms of AI systems as *risks* and the solutions as *risk regulation* are value-laden choices."); *see id.* at 108, 137–40 (analyzing NIST's AI Risk Management Framework and noting how it draws from enterprise risk management).

15. Writing both alone and with others, I have previously made similar arguments about the development of AI technology itself. *See* Solow-Niederman, *supra* note 13, at 641; Edward Parson, Richard Re, Alicia Solow-Niederman & Elana Zeide, *Artificial Intelligence in Strategic Context: An Introduction*, UCLA LAW: PULSE, 1–15 (Feb. 8, 2019), https://deliverypdf.ssrn.com/delivery.php?ID=84310608600808706509501606610707801001705102400100802012411712012301202207102911509104910100106001803805811307106802506709012110903401104604212501800309811411200404105509402101208211009801412408900408808300909311503007109809710100512311310511510009 8&EXT=pdf&INDEX=TRUE [https://perma.cc/699P-5EUX].

## I.    THE POLITICS OF AI STANDARDS WHEN THE STATE LEADS

The very formation of standards is political because the standards development and diffusion process reflects a particular institutional context and an associated set of relationships among public and private actors.[16]  Under the surface of any standard setting effort, there is a set of assumptions about how a standard will diffuse, and this anticipated diffusion pattern depends on the relationships between public and private actors.  This Part exposes the dynamics of standards implementation by analyzing two ways that the state may lead in standard setting efforts: First, the state might set forth a legislative framework, yet rely on private actors to articulate standards within that framework.  Second, the state might directly stipulate terms of commerce, such that private firms must comply with standards to participate in the market.

Some recent processes are initiated by public actors, yet still feature private actors in a prominent role.  Take, for instance, the initial version of the EU's AI Act, as proposed in April 2021.  The Act is intended to impose strict requirements on providers of high-risk systems and place a set of other measures, such as transparency requirements, on all AI systems.[17]  This approach, modeled after the EU's product safety regime,[18] conceptualizes AI as a product.  It operates, in part, by placing what are known as essential requirements on providers of high-risk AI systems.  These providers must meet standards for categories such as data quality.[19]  These essential requirements are to be translated into a for-purchase, harmonized European standard by two private standard setting organizations.[20]

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16.    In focusing on institutional dynamics, I join other scholars who suggest that difficult and essential institutional questions are under the surface of "techlaw" challenges. *See, e.g.*, BJ Ard, *Making Sense of Legal Disruption*, 2022 WISC. L. REV. FORWARD 42, 48–57 (2022) (developing an institutional account of legal disruption); Julie E. Cohen, *From Lex Informatica to the Control Revolution*, 36 BERKELEY TECH. L.J. 1017, 1019–20 (2021) (noting that legal scholarship on digital technologies and law to date has not focused on what emerging developments "might signify for the shape of legal institutions themselves"); JULIE E. COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM 202 (2019) (focusing on transnational governance institutions and assessing how standards play a "vitally important" role in the new "networked legal-institutional form" that characterizes the informational economy).

17.    Veale & Borgesius, *supra* note 9, at 106.

18.    *Id.* at 98.

19.    *Id.* at 102–03.

20.    *Id.* at 104–05. *See also* Laux et al., *supra* note 1, at 6 (explaining role of two European standard setting organizations envisioned by draft text of the EU's AI Act).

A provider of an AI product that complies with these standards is then presumed to conform with the Act.[21]

The EU AI Act's path to promulgating AI standards and adopting them in law reflects a particular set of assumptions about how governance institutions can and should operate, as well as the necessary conditions for standards to take hold. Under such a model, there is deference to private actors and trust in market forces to guide adoption. The proposed process relies on a set of relationships between specified standard setting organizations and the European Parliament, which cannot veto "harmonized standards" when they are mandated by the European Commission, even when those standards are developed by private actors.[22] In addition, it implicitly puts faith in the "Brussels Effect," wherein one nation's market power leads transnational firms to adopt its compliance benchmarks across all markets and thereby avoid the expense of developing customized products for each market.[23] The hope here is that the EU's efforts to regulate AI relatively early on will lead to global adoption of its AI standards.[24] The development and anticipated diffusion of standards is thus formal, top down, and driven by the market as much as it is steered directly by public actors.

This model is not the only one. By way of illustrative example, one alternative approach permits public actors to dictate what private firms may do by setting the terms of commerce, rather than by directly regulating those firms. Consider the Shanghai Data Exchange, a state-backed attempt to build a market for data so that it can be traded like other commodities.[25] With the caveat that details about the

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21. Veale & Borgesius, *supra* note 9, at 105 (discussing "presumption of conformity"). *See also* Laux et al., *supra* note 1, at 7, 19 (emphasizing the European Commission's desire for "certifiable standards" that will "signal compliance" with the Act).

22. Veale & Borgesius, *supra* note 9, at 105 ("Moreover, the European Parliament has no binding veto over harmonised standards mandated by the Commission.") (citing Parliament and Council Regulation 1025/2012, art. 11, 2012 O.J. (L 316/12)).

23. Anu Bradford, *The Brussels Effect*, 107 Nw. Univ. L. Rev. 1, 5–6 (2012) (identifying and describing the "Brussels Effect"). For further discussion of this phenomenon, see Anu Bradford, The Brussels Effect: How the European Union Rules the World (2020).

24. *See* Alex Engler, *The EU AI Act Will Have Global Impact, but a Limited Brussels Effect*, Brookings Inst. (June 8, 2022), https://www.brookings.edu/research/the-eu-ai-act-will-have-global-impact-but-a-limited-brussels-effect [https://perma.cc/8W6Z-SZTM].

25. *See* Huaxia, *Shanghai Data Exchange Begins Trading*, Xinhuanet (Nov. 25, 2021, 2:15 PM) http://www.news.cn/english/2021-11/25/c_1310332018.htm [https://perma.cc/SA93-BMG9]; David Navetta, Lei Shen & Charlie Wood, *PRC's New Efforts to Facilitate Data Trading: Shanghai Data Exchange Kicks Off Trading*, Cooley (Jan. 12, 2022), https://cdp.cooley.com/prcs-new-efforts-facilitate-data-trading-shanghai-data-exchange-kicks-off-trading [https://perma.cc/C9SV-JQHK]. Although the Exchange is not explicitly about AI, it is worth noting that data standards might affect AI's development path and bear on AI governance because data is a fundamental building block for AI. *See* Alicia

enterprise are shadowy, it appears that the Exchange enforces an evaluation process so that data is interoperable and in compliance with the benchmarks that the state puts in place.[26] These standards are necessary to allow data to be traded in the first place: without standardization, the entire idea of a data exchange unravels, because it is difficult to evaluate what fair exchanges would mean or how to operate the system efficiently over time.[27]

An example such as the Shanghai Data Exchange represents a distinct model of standards creation and diffusion that is market focused, yet more publicly driven. The state itself enforces the conditions for data trading. The resulting standards then diffuse as a byproduct of business incentives: State-driven standards that make it easier to trade in data will create de facto inducements for companies to embrace those standards to participate in the data market. Institutional choices about who can access the data, moreover, will affect the diffusion of these standards. If the data markets are restricted to state-owned companies, then these data standards might supercharge those companies' economic opportunities and growth.[28] However, the international impact of these standards will ultimately be limited to those companies' global reach. If global firms are allowed entry to the data market, then those state-developed standards may diffuse further.[29] The political economy of the data exchange, and the policy tradeoffs that it reflects, matter a great deal.[30]

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Solow-Niederman, *Information Privacy and the Inference Economy*, 117 Nw. Univ. L. Rev. 357, 391–92 (2022) (analyzing data as a critical resource to construct machine learning tools); Solow-Niederman, *supra* note 13, at 688 (arguing that data is one of three essential resources for AI research and development). Indeed, AI-specific standard setting efforts often include standards focused on data. *See, e.g., P3123, Standard for Artificial Intelligence and Machine Learning (AI/ML) Terminology and Data Formats*, IEEE SA, https://standards.ieee.org/ieee/3123/10744 [https://perma.cc/BJU9-DBF9] ("defin[ing] requirements for data formats" for AI).

26.   *See* Ming En Liew & Yun Xuan Poon, *Exclusive: How China's Open Data Trading Could Power Growth*, GovInsider (Feb. 14, 2022), https://govinsider.asia/digital-gov/yong-lu-exclusive-how-chinas-open-data-trading-could-power-growth [https://perma.cc/ GE3R-ZW7X].

27.   *See* Navetta et al., *supra* note 25.

28.   *See id.* ("The first data products listed on the SDE were released by established Chinese companies, and the first batch of transactions in the SDE appeared to be orchestrated by state-owned companies or their proxies. It remains to be seen whether the SDE could potentially be used by multinational companies and handle data that comes with cross-border implications.").

29.   *See* Zhu Shenshen, *Shanghai Data Exchange Goes International*, Shine (Nov. 25, 2022), https://www.shine.cn/biz/economy/2211253340 [https://perma.cc/3SQJ-KJV2].

30.   *See* Anupam Chander & Paul Schwartz, *Privacy and/or Trade*, 90 U. Chi. L. Rev. 49, 84–95 (2023) (assessing different nations' approaches to the relationship between privacy and trade).

Debates about AI standards today, however, tend not to engage with these sorts of institutional dynamics and tend not to consider how they may mediate the diffusion of AI standards. That is shortsighted. As has long been observed in the context of internet protocols, institutional arrangements affect the values and objectives that motivate a particular standard's creators.[31] Standards cannot be understood as technical, objective parameters. Rather, developers and disseminators of standards must account for organizational dynamics.[32] A particular kind of standard may be a better or worse fit for a given context.[33] Yet accounting for context complicates the way that standards affect AI governance, because the idea of tailoring a standard to reflect institutional politics is in tension with the idea of standards as neutral and stable things. Moreover, as the next Part evaluates, the intersections between public and private power become even thornier in an institutional setting without formal government support for a singular standard setting and implementation effort.

## II.     THE POLITICS OF AI STANDARDS WHEN THE STATE DOES NOT LEAD

This Part focuses on the American context and assesses how, when standards are not part of formal lawmaking processes, the commingling of public, private, and market forces affects the development and diffusion of AI standards.

To date, there is no single organizational model, nor any one public or private entity, that dominates AI standards development in the United States. The public sector plays a part in the conversation. For instance, in late 2022, the White House released principles that are meant to serve as a "blueprint for the development of additional technical standards and practices that should be tailored for particular sectors and contexts."[34] Yet, in contrast to Europe, there is no public mandate for standardization; rather, U.S. standard setting is in flux and subject to a range of organizational influences. Some influential organizations are transnational and nongovernmental: the IEEE, for example, is a technical professional organization that includes engineers, computer scientists, doctors, physicists, and IT

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31.     *See* DENARDIS, *supra* note 9, at 10.
32.     *See generally* Stefan Timmermans & Steven Epstein, *A World of Standards but Not a Standard World: Toward a Sociology of Standards and Standardization*, 36 ANN. REV. SOCIO. 69 (2010) (evaluating the sociology of standards and calling for case-by-case, grounded analysis of how a particular type of standard operates in a specific social context) [hereinafter Timmermans & Epstein, *A World of Standards*].
33.     *See id.* at 84.
34.     OSTP, BLUEPRINT FOR AN AI BILL OF RIGHTS at 9 (2022).

professionals.[35]  Others are domestic and governmental, but without the force of law.  A body like NIST, which now sits within the U.S. Department of Commerce and aims to "promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology," is a leading example.[36]  Because there is no dominant, formalized organizational model for the development and diffusion of AI standards in the United States, it is all the more essential to account for the political economy of standard setting efforts.

An analysis that is attuned to political economy requires focusing on how the public, private, or public-private entity that sets a standard is embedded in society, how it shapes and is shaped by the market and the political system, and what these dynamics might mean for AI governance overall.  Some of the most challenging cases arise when standard setting bodies are not formally labelled as such, which can result in private actors becoming de facto standard setters in ways that affect public sector actors as well as broader governance efforts.

To make this point more concrete, consider two examples of how private market leaders in public sector AI are self-regulating today and the associated implications for standards development and diffusion.[37]  First, take the consulting firm Deloitte.  The firm offers a variety of "Artificial Intelligence and Analytics Services"[38] and touts its "Trustworthy AI" framework "to guide organizations on how to apply AI responsibly and ethically within their businesses."[39]  This framework emphasizes how, until global AI regulations "eventually address ethics concerns," the firm is "working to bridge the ethics gap," underscoring that AI must be "transparent and explainable, fair and impartial, robust and reliable,

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35.  *History of IEEE*, IEEE, https://www.ieee.org/about/ieee-history.html [https://perma.cc/AK9P-6BYH].

36.  *About NIST*, NIST, https://www.nist.gov/about-nist [https://perma.cc/L4GQ-WQNF].

37.  To highlight cross-cutting considerations concerning the relationship between private companies and the state, this Essay reserves the separate question of how a particular public or private entity's internal configuration, membership, and motivations might affect the development of standards, and how that might affect the perceived legitimacy of the standard. On legitimacy and accountability in "regulatory regimes . . . in which the state is not the sole locus of authority," see Julia Black, *Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes*, 2 REGUL. & GOVERNANCE 137 (2008).

38.  *Services, AI solutions in the Age of With™*, DELOITTE, https://www2.deloitte.com/us/en/pages/deloitte-analytics/solutions/deloitte-analytics.html [https://perma.cc/GDW9-K72P].

39.  Press Release, *Deloitte Introduces Trustworthy AI Framework to Guide Organizations in Ethical Application of Technology in the Age of With*, DELOITTE (Aug. 26, 2020), https://www2.deloitte.com/us/en/pages/about-deloitte/articles/press-releases/ deloitte-introduces-trustworthy-ai-framework.html [https://perma.cc/2UVB-X2TZ].

respectful of privacy, safe and secure, and responsible and accountable."[40] In other words, Deloitte is setting forth, and internally defining, its own AI standards for the tools and guidance that it sells.

So, too, are internally-defined, de facto standards set forth by a second private company, Thomson Reuters. The firm acquired the AI analytics company Pondera Solutions in 2020 in order to "enhance its offerings in the risk, fraud, and compliance space" and deliver "advanced analytics, artificial intelligence, and human expertise" to its government customers.[41] Thomson Reuters also emphasizes its commitment to AI principles to promote "trustworthiness," stressing the importance of "safety, security, and privacy;" a "human-centric approach;" "reliable" products and services that "help empower people to make efficient, informed, and socially beneficial decisions;" "appropriate accountability measures;" and explainability.[42] Again, this is AI standards setting and diffusion through private practice.[43]

These privately encoded understandings of AI ethics matter for the present and future of AI standard setting because such private firms' normative understandings are *already* entrenched in public sector automation. This is especially true in local and state government in the United States.[44] For example, when the state of New Mexico updated its welfare administration system, it entered a contract with Deloitte. The firm's engagement with New Mexico adapted a model that Deloitte had previously developed for the state of Michigan's

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40. *Trustworthy AI™*, DELOITTE, https://www2.deloitte.com/us/en/pages/deloitte-analytics/solutions/ethics-of-ai-framework.html [https://perma.cc/GM6X-FH34]. *See also* Press Release, DELOITTE, *supra* note 39 (describing six dimensions).

41. Press Release, *Thomson Reuters Acquires Pondera Solutions*, THOMSON REUTERS (Mar. 19, 2020), https://www.thomsonreuters.com/en/press-releases/2020/march/thomson-reuters-acquires-pondera-solutions.html [https://perma.cc/N8YZ-A4PR].

42. *Artificial Intelligence at Thomson Reuters*, THOMSON REUTERS, https://www.thomsonreuters.com/en/artificial-intelligence/introduction-to-artificial-intelligence-at-thomson-reuters.html#principles [https://perma.cc/UD2S-PUDC].

43. *See* Laux et al., *supra* note 1, at 16, 21.

44. *See* Alicia Solow-Niederman & David Freeman Engstrom, *Federalism and the Automated State* (manuscript on file with authors) (documenting and analyzing subfederal government reliance on private actors for automation tools). *See also, e.g.*, Catherine Crump, *Surveillance Policy Making by Procurement*, 91 WASH. L. REV. 1595 (2016) (documenting the mounting importance of private procurement in tech policy and assessing its troubling implications for public accountability); Deirdre K. Mulligan & Kenneth A. Bamberger, *Procurement as Policy: Administrative Process for Machine Learning*, 34 BERKELEY TECH. L.J. 733 (2019) (analyzing the risks of relying on procurement in government choices to adopt AI tools); *Artificial Intelligence and Procurement*, THE REG. REV. (June 27, 2022), https://www.theregreview.org/2022/06/27/series-artificial-intelligence-procurement [https://perma.cc/4XBS-LNQ8] (compiling essays on topic).

Department of Human Services.[45]   And this same system was subsequently adapted to form part of the state of Illinois's "Integrated Eligibility System" to update delivery of welfare benefits,[46] thereby diffusing a similar understanding of how such an automated system should operate.  Moreover, according to a report by the Electronic Privacy Information Center, multiple agencies in the District of Columbia rely on Pondera Solutions' "FraudCaster" and case tracking tools.[47] Similar patterns of reliance on private actors and concentration in a limited number of private firms are evident in myriad other state and local government adoptions of automated decisionmaking systems,[48] including subfederal contracts to update unemployment systems and address the surge of claims at the onset of the COVID-19 pandemic.[49]

   Regardless of whether one agrees with the substance of a company's standards, the bottom line is that this dynamic embeds one private company's vision of what it means for an AI system to be trustworthy, ethical, fair, or accurate within government bodies themselves.  And it does so without explicit reference to other standard setting bodies or governance efforts.   Private firms' operationalizations of normative and ethical parameters are thus de facto governing what public actors are doing with artificial intelligence.[50]

   To be sure, whether this de facto private governance is a problem in the intermediate and long term will depend on how locked-in today's privately

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45.   *See* Solow-Niederman & Engstrom, *supra* note 44.

46.   *See id.*

47.   *See* Thomas McBrien, Ben Winters, Enid Zhou & Virginia Eubanks, *Screened and Scored in the District of Columbia*, EPIC 1, 13 (Nov. 2022), https://epic.org/wp-content/uploads/2022/11/EPIC-Screened-in-DC-Report.pdf        [https://perma.cc/9D8D-YWAQ].

48.   *See, e.g.*, Media Freedom and Information Access Clinic, Yale Law School, *Algorithmic Accountability: The Need for a New Approach to Transparency and Accountability When Government Functions Are Performed by Algorithms*, ABRAMS INST. (Jan. 18, 2022), at 17–20 (discussing Connecticut Department of Children and Families' use of the Mindshare algorithm and Eckerd Rapid Safety Feedback model (ERSF) to identify at-risk children and referencing the state of Illinois' use and subsequent abandonment of this same tool).  I acted as the requestor for the FOIA requests discussed in the MFIA Clinic report; however, the report itself was authored by students at the Yale Law School MFIA Clinic.

49.   *See* Chris Marr & Alex Ebert, *Deloitte, Others Reap Big Contracts From Unemployment Deluge*, BL (July 29, 2020, 1:46 AM), https://news.bloomberglaw.com/tech-and-telecom-law/deloitte-others-reap-big-contracts-from-unemployment-deluge [https:// perma.cc/G6FK-F695].

50.   At least some of these instruments seem to be simple, rule-driven models or more basic automated decision-making systems, not advanced AI.  Yet the underlying lesson holds.  *Cf.* Ryan Calo & Danielle Keats Citron, *The Automated Administrative State: A Crisis of Legitimacy*, 70 EMORY L.J. 797, 845 (2021) ("[A]utomated systems in the administrative state highlight the extent to which agency officials have re-delegated their responsibilities to third-party systems that are little understood even by their creators.").

encoded, de facto standards prove to be.  Perhaps standards will be updated to reflect emerging conditions or to respond to a new normative consensus.  This is to some extent an open empirical question.  But there are reasons to believe that AI standards development will tend towards path dependence, wherein early steps in a particular direction will shape future outcomes.[51]  Markets involving new technologies often feature "increasing returns path dependency," which occurs when the initially-selected product produces subsequent "lock-in" around the system that was chosen first.[52] Institutional contexts with a limited set of purveyors and a limited set of tools—as is often the case for public sector AI—may converge around the tools that dominate the market early on.  Such early technological lock-in might lead to locked-in standards, keyed to the political economy within which those tools emerged.[53] Moreover, the profit motives of private market leaders may make it harder to create change.[54]  Accounting for issues such as the impact of early market dominance and the profit motives of private actors requires thinking about the process of standardization over time,[55] with reference to the incentives and constraints of all of the actors involved—rather than by creating and invoking standards as plug-and-play governance divorced from institutional and normative contexts.

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51.  By "path dependence," I mean a "narrower" conception "in which preceding steps in a particular direction induce further movement in the same direction."  Paul Pierson, *Increasing Returns, Path Dependence, and the Study of Politics*, 94 AM. POL. SCI. REV. 251, 252 (2000).

52.  *See* Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 609–11 (2001).

53.  This is not intended as a technodeterminist stance; rather, my point is that technological shifts can both affect and be affected by their surrounding social, political, and economic systems. *See* Richard M. Re & Alicia Solow-Niederman, *Developing Artificially Intelligent Justice*, 22 STAN. TECH. L. REV. 242, 250, 255 (2019) (arguing that technological shifts, such as AI adjudication, can produce updates to the values that undergird the legal system, not merely updates to legal rules). *Cf.* BATYA FRIEDMAN & DAVID G. HENDRY, VALUE SENSITIVE DESIGN: SHAPING TECHNOLOGY WITH MORAL IMAGINATION 7 (2019) (suggesting that the shape of a particular technology may support one form of government, but not another).

54.  *See* Re & Solow-Niederman, *Developing Artificially Intelligent Justice*, *supra* note 53, at 260 (suggesting that algorithmic purveyors' early-stage market success with certain codifications of algorithmic values will reduce incentives to develop other models and ultimately "diminish later-stage demand" for those other models). *See also* Graeme Auld, Ashley Casovan, Amanda Clarke & Benjamin Faveri, *Governing AI Through Ethical Standards: Learning From The Experiences of Other Private Governance Initiatives*, 29 J. EURO. PUB. POL. 1822, 1827–34 (2022) (identifying "three ideal-type pathways" through which private actors might affect AI governance).

55.  *See* Timmermans & Epstein, *A World of Standards*, *supra* note 32, at 71 (citing GEOFFREY C. BOWKER & SUSAN LEIGH STAR, SORTING THINGS OUT (2000); Susan Leigh Star & Martha Lampland, *Reckoning with Standards*, *in* STANDARDS AND THEIR STORIES 3 (Susan Leigh Star & Martha Lampland eds., 2009)).

## CONCLUSION: POLITICS VERSUS STANDARDS?

The effort to govern AI through standards risks ignoring the reality that standards have politics. This Essay calls for us to stop doing so. That will not be easy. The basic difficulty is that AI standards are most powerful as governance tools when we embrace the fiction that standards emerge in a vacuum, without reference to an institutional context and without implicating normative choices. AI standard setting efforts implicitly rely on this fiction when they focus on the need for a "scientific" or "technical" consensus—a uniform understanding of the nature of the problem and the best formula to use to solve it—before crafting a standard.[56] The more a standard appears apolitical, objective, and neutral, separate from specific institutional dynamics and their politics, the stronger the case for the standard's dissemination across contexts.

There are natural incentives to see things this way: tailoring a standard to local conditions and accounting for the political economy and normative commitments of a particular context may make it impossible to craft a standard that would be well suited for broader diffusion. An essential question for future research is thus whether there is a level of abstraction for standard setting that could provide enough specificity to diffuse across contexts, yet still provide space for difficult normative choices and permit adequate flexibility at a more local level.[57] Such proposals would also need to account for the force of private actors within a particular institutional context. Notably, there may be strong market pressures that make tailoring to local conditions difficult, especially in situations where a lack of public sector guidance permits a private actor to diffuse its internally generated standards by dominating the market.

Integrating these on-the-ground realities makes standards-driven AI governance infinitely more complex. At bottom, there is a real question whether it is possible to embrace the politics of standards and still have them meaningfully serve as standards. In other words, can AI standards have politics? Obviously, they can in the literal sense of that word. But maximizing their functionality relies on a fiction that they do not. Admitting that standards are crafted by people, in

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56.  *See, e.g.*, *Plan for Federal AI Standards Engagement*, NIST, https://www.nist.gov/artificial-intelligence/plan-federal-ai-standards-engagement [https://perma.cc/3JMC-Z9MF] (setting forth issues that "the AI community" agrees "must factor into AI standards," yet also noting that "many decisions still need to be made about whether there is yet enough scientific and technical basis to develop those standards provisions").

57.  For one proposal, see Laux et al., *supra* note 1, at 6, 21–25 (advocating a "third pathway" for European standard setting organizations: "Rather than setting specific ethical requirements for trade-offs and thresholds, this approach would instead ensure all providers of AI systems meet a minimum harmonised standard for testing, reporting, and public participation.").

particular institutional contexts, with particular institutional agendas—with politics—may make it so they are no longer standards, at least in the sense of being soft law regulatory instruments capable of setting forth a single, best formula to disseminate across contexts. They instead become entangled in a messy, normative metaprocess of legal and sociotechnical change, bound up in market processes. AI governance can look to standards development as a strategy. But taking the politics of standards seriously may undercut their utility as governance tools. Until governance efforts confront that tension, efforts to diffuse AI standards are premature.