

# Artificial Intelligence and the Carousel of Soft Law

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**Abstract**—The impulse of so many organizations across nearly every sector of society to promulgate principles in response to the ascendance of artificial intelligence is understandable and predictable. There is some utility in public commitments to universal values in the context of AI, and common principles can lay a foundation for societal change. But ultimately what is missing is not knowledge about the content of ethics as much as political will. If, as both detractors and proponents claim, AI constitutes the transformative technology of our time, then one of the aspects of society that must transform is the law and legal institutions.

**Index Terms**—Artificial intelligence, ethics, law, machine learning, policy, principles.

## I. INTRODUCTION

**I**S ARTIFICIAL intelligence a transformative technology? If so, are not laws and legal institutions among the aspects of society that must change? This question has always struck me as unavoidable. Yet, everywhere I turn I seem to confront an opposing view: despite (or because of) AI's transformative potential, the proper way to govern this technology is not to remake law, but to fashion a set of nonbinding principles. This invited essay explores some of the rhetoric and arguments that police this curious conclusion. The essay concludes that talk of principles only forestalls the real governance exercise at hand: careful analysis of what aspects of law and policy AI requires society to revisit.

Among the most potent metaphors of the 18th century is Adam Smith's conception of market forces as amounting to an "invisible hand." For Smith, the individual need only pursue his rational self-interest and "by directing that industry in such a manner as its produce may be of greatest value, . . . he is led by an invisible hand to promote an end which was no part of his intention [1]." Even the wealthy—"selfish and rapacious" though they may be—"are led by an invisible hand to make nearly the same distribution of the necessities of life, which would have been made, had the Earth been divided into equal portions among all its inhabitants [2], [3]." The intuition that markets should run their course absent clear evidence of failure lingers to this day.

Early proponents of the Internet imagined not an invisible hand but a living world actively resistant to government intervention. "The Net interprets censorship as damage," wrote activist John Gilmore, "and routes around it [4]." Freed from its initial "walled gardens [5]," the Internet grew into

a powerful economic and cultural force with deep libertarian underpinnings. Its corporate gardeners form the backbone of the contemporary American economy. To this day—even as widespread problems of privacy, hate speech, and misinformation force a national conversation about the perils of social media—regulators continue to take a largely "hands off" approach to Internet governance, excepting certain ground rules necessary to vindicate private rights [6].<sup>1</sup>

An invisible hand channels seemingly selfish behavior toward human flourishing. A brave new world of freedom blossoms spontaneously from the technology of the postindustrial age. Surely the cynic of today could not be so gullible.

## A. Enter Artificial Intelligence

AI is best understood as a set of techniques aimed at approximating some aspect of human or animal cognition using machines [7]. Interest in AI has come in waves since the term was coined at my alma mater in the summer of 1955 [8]. Recent gains in computer power, coupled with refinements to statistical techniques and access to enormous volumes of data, have sparked renewed interest in AI across many segments of society. Successive American administrations have convened workshops and published reports on AI policy, as have governments and intergovernmental organizations around the world.

Despite the sustained attention to AI in policy circles, AI has occasioned very little official action to date. One exception is facial recognition. Pointing alternatively to the poor performance of facial recognition on black and brown faces, and the disproportionate impact of surveillance generally on the marginalized, an emerging group of artists, researchers, and activists—often women of color with links to academia—have succeeded in securing bans on the use of facial recognition in some American cities as well as pledges by large, U.S. technology companies not to support law enforcement use of facial recognition [9], [10].<sup>2</sup> But generally speaking, there has been little change to the law and legal institutions in light of the supposedly transformative technology of our time [11].<sup>3</sup>

<sup>1</sup>"In short, for a long time, the governing entities in the world took a "hands-off" approach to regulating this universal construct called "the Internet." There are exceptions to the government's hands-off approach—such as counterterrorism and online gambling—with perhaps more to come."

<sup>2</sup>The fate of facial recognition remains in flux. Some states, like Washington, expressly permit facial recognition within limits. And some fear larger companies have only ceded the multibillion facial recognition market to smaller, less responsive firms.

<sup>3</sup>There have been legal changes related to specific applications of artificial intelligence or automation. For example, states have passed laws governing the licensure of driverless cars and the Securities and Exchange Commission has established new trading safeguards in light of high-speed trading algorithms.

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What we have instead are principles. We are awash in them. The industry has a running supply: Microsoft, Google, Facebook, IBM, and other companies have each released principles [12],<sup>4</sup> despite joining with civil society to form an organization—the Partnership on AI—which has its own “tenets [13].” The White House has AI principles [14]. The Department of Defense has AI principles [15]. So does the U.S. Chamber of Commerce [16]. The UN, the WTO, and the OECD all have published AI principles. Even organizations with a track record of advocating for concrete legal reform have released or endorsed AI principles [17].

What accounts for this abundance of AI principles and dearth of rules? The most skeptical explanation is that our appetite for principles performs roughly the same role in AI as self-regulation did in online advertising—namely, forestalling any real limits [18]. Principles make the public sector appear responsive to concerns without killing the robot that lays the golden egg. The private sector can aspire to responsibility without precommitting to any particular behavior. Worse still, the cynic might argue, history is replete with examples of new industries agreeing to a set of ethical principles that later prove to be anti-competitive [7].

Principles gain support from rhetoric—the terms and mental models that police against regulation. It would scarcely make sense to say of AI that it is guided by a benevolent force, or constitutes a new world unto itself. Nor can proponents wrap AI in the communal language of “sharing” the way early gig economy platforms managed [19].<sup>5</sup> Yet, both proponents and some critics of AI encourage similarly magical thinking about the power of AI. The public, of which government officials and their staff are members, could easily get the sense that AI is intelligence in a bottle—a sort of techno-genie capable of granting a growing list of wishes. It would neither be desirable nor indeed terribly coherent to regulate such an entity.

Thus, for many in the AI policy community, principles constitute the latest attempt to forestall regulation through rhetoric. This rhetoric can be powerful, especially when combined with promises of innovation and fears of being overtaken by foreign competitors in some kind of AI “arms race.” But, in the end, today’s talk of principles is no different than talk of self-regulation of yesteryear.

This skeptical recital is commonplace in discussions of the social impacts of AI today. I have espoused it myself in my written work and public lectures. But it is hardly universal. Several counterarguments have arisen to push back on principles skepticism, arguing instead that principles are vital to AI policy, or at least the best among poor alternatives. The first counterargument is that principles need to precede law because they provide the necessary, but missing moral foundation for action. The second is that AI cannot be subject to rules in a traditional sense because, as I have already conceded, AI is not a “thing” that can be regulated. Let us call the first argument the “emerging norms problem” and the second, the “problem of definition.” Collectively, these arguments tend to rebut the skeptics’ notion that the primary purpose of principles is to forestall regulation.

As Chief Justice Earl Warren famously said, “in civilized life, law floats in a sea of ethics [20].” Law is not fashioned out of whole cloth, but woven out of norms and societal expectations. These norms and expectations have yet to cohere, the argument runs, when it comes to a “disruptive” new technology like AI. Rather, a society confronted with the promise and perils of AI must think through and articulate the ethical ground rules. We cannot channel technology in the public interest if we do not know what the public’s interest in AI quite is.

Such thinking positions the formation of principles as a necessary first step in crafting regulation. It explains why the Electronic Privacy Information Center—no fan of soft law—would endorse AI principles, and how Microsoft can promulgate principles while simultaneously arguing for regulation [21]. Much contemporary privacy law, not to mention Federal Trade Commission enforcement in the area of privacy and security, finds support and inspiration in the OECD fair information practice principles of 1973 [22]. Institutional review boards are based around principles of human health and dignity articulated in the Helsinki Declaration and Belmont Report.

The notion that technology confronts society with emerging norms finds echoes in a broader perception about law and technology. Sometimes recast as a “pacing problem,” David Collingridge famously argues that regulators confront a genuine dilemma when it comes to emerging technology [23], [24].<sup>6</sup> Intervene too early and regulators with imperfect information risk interrupting the course of new technology by imposing constraints without understanding the technology’s trajectory or societal effects. Intervene too late and technology will have already set up shop: technology will become entrenched, with powerful vested interests resisting any change [25].<sup>7</sup>

No one knows quite what impact a new technology will have. If decades of Science and Technology Studies has anything to teach us—and it very much does—the development and impacts of technology are neither linear nor fixed. I have personally argued (with Danielle Keats Citron) that powerful new technologies constitute an invitation to inventory our values and explore whether our laws and legal institutions are doing enough to advance them [26]. So I am sympathetic to the emerging norms problem.

Nevertheless, in my experience, the most common tendency of technology is to act as an illustration or “synecdoche” for ills and issues already in existence [27]. New technology tends, if anything, to reify, amplify, and propagate longstanding social, cultural, and economic concerns, such as racism, sexism, and heteronormativity. This has been especially clear with respect to AI [28]–[30].

The merest glance at any of the AI principles in circulation will confirm what you already know—that no radical new values are being introduced. There is scarcely any uncertainty

<sup>4</sup>Some ethical principles have been blessed by the Pope himself.

<sup>5</sup>A discussion of the role of communal rhetoric in enabling the gig economy.

<sup>6</sup>Oversimplification of Collingridge in service of opposing the precautionary principle to emerging technology has become something of a libertarian cottage industry.

<sup>7</sup>Technology companies, such as Uber, pursue this strategy rather overtly as a form of what Elizabeth Pollman and Jordan Berry term “regulatory entrepreneurship.”

about the lack of equity and inclusion in American society, nor the importance of meeting human life with dignity and respect. We know we want our institutions to be accountable and our bodies to remain safe. The role of law is precisely to give meaning and practical effect to shared values—a task in which it remains dramatically behind, especially with respect to technology. Society does not need new principles *per se*, or a bevy of moral lessons in how to translate existing values to a new context. We urgently need the law to enforce the principles we supposedly already have [31].

A second argument for AI principles over law is that AI is not amenable to regulation because it is not any one thing—AI is not a single technology like a train, or even a category of technology like steam power. Principles are necessary because nothing more concrete or specific is capable of channeling such a widespread, amorphous phenomenon in the public interest.

Again, there is more than a little truth here. The export restriction on machine learning contemplated by the U.S. Department of Commerce struck many—myself included—as a misguided attempt to regulate math [32]. And as my definition of AI makes clear, AI is best understood not as a single technology, but as a set of techniques aimed at a common goal. Even attempts to regulate a subset of AI such as social media “bots,” as California has attempted, is rife for misfire [33]. The first state statute to attempt to define AI—in the context of driverless cars—had to be repealed and rewritten a year later [34].

Yet this argument, too, rests upon a misconception about law and technology. That you cannot define a technology in precise terms does not mean that nothing can be done to channel or mitigate its effects [35]. Ultimately, defining AI is less important than identifying the ways in which AI alters human *affordances* [36]. These changes to affordances are what do (or should) lead us to reexamine law and legal institutions along several lines. Not only should lawmakers concern themselves with harmful effects, they should also understand what changes to law and policy might be needed to channel technology in the public interest, hold developers and adopters of technology accountable, and help ensure that the costs and benefits of technology fall more evenly across society—a “social systems” approach that bears many names and incarnations [28].

It may be incoherent to say we should regulate AI. But this claim is in the end specious. It is perfectly coherent—indeed, intuitive—to say that a set of techniques or technologies such as AI that are collectively poised to transform every aspect of our society should also occasion changes to law and legal institutions.

What sorts of changes? The definition of hacking, for example, should evolve to encompass adversarial machine learning—the potential to trick a system rather than break into it by bypassing a security protocol [37]. The concept of fair use in copyright should evolve to deal with the machine learning training data [38]. The third-party doctrine, contraband exception, and public–private distinction in privacy law should change in response to the ability of AI to make inferences about people’s behavior or characteristics for otherwise public information [7]. The nature of competition law should address AI systems acting in a kind of concert [39]. The nature of due

process should evolve to encompass the prospect automated decision making [40]–[43].

Looking still more systemically, the widespread introduction of AI necessitates concrete measures to address its negative impacts, from shoring up gaps in accountability to addressing the likely displacement of workers [44], [45]. Among the best ways to hold those who design and deploy AI systems accountable for problems of safety, security, and bias is investigative research. It has been academics, journalists, and litigants who, in recent years, have uncovered many of the worse harms of algorithmic systems [46], [47]. And yet, federal antihacking law still holds no express exception for accountability research, opening the door to the threat of litigation for those exploring the limits and harms of AI [48].<sup>8</sup>

In short, just because you cannot *define* AI, does not mean you cannot, let alone should not, make changes to law and legal institutions in order to address the way AI changes human affordances. Principles alone are no substitute for, and have the potential to delay, the effort of rolling up our collective sleeves and figuring out what AI changes, and how the law needs to evolve to preserve the values we are so quick to articulate.

The impulse of so many organizations across nearly every sector of society to promulgate principles in response to the ascendance of AI is understandable. Unlike law, which requires consensus and rigid process, an organization can develop and publish principles unilaterally, thereby articulating its recognition of important values nearly in real time. While there is some utility in public commitments to universal values in the context of AI, and while common principles can lay a foundation for societal change, they are no substitute for law and official policy. If, as both detractors and proponents claim, AI constitutes the transformative technology of our time, then one of the aspects of society that must transform is the law and legal institutions.

No invisible hand guides market participants to charity. The Internet is not Eden. Uber and Airbnb are not sharing with anyone. And AI is not a magical genie-in-training. New techniques and technologies alter human affordances, they change what people are able, and think, to do. The role of the law is to understand, channel, and address that change—with rules, not aspirations.

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<sup>8</sup> Absolving academic researchers for violating a website’s terms of service in the course of showing online job discrimination.

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