The Point of No Return:

Regulating Legislation in the "Cold War"

Era of Artificial Intelligence Evolution

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In a world where global power is measured no longer by GDP or military dominance, but in technological innovations, the race to govern artificial intelligence becomes increasingly necessary yet seemingly impossible. Overdrawn conference hearings lead to governmental delays across every sector, spanning international conferences of preventing the next cold war to small-town meetings on how to drive AI as an educational resource for children. The challenge, then, lies not just in what policymakers lack in terms of scientific understanding, but in the holistic perspective of the potentially detrimental effects that misguided regulation could have on both domestic innovation and global security. Within the United States, this brings internal tension as unfocused federal legislation leaves state governments to fill in widening gaps in AI oversight. These jurisdictions subsequently attempt to construct AI policies for immediate concerns such as cybersecurity and educational protection, yet technical demands and the pace of change outstrip what decentralized legislative efforts can meaningfully address. Due to these conflicting and slow-paced legislative changes, the bulk of learning how to govern AI is ultimately best focused within the private sector, where companies navigate ethical practices, potential liability, and consumer safety under incentives that naturally encourage quicker adjustments than traditional legislative cycles can provide.

Because governments often lack the technical agility to regulate emerging AI systems, policymakers need to decentralize AI legislation, shifting long-term responsibility to the private sector and driving a laissez-faire system that can actually make policy adjustments based on the evolving landscape of AI technology. This research delves into current governmental approaches to AI governance by informing policymakers of the highly variable influences of AI innovation and the methods of which these regulatory models should transition to. In analyzing the recent trends in developing AI models' computational capabilities and comparing them to the vastly

differing methods of approaching AI legislation across global superpowers, the economic and societal effects of harsh regulatory models become unavoidably evident. By acknowledging where centralized control becomes counterproductive, government bodies will be able to reevaluate their regulatory posture, recognizing the power of natural governance in current corporate liability policy and innate pursuit of the common good.

Artificial intelligence has consistently developed at a pace that makes comparative research obsolete over time. Unlike fields rooted in stable theoretical foundations, AI systems evolve through constant adjustments in data, architecture, and training goals. This ongoing transformation has led several researchers to argue that the scientific landscape of AI shifts too quickly for policymakers to grasp promptly. In their study on global AI governance, Zaidan and Ibrahim describe AI progress as "highly unpredictable and uncontrollable," noting that this instability fundamentally complicates attempts at proactive oversight (2). Their work helps establish a technical baseline for understanding why AI policy cannot rely on the same gradual, accumulative logic that defines regulation in fields like medicine or transportation. Instead, lawmakers are forced to respond to an environment where scientific norms, performance standards, and even the capabilities of the underlying models change from month to month.

One area where this volatility becomes especially visible is in the collapse of stable evaluation metrics. To understand this phenomenon, Stanovsky et al. conduct a focused analysis on the reliability of various benchmarks posted by companies in support of their own respective models. Before presenting their findings, the authors introduce the notion that new models generally pass benchmark tests that had been designed only a few years prior, with new benchmark tests being created almost every time a new model is released, making it practically impossible to compare what any given score actually signifies. In comparing various tests against

each other, their study warns that "it is currently impossible to know whether a benchmark for deep learning models…is indicative of future behavior" (Stanovsky et al. 5). This insight exposes a critical flaw in the regulatory logic of using standardized tests to verify safety or reliability. If an AI model can rapidly surpass or invalidate a given metric through a given computational innovation, then policymakers cannot assume linear trends of innovation when advocating for various legislation. Strategically selective argumentation within legal and policy settings becomes viable for policymakers who rely on benchmark-based statistical reasoning, as legislators and courts often lack the technical means to effectively contest or contextualize the evidence presented.

This instability is further compounded by the internal complexity of modern AI systems. Drawing on past research of complex systems theory, Kolt et al. argue that traditional approaches to AI governance are insufficient. Their study describes AI governance as being "marked by deep uncertainty," a condition arising from interdependent relationships between model size, optimization strategies, and emergent behaviors (Kolt et al. 6). By framing AI systems as complex systems rather than linear ones, their work reinforces the idea that even technically informed regulations may become outdated before implementation. This perspective adds an important dimension when evaluating policy trends, suggesting AI unpredictability is not merely a consequence of rapid progress but a structural result of how models learn and adapt. New forms of training, changes in objective functions, or shifts in resource allocation can lead to outcomes that neither developers nor policymakers could reasonably anticipate. Similarly, it is this unpredictability that effectively sets the stage for regulatory tension on a global level.

Recent legislative practices diverge internationally, not just in terms of privacy or security standards, but also in the restriction of private-sector models' use as a whole. Chun's section of

the paper "Comparative Global AI Regulation: Policy Perspectives from the EU, China, and the US" evaluates the differing dynamics of legislative practices between the three main superpowers of AI regulation. More specifically, a large, differing dynamic is emphasized when comparing globally accessible models versus the regulatory practices occurring in China. Chun's article describes the regulatory processes in China, emphasizing how AI systems are required to undergo a registration and approval process before being released, allowing regulators to influence model behavior and contextual outputs. Chun mentions, "The registration process alone illustrates how strict central regulation can slow down innovation and economic growth" (11). By contrasting the additional processes of regulatory systems in China with those driven by free markets in the West, Chun argues that China's regulatory motives create secondary factors of innovative stagnation, revealing fundamental differences in how each global system weighs safety, ethics, and competitiveness. Yet, AI regulation is not limited to controlling innovative growth. The inherent risk of considering the possible tampering and overruled control of AI companies by the Chinese government puts consumers at risk of misguided or biased models. In this transitory nature, it is the accessibility of these models that catalyzes a growing global imbalance in AI accessibility. This dynamic is emphasized by Chun when comparing the availability of globally accessible models versus what is actually approved through the regulatory system. In his study, Chun mentions that "As of March 2024, only 546 AI models have been registered [in China], and just seventy are Large Language Models…in stark contrast to…over 500,000 open-source LLMs on Huggingface.co, which is banned in China" (11). The quantitative disparity of model availability, as explained by Chun, not only exemplifies the truth in suppressing consumer availability but raises the question of how a nation of people can accurately trust a government system to regulate a driving societal change with no transparency.

Yet, although China limits the number of usable models to its citizens, many have speculated that its limitation has brought greater access and prioritized usage for consumers in comparison to the economic and technological differences between China and less developed countries globally. Some international bodies, such as the United Nations Development Program, have mentioned this, warning that "Countries that invest in skills, computing power and sound governance systems will benefit, others risk being left far behind" (United Nations Development Program). From this perspective, China's strong state-led investment in AI infrastructure and governance can be framed as giving its citizens a relative advantage over populations in states that lack comparable resources. While aspects of this speculation may hold true, Chinese AI regulation heavily prioritizes sectors that align with national strategic objectives. In examining how the three global superpowers structure their AI policy priorities, Wang et al. conduct a policy analysis of over one hundred national policy documents to determine which themes each region emphasizes most. Their findings show that China places the greatest weight on policy topics related to industrial deployment and state-driven development, noting that "topics under *'research and application'*…account for over 40% of China's AI policy text, while *'social impact'* topics—including human rights and technological risk—receive less than 5%" (Wang et al. 9). By emphasizing these apparent values, Wang exposes the idea of government systems using AI policy not as legislation to protect civil liberties, but as a mechanism within government to elevate industrial competitiveness on the international scale. The outcome is a system where AI is governed almost exclusively for economic and infrastructural gain, supported by a centralized control that enforces rules with limited flexibility and subsequently less transparency. Wang's study further confirms that, among the thirteen thematic topics covered by Chinese AI policy, "social impact" issues such as human rights and technological risk received the least

attention at under five percent while "government role" and "research and application" topics accounted for more than 60% of all policy content (10). In focusing efforts almost purely towards hierarchical gain, the imbalance underpins an inherent reality of limited disclosure, constrained media, and the aforementioned limited accessibility of AI models.

The consequence of this imbalance is a regulatory system that not only micromanages beneficial AI development and otherwise ethically-focused companies, but restricts freedom in practices in ways that are difficult to challenge from within. This approach contrasts not only with looser U.S. market conditions but also with broader international frameworks. For example, the European Union's AI Act has demonstrated over time that even robust frameworks that are created to protect consumers can create similar obstacles when broadly applied. Schroeder de Witt analyzes the structure of the European Union's AI Act, emphasizing its foundational goal of creating a unified regulatory approach across member states. He summarizes that the Act is designed as a "coherent, universal, risk-based regulatory framework," which is ultimately intended to protect fundamental rights and ensure safe innovation (de Witt 24). Yet, this regulatory model, much like its Chinese counterpart, struggles with implementation across "heterogeneous use cases" and has been criticized for "using ambiguous language" that leads to uncertainty among developers (25). Designed initially as a general safety lens for all AI-related policy, the Act has been repeatedly revised and focused on ethical arguments, such as human rights considerations within transparency and liability. In attempting to address all categories of risk, the Act becomes less adaptive to shifting technical realities and imposes disproportionately high burdens of compliance on companies seeking to release new technology onto the free market, especially on startups, which often lack the legal and financial infrastructure to maintain the strict and lengthy compliance standards set up in Europe.

Meanwhile, the United States adopted a system that allows for more freedom in driving company innovation, but only after months of stalled attempts to effectively write overarching legislation, and ultimately shifting responsibility to state governments. Executive Order 14110, issued by the White House in 2023, directed over fifty federal agencies to coordinate more than one hundred AI-related tasks, ranging from encouraging groups to enact local changes in data security policies to writing separate AI regulation policies for each state within their respective education systems (whitehouse.gov). As a result, jurisdictions have been forced to rapidly hire AI advisory staff, many of whom lack any technical fluency or even a fundamental understanding of how AI regulation could affect communities on a broader scale. Chun follows up on this idea by noting that the United States often deploys AI policymakers who lack deep technical or safety expertise. For example, Chun argues that the rapid pace of AI "coupled with the lack of technical expertise in government" has even reversed the usual legislative process (Chun et al. 14). California's draft SB 1047 was created following this order, proposing a nine-member Board of Frontier Models composed of AI and safety experts to approve regulatory standards (Chun et al. 13). The need to establish such an expert board across states, within a fragmented system of state-level boards, federal agencies, and advisory committees, underscores how few existing U.S. committees or task forces can actually find the means to hire qualified AI specialists. Moreover, the level at which these "experts" can actually enforce meaningful regulation is limited by overlapping jurisdictions and increasing policy discrepancies between the countless different AI boards across the nation.

Globally, each government superpower shows innate shortcomings with its respective models. Chun notes a contrast in their core values when establishing regulation, with the United States relying on "market-driven" decentralized approaches, while China uses focuses on their

centralized system (Chun 3). As the European Union and China take a head-on approach to AI governance, a clear pattern of overregulation creates inflexible systems that hinders the progress of companies. For example, the EU AI act has drawn warnings that its stringent rules could "stifle innovation, deter investment, and weaken Europe's position" in the global "tech race" (de Witt 63). China's regime is even more burdensome in its more robust regulatory-based system, with Chun reinforcing the idea that "strict central regulation can slow down innovation and economic growth" (Chun et al. 11). In contrast, the United States' decentralized strategy that leans on existing agencies and voluntary industry standards provides a more balanced approach to these one-size-fits-all mandates. In an effort to negate any regulatory void, the current model leverages the agility and expertise of the private sector, often "[addressing] uncertainty more efficiently than direct regulations" (Zaidan and Ibrahim 823). This flexibility becomes especially valuable in an environment such as the United States, where liability risks often discourage progress. Despite this, the U.S. governance structure of AI still introduces its own complications. This overlapping patchwork of state laws, federal agencies, and committees organizations creates an innate ambiguity, making complete compliance inefficient and relatively impossible when navigating the vast amount of regulatory boards and state-specific legislation. Chun adds that the U.S. lacks any central AI regulator and instead "relies on a range of existing institutions" with inconsistent mandates and priorities (Chun 5). In this context, voluntary self-governance is not a loophole but a practical necessity. Without a clear federal direction, companies are often the only ones positioned to respond in real time, and have been forced to balance liability, adapt to risk, and shape their model behaviors as global expectations change. Still, while clearly inefficient, the United States system reflects the only current governance model that respectively paces with the unpredictability of AI evolution while allowing for greater freedoms of companies.

While there may never be a true equilibrium between regulatory systems and promoting innovation, there may be alternative perspectives on approaching this problem. Most prominently, AI accountability is trending towards keeping liability within the private sector itself. For example, companies like OpenAI have focused their company policies on operating under a set of structural constraints that naturally encourage self-governance. Following OpenAI's spike in popularity, the company reorganized as a Public Benefit Corporation, a legal structure recognized under U.S. corporate law that allows companies to prioritize public benefit (though how that mandate is implemented remains largely self-directed). The company is legally controlled by its nonprofit board, prioritizing long-term societal benefits over commercial incentives that would otherwise dominate startups experiencing exponential growth (OpenAI). The company's fiduciary documents state that OpenAI's "primary fiduciary obligation is to advance the aims of the OpenAI Charter," and that this obligation "always comes first, even at the expense of some or all of their financial stake" (OpenAI). By capping investor returns, ethically based AI companies such as OpenAI can better direct internal decision-making to protect both their company image and the general public interest of AI innovation. Additionally, this company posture is reinforced by prohibiting their respective models from providing over sensitive information and requiring explicit disclaimers that its outputs "are not a substitute for professional advice" (OpenAI). It is important to note that these restrictions do more than just limit the functionality of models. In practice, limiting model capabilities reduces company exposure to liability claims or negligence suits and incentivize firms to adopt responsible guardrails before regulators intervene. The combination of public benefit obligations, capped profits, safety-driven usage rules, and the constant threat of legal liability produces a form of natural governance that traditional systems have struggled to replicate. The private sector's emerging pattern of self-regulation thus demonstrates that companies are already shaping their

own ethical boundaries in real time. As governments continue to struggle with technical, procedural, and structural barriers to comprehensive AI legislation, the most adaptive and responsive governance remains rooted in the companies building these systems, whose incentives and accountability mechanisms evolve in step with the technology itself.

Technological innovation is not some new concept that has never been seen in government. However, the unprecedented speed and autonomy of artificial intelligence has redefined how progress is fundamentally measure and controlled. It is evident that governments struggle to keep pace with evolving systems and lack the technical agility to regulate a technology that advances faster than any legislation can adapt. Policymakers must recognize the importance of granting sufficient flexibility to private-sector innovators and enable them to develop and refine regulatory practices that evolve in tandem with technological advancements. That given leeway can promote accountability and transparency without restricting the unpredictable nature of innovation that traditional bureaucracy fails to recognize.

The contents of this paper have been compiled and formulated through the recency of sources to provide the most accurate information within a constantly shifting technological atmosphere. Yet, this information, like research that preceded it, could easily become misaligned with reality a year from now as unforeseen advancements reshape the landscape. It is essential to view this paper as a chronological timestamp within the broader scope of governmental AI research, allowing for continued analysis of how governmental regulations evolve and comparing their effects with other moments in history marked by rapid technological change. The challenge of this evolving problem lies not only in governing artificial intelligence but in understanding that its progression cannot be predicted. It is up to policymakers to navigate the delicate balance between laissez-faire innovation and reasonable oversight, ensuring that progress remains both sustainable and aligned with the broader public interest.

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