Exploring National Artificial Intelligence Policy Trajectories Through Democracy

by

Aiden McIlvaney

POLSCI 4Z06: Honours Essay

Submitted to the Department of Political Science

McMaster University

In Partial Fulfillment of the Requirements for the degree of

Honours Bachelor of Arts (B.A.) in

Political Science

April 2025

Abstract

Innovations in artificial intelligence (AI) have simultaneously provoked widespread hope and fears. The technology raises countless economic, social, political, and cultural uncertainties. In this environment, several regulatory approaches have emerged that attempt to govern AI. In the academic literature, these approaches have largely been classified using China, the European Union, and the United States as the baseline of study because of their distinct regulatory approaches, despite the availability of dozens of public policy options to these polities. This raises a question, what accounts for these distinct regulatory approaches? This study examines the relationship between democracy and national AI public policy pursuits. It relies on the Organization for Economic Co-operation and Development's four AI policy categories: Governance, Guidance and Regulation, Financial Supports, and AI Enablers and Other Incentives, and the Varieties of Democracy Electoral Democracy Index to statistically examine whether a relationship exists between democracy and national AI policies. The study's results are inconclusive because of a limited sample size presents some exploratory findings for understanding national AI policy development.

Acknowledgements

As I finish painting the canvass of my undergraduate adventure, I reflect on all the people who have supported me and made this journey like no other. At the forefront of my academic experience is Tony Porter. When I first reached out to Tony in late 2023 about potential research projects, I had no idea that it would change the trajectory of my career. I am grateful for all the support Tony has provided me during my undergrad, from supervising this undergraduate essay, supporting me through his research grant, and overseeing countless of my other academic projects. This, of course, would not have been possible without the support of Netina Tan, who not only generously agreed to be this paper's second reader, but also played an instrumental role in my personal development as an undergraduate student. Netina took me under her wing and provided me with exceptional guidance and mentorship.

I am also incredibly grateful to Andrea Lawlor and John McAndrews, both of whom of assisted me with other academic projects but also pushed me to take on challenges outside my comfort zone. Their supervision and encouragement have been invaluable to my professional and personal development. I am also grateful to Kee Yong from McMaster's Anthropology Department, who taught my several valuable life lessons, including that working hard requires playing hard. The support of Tony, Netina, Andrea, John, and Kee have truly made my undergraduate journey an exceptional adventure. Because of them, I have never once regretted my decision to attend McMaster.

I am grateful to my Mom, Dad, Brother, and family who have been nothing less than encouraging, supportive, and reassuring during my time at McMaster. Their unconditional love, no matter how anxious, stressed, or cranky I could be (and have been) throughout the years provided the motivation I needed to pursue my degree. I am grateful to have been born into a loving, caring, and encouraging family that has supported me no matter what decision I've made or adventure I've pursued.

I am deeply indebted to my friends, both those I made while in high school and those I made while at McMaster, who have encouraged me and provided me with unconditional support. I am especially grateful to my friend Todd, who helped me structure the statistical methodology for this paper. His wisdom and statistical expertise made this paper possible, and I deeply indebted to him.

That noted, any errors, shortcomings, or mistakes in this thesis are exclusively mine.

Table of Contents

1. Introduction

On May 13th, 2024, the technology firm OpenAI released GPT-4o, a highly advanced artificial intelligence (AI) model. The capabilities of GPT-4o are wide-ranging, including generating text, images, audio, language translation, solving geometry and physics homework, and logical reasoning (Chen 2024). Indeed, GPT-4o follows a series of leaps in the technological capabilities of AI and large language model (LLM) systems, such as when IBM's Deep Blue defeated world chess champion Garry Kasparov in 1997 (IBM n.d.), showcasing AI's ability to perform highly complex strategic thinking. This was followed by the ground-breaking achievement in 2011, when IBM's Watson won Jeopardy! (IBM n.d.), demonstrating AI's advancement in natural language processing and understanding complex, conversational contexts. In 2016, another monumental achievement occurred when Google DeepMind's AlphaGo defeated Go champion Lee Sedol (Borowiec 2016), marking a significant leap in AI's ability to navigate games that require intuition and creativity, beyond the reach of traditional computing methods. Finally, the launch of ChatGPT in 2022 brought a new era of conversational AI, with the ability to generate human-like text, further pushing the boundaries of language understanding and interaction (OpenAI 2022). Each of these milestones paved the way for the development of systems like GPT-4o, which continue to evolve and expand the potential of AI.

More recently, an update to GPT-4o which enables users to generate images that near-perfectly mimics the unique art style of Studio Ghibli with nothing but a prompt input represents one of the latest advancements in AI (Kircher 2025). Although this advancement, and the innovations of earlier generations of AI systems and LLMs, have provoked widespread curiosity into the capabilities of these emerging technologies, they have also stoked unease, concern, frustration, and even fear. The example of GPT-4o and Studio Ghibli, for instance, has created

tension between OpenAI and the artists whose work GPT-4o (and other AI models) rely on (Pollard 2025). Similarly, in late-2023, The New York Times initiated legal proceedings against OpenAI and Microsoft on the grounds that AI systems and LLMs like ChatGPT rely on the unauthorized use of copyrighted works (Grynbaum and Mac 2023). The validity of these legal proceedings were recently reaffirmed when the presiding judge rejected a request from OpenAI to throw out the lawsuit (Allyn 2025).

The cases of OpenAI, Studio Ghibli, and The New York Times centre on the applicability of copyright law to generative AI systems and LLMs, but they speak to a much broader theme of AI regulation. That is to say, the uncertainty of AI technical trajectories and capabilities has resulted in an uncertain regulatory landscape, where countries are racing to develop proportionate public policy responses (Smuha 2021). For countries attempting to regulate AI, there are countless considerations, such as how AI can be regulated as a technology stack to considering the effects these regulations will have on an increasingly competitive (geo)political environment (Finocchiaro 2024). Some polities like China and the European Union have sought *ex ante* regulation as a means of mitigating the potential harms of AI. Conversely, other countries like Canada, India, Switzerland, and the United States have taken a laissez-faire approach, where either existing regulations are applied to AI or are grounded in newly-created yet intentionally abstract ethical principles (Turk 2024).

The overarching theme is that countries are going to regulate AI, whether it be through command-and-control governance mechanisms or through abstract ethical principles. The question, then, is why do certain countries pursue certain AI regulatory options? With the countless different public policy options available to countries to regulate AI, we would, in theory, expect countries to pursue a healthy mix of regulatory approaches. Yet, scholars have been paying

increased attention to the politically, culturally, and economically distinct approaches countries and political bodies have taken towards AI regulation, particularly around China, the European Union, and the United States (Chun, de Witt, and Elkins 2024; Roberts et al. 2023; Zaidan and Ibrahim 2024; Zhuk 2024; Zou and Zhang 2025). For China, this has been state-based regulation; for the European Union, this has been a rights- and risk-based approach; for the United States, this has been a laissez-faire approach. What, then, explains these distinct regulatory approaches? Why does national AI regulation appear less of a vibrant melting pot of different public policies and more of a high school lunchroom where the 'ethics nerd' state sit at one table frantically highlighting their AI ethical principles homework, the 'laissez-faire tech bro' states huddle around another table bragging about their latest public-private partnership investments, and the 'central planner' states coordinate their next top-down AI regulatory initiatives at a table in the back of the room?

To both understand this apparent divide in national regulatory approaches and expand the discussion of such regulations beyond American, Chinese, and European frames, this study provides a holistic quantitative analysis on the association between democracy and national AI policy outcomes. The central goal is to assess whether the types of national AI policies a country pursues can be predicted based on that country's level of democracy. To achieve these ends, this essay relies on the Organisation for Economic Co-operation and Development (OECD) National AI Policy Observatory database, which accumulates and classifies national AI policies into at least one of four categories: 1) Governance, 2) Guidance and Regulation, 3) Financial Support, and 4) AI Enablers and Other Incentives (OECD 2024f). The total number of categorical policies pursued by each country (out of 69 countries within the OECD's database) represents this study's dependent variable. The independent variable, meanwhile, is V-Dem's Electoral Democracy

Index, which provides a score on a country's quality of democracy using a set of indicators coded by country experts (Michael Coppedge et al. 2024).

In meeting this research goal, this essay is structured as follows: the succeeding section provides an in-depth review of the literature. This begins with an examination of the historical development of national AI policies, including a broad overview of the history of AI regulation into a present-day analysis of different regulatory initiatives. This also entails a comparative overview of AI regulatory initiatives by China, the United States, and the European Union, which is important to underscore because these three polities are where most research on AI regulation has focused. This section also introduces the OECD's AI Policy Observatory. The next section overviews this essay's methodological approach, with a particular emphasis on operationalizing the OECD's four AI policy category themes as the dependent variable and V-Dem's Electoral Democracy Index as the independent variable. The following section details this study's results. The subsequent section includes a discussion of those results, along with limitations and suggestions for future research. The final section concludes.

Overall, this study's results are not statistically significant at the α=0.05 level, indicating no strong evidence that democracy directly influences the number of AI policies enacted. While there are some potential patterns in the data (such as Governance policies showing a slight inverted U-shape relationship with democracy levels, and both Financial Support and Guidance and Regulation policies showing negative associations with democracy), these observations are purely exploratory due to the small sample size. Although the inconclusiveness of the study casts doubt on its generalizability, it represents an opportunity for more granular analysis in understanding the relationship between AI policies, democracy, and other causal variables.

2. Understanding the Development of National AI Policies

2.1. *History of AI Regulation*

2.1.1. *Early Focus on Robotics Ethics (2004-2015)*

Before 2016, there had been little movement by governments to regulate AI (Chesterman et al. 2024). While AI systems began to advance technologically, efforts focused on regulating precursor systems,[1] mainly robotics. This primarily came in the form of ethical principles and considerations developed by private sector, academic, and technical bodies (Ishihara and Fukushi 2010). For instance, in 2004, the Institute of Electrical and Electronic Engineers (IEEE) Robotics and Automation Society founded a committee on 'roboethics'.[2] Similarly, the First International Symposium on Roboethics was held in Sanremo, Italy that year. In 2005, the European Robotics Research Network (EURON) funded the Roboethics Atelier to develop applied roboethics. Following this in 2006, EURON developed a the "EURON Roboethics Roadmap" outlining ethical considerations and problems for developing robotic systems research and development (R&D) (Chesterman et al. 2024; Veruggio 2006). In 2010, the United Kingdom's Engineering and Physical Science and Arts and Humanities Research Councils developed a set of "Principles of Robotics" following a retreat held in British Columbia (Prescott and Szollosy 2017).

During this time, there were some efforts to capture these ethical principles into more tangible public policy and law. For instance, it was reported that South Korea considered using

[1] Although the history of non-fiction AI systems can be traced as far back as 1966, what we might think of contemporary AI systems come in the form of 'deep learning' systems that mimic's the human brain's network and 'think' like a human. It has been argued that Google's AlphaGo system, which in 2015 was able to defeat a world champion in the board game 'Go,' a more complex version of chess, marks the transition into contemporary AI (Haenlein and Kaplan 2019).

[2] The term 'roboethics' was coined by Gianmarco Veruggio in 2002. It describes an applied form of human ethics of robot designers, manufacturers, and users where scientific, cultural, and technical tools can be shared by different social groups and belief systems that prudently advances robotic development (Veruggio and Operto 2008, 1504).

emerging ethical principles as the bedrock for a "Robo Ethics Charter," although this regulatory instrument never materialized (Chesterman 2021, 174).

2.1.2. *Shift to AI Governance (2016-present)*

The formal shift to AI governance began around 2016 (Chesterman et al. 2024), described as the "race to regulate AI" (Smuha 2021). Indeed, an index analysis study of 127 country legislative records found that the number of bills containing the term "artificial intelligence" increased from one in 2016 to thirty-six in 2023 (Maslej et al. 2023, 268). Like robotics, ethics in the form of principles, guidelines, and best practices have been a cornerstone of domestic and international AI regulatory initiatives. For example, one of the earliest government reports on contemporary AI, the 2016 American *Preparing for the Future of Artificial Intelligence*, emphasizes risk mitigation, safety, and market fairness (Holdren et al. 2016). The focus on ethical principles was continued by both the European Union through its *Ethics Guidelines for Trustworthy AI* (European Commission and AI HLEG 2019) and China's "AI Principles" (2019).

Several studies have thematically investigated AI documents and guidelines to identify what central themes, values, and principles are informing AI development, deployment, and regulation (Hagendorff 2020; Jobin, Ienca, and Vayena 2019). Similarly, a high-volume academic literature has been published that outline theoretical opportunities and suggestions for AI regulation. These predominately include works for the ethical deployment, management, and regulation of AI systems as well as considerations for broader society (Bostrom 2020; Cihon, Maas, and Kemp 2020; Iphofen and Kritikos 2021; Rafanelli 2022; Vesnic-Alujevic, Nascimento, and Pólvora 2020; Zhu 2022). Literature has also gone beyond advancing ethical AI regulatory considerations to include more empirical accounts, such as Stix's (2021) "actionable principles" of 1) preliminary

landscape assessments, 2) multi-stakeholder participation and cross-sectoral feedback, and 3) mechanisms to support implementation and operationalizability.

Beyond normative or theoretical scholarly contributions over AI regulation, considerable empirical attention has been paid to AI policies proposed and adopted by governments and transnational organizations. One particularly salient approach in understanding these policies is thematic analysis of AI policy documents to identify what values and principles are being incorporated into AI policies, as opposed to what values and principles should be. For instance, a qualitative content analysis study of 57 AI policy documents identifies principles, personal data protection, governmental, governance and monitoring, procedural, and epistemological themes as core elements of emerging AI policies and strategies (Saheb and Saheb 2024). These findings are consistent with governmental and non-governmental[3] AI principle documents that highlight the themes of accountability, fairness and non-discrimination, human control and values, privacy, responsibility, safety and security, and transparency and explainability (Fjeld et al. 2020).

This approach has been applied more precisely in attempts to identify regulatory themes in certain contexts or for specific AI applications. For instance, Lo (2023) examines proposed AI policies in Canada, China, the European Union, United States, and United Kingdom to assess their implications for libraries, finding that although all policies are premised on the themes of ethics, transparency, data privacy, and a balance between innovation and regulation, regulatory gaps exist regarding risk assessment and AI system bias mitigation. Studies that examine the regulation of AI-facial recognition technology show that approaches by the European Union and

[3] This includes a review of 36 AI principle documents collectively produced by governments, inter-governmental organizations, private sector organizations, civil society, and multistakeholder groups (Fjeld et al. 2020).

United Kingdom focus on accountability requirements whereas regulatory approaches in the United States are ill-defined and fragmented (Almeida, Shmarko, and Lomas 2022).

2.2. *Comparative Analysis of National Approaches*

It is clear there are several public policy options available to states for governing AI domestically. From a public policy perspective, remaining questions for states are what types of AI policies to pursue, and why? Some work has been done that attempts to answer these. For instance, Filgueiras (2022) examines the politics of AI in developing countries, noting that countries with low democratic quality, and more precisely authoritarian countries, tend to design AI policies with fewer regulatory barriers. For instance, autocratic countries such as China, Russia, and Saudi Arabia have developed national AI policies that prioritize accelerating AI research. However, others have argued autocracies like China and Russia not only want to command-and-control AI through regulatory instruments, but actively use such technologies to entrench regime incumbents (Cupać, Schopmans, and Tuncer-Ebetürk 2024).

These issues are even more prevalent in democratic countries. For instance, AI policies in Canada have taken several forms, including ethical statements, governance interventions, programs, standards, and strategic plans (Attard-Frost, Brandusescu, and Lyons 2024). To help illuminate some of the different approaches being taken by states to AI regulation, this section examines three case studies: China, the United States, and the European Union. These three case studies have been described as being in an AI "race" both in terms of AI political economy and regulation because of their distinct regulatory approaches (Budhiraja 2024; Hull et al. 2022;

Roberts et al. 2023). As such, they provide an excellent focal point of analysis for understanding how different regime types are approaching AI regulation.

2.2.1. *China: State-Driven Regulation*

China has taken a unique approach to national AI governance. Domestically, China has historically limited public access to information-communication technology to maintain social order. Freedom House (2024) notes that Chinese citizens experience some of the most restricted access to the Internet in the world. Given the potential of AI to disrupt social order both online and offline, there is an incentive for China to likewise limit public access to such technologies. Internationally, however, political and economic competition with West means China has an incentive to pursue policies that fund and enable AI development (Arcesati et al. 2023).

Accordingly, the domestic governance of AI China would logically need to promote social order without hindering China's competitiveness globally. To understand this dynamic, it makes sense to consider the founding documents of China's approach to AI regulation. This would be China's *New Generation Artificial Intelligence Development Plan* (AIDP) which was initiated in 2017 with the goal of making China a global AI leader by 2030. Thematic analysis of this policy document reveals three strategic goals by China (Roberts et al. 2021). First, the AIDP seeks to promote AI development in China that promotes national competitiveness while also ensuring national security. Second, the AIDP aims to promote economic growth by restructuring economic activities in industrial sectors. Third, the AIDP seeks to promote social governance. Taken together, this analysis suggests that China is indeed attempting to balance the goals of domestic social order and international competitiveness.

This analysis is corroborated by Sheehan (2023), who conducts an in-depth examination of China's national AI governance frameworks, highlighting that China's regulatory approach to AI does not exclusively seek to enable or finance AI, but also to limit the development and deployment of certain AI systems. This is important because whereas jurisdictions such as the United States and European Union have sought to regulate AI as a technology stack, China has instead sought to regulate specific uses and types of AI systems. For instance, in 2021 China developed a national algorithm registry to regulate recommendation algorithms and "deep synthesis"[4] AI. Similarly, in 2023, China developed the *Interim Measures on the Management of Generative AI Services* to govern specific generative AI products and services (Migliorini 2024). This vertical command-and-control regulation of specific AI systems has been criticized for issues of policy drift, where advancements in AI systems outpace the ability of these policies to regulate them (Johnson and Bowman 2021). Sheehan (2023) suggests China's regulatory approach stems from both its interest in regulating content online and advocacy from civil society. Similarly, Migliorini (2024) notes this approach is strategic for China because it only applies to generative AI services accessible to the public and does not affect R&D, hence highlighting China's approach of balancing domestic social order and international competitiveness.

China's approach to AI governance extends beyond system-specific regulations to include broader ethical frameworks and innovation initiatives. In 2019, the National New Generation Artificial Intelligence Governance Expert Committee released a set of ethical AI principles, establishing guidelines for AI development that emphasize harmony, fairness, and respect for human rights while maintaining consistency with socialist values (Laskai and Webster 2019). These principles work in concert with the AIDP and form part of China's larger *Science and Technology*

[4] I.e., "deepfakes," which are artificial but realistically appearing audio, images, and video (Mustak et al. 2023).

Innovation 2030 Major Projects initiative, which positions AI as a crucial component of China's technological advancement strategy. The 2023 *Administrative Measures for Generative Artificial Intelligence Services* deserves particular attention as it represents one of the world's first comprehensive regulatory frameworks for generative AI. These measures require service providers to register their AI models with the government, undergo security assessments, and ensure their training data does not violate Chinese laws (Gong and Qu 2023). This regulatory framework exemplifies China's dual approach: enabling technological advancement while maintaining strict control over content and deployment. The measures require companies to establish robust content moderation systems and take responsibility for user-generated content, effectively extending China's existing Internet governance framework to the AI domain.

Other scholars have described China's participation in AI-technical standard setting (Cantero Gamito 2021), which is consistent with China's approach to other governance initiatives, such as the Internet (Hoffmann, Lazanski, and Taylor 2020). This is noted in the dominance of Chinese firms and institutions in AI technical standard setting bodies such as the IEEE (Porter and McIlvaney n.d.), which has been an important body for national and international AI governance (Schmitt 2022). For China, this approach makes sense because it does not have access to key first-mover AI regulatory discussion channels, such as Council of Europe, European Commission, and G7, G20, and other global initiatives specifically created to impede China's influence in international AI regulation (Cheng and Zeng 2023).

2.2.2. *United States: Market-Led Regulation*

For both the United States and the European Union, one of the key ethical principles that policymakers have attempted to capture in comprehensive AI regulation is risk-mitigation. In the

former, the federal government has experienced significant inertia in translating risk-mitigation based policy goals into tangible policy. One way this has materialized has been in the form of soft-law arrangements, described in the literature as non-binding norms and corresponding techniques for implementing them (Abbott, Marchant, and Corley 2012; Gutierrez and Marchant 2021).

Two of the earliest attempts to regulate AI in the United States occurred under the Trump administration, the February 2019 executive order, *Maintaining American Leadership in Artificial Intelligence* and the November 2020 Office of Management Budget "Guidance on AI" (Engler 2023). Both documents encouraged federal agencies to identify and implement AI risk-reduction strategies and to regulate certain AI applications. Although these documents articulated tangible action items for federal agencies, the translation of these policy goals into public policy measures has been lackluster; in December 2022, only five out of forty-one key federal agencies created plans as instructed by these policy documents.

The Biden administration further pivoted from implementing Trump-administration AI regulatory initiatives by opting to instead to pursue AI risk mitigation through *the Blueprint for an AI Bill of Rights* (AIBoR), released by the White House Office of Science and Technology Policy in October 2022 (Engler 2023). Unlike initial AI policy interventions, the AIBoR does not require federal agencies to mitigate AI risks but instead offers five principles for federal agencies to consider when attempting to mitigate AI risks. Similarly, the *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* executive order was signed in October 2023 (The White House 2023). The guidelines outline accountability, anti-discrimination, privacy, safety, and transparency requirements for developing AI systems (Li et al. 2024). The October 2023 Executive Order marked a significant evolution in federal AI governance, moving beyond purely voluntary guidelines. The order established concrete requirements for federal agencies and AI

companies developing frontier models, including mandatory safety testing, and reporting requirements. Additionally, the creation of the National AI Research Resource Task Force represents an attempt to democratize AI research access, addressing concerns about AI development becoming concentrated among a few powerful companies.

The trend of guidance and guidelines has also been the dominant approach in governance of American firms, such as the July 2023 voluntary commitments from leading AI firms (The White House 2023). It has also been the dominant approach by federal agencies, such as the January 2023 National Institute of Standards and Technology "Voluntary Risk-Management Framework" (Tabassi 2023), and the Department of Homeland Security "Voluntary Guidelines for Firms that Operate Critical Infrastructure" (Hirsch 2024).

From a more 'hard law' perspective, there has been some movement in the American context. This has predominately been in the form of the 2022 *CHIPS and Science Act*, which focuses on promoting private-sector R&D and public-private partnerships through tax cuts, subsidies, and STEM education (Litwin and Racabi 2024). These policy instruments suggest that, parallel to China, the United States is also adopting a dual approach to AI regulation. Specifically, the United States is attempting to manage AI risks through guidance and guidelines (as opposed to China's command-and-control policies) while also incentivizing and promoting AI R&D.

It is worth noting that while federal action has largely focused on voluntary guidelines, state governments have emerged as more proactive regulators of AI. Several states have enacted legislation governing specific AI applications, particularly in areas of immediate public concern. For instance, Illinois's *AI Video Interview Act* (2022) requires employers to notify job candidates about AI use in video interviews, while various states have implemented restrictions on facial

recognition technology use by law enforcement. This state-level activity suggests a more complex regulatory landscape than the federal-level analysis alone would indicate.

Finally, questions remain about the resilience of the American bureaucracy to regulate AI with the return of Donald Trump to the White House. This was demonstrated by one of the first executive actions taken by the president, mainly, the *Removing Barriers to American AI Innovation* executive order, which eliminated several Biden-era AI regulatory initiatives (The White House 2025). With this stroke of a pen and in combination with the new Department of Government Efficiency, Trump Administration 2.0 appears steadfast on reducing domestic AI regulation and promoting AI R&D and consumerism.[5] Indeed, understanding the relationship between democracy and AI policies has arguably never been more important.

2.2.3. *European Union: Rights-&-Risk-Based Regulation*

One of the earliest attempts to regulate AI within the European Union was the 2018 *Declaration of Cooperation on AI* and the European Commission's *Communication on the European Approach to AI* (Roberts et al. 2023). The former emphasizes the need to develop holistic European approaches to regulation, whereas the latter document similarly emphasizes the need to balance AI regulation with European values, industrial production, and technological, social, & economic modernization. Unlike China's vertical regulatory approach and the United States non-binding, market-based approach to AI regulation, the European Union AI regulatory approach is comparatively divergent. Specifically, the European Union's AI Act was the first comprehensive legal framework for regulating AI (Hickman et al. 2024).

[5] Perhaps best further illustrated by Donald Trump's AI blockchain-based $Trump meme coin (Lipton 2025).

Unlike China's vertical AI regulatory approach that attempts to regulate specific AI applications and systems, the European Union AI Act horizontally regulates AI based on the level of "risk" associated with AI systems and applications (Future of Life Institute 2024). This is based on four-tiered classification systems that categorises risk as minimal, limited, high, and unacceptable. Minimal risk AI systems, such as AI-powered video games and spam filters, are not subject to additional regulatory requirements under the AI Act. Limited risk AI systems are generated from deficiencies in transparency, such as non-disclosed AI-chatbots and deepfakes.[6] These systems are subject to transparency requirements where AI developers and deployers must ensure end-users know they are interacting with AI (European Commission 2024).

High-risk AI systems are classified as those with the potential to negatively affect safety or human rights. Article 6 of the European Union AI Act outlines two categories of high-risk AI systems. The first category includes AI products governed by product safety legislation, such as automobiles, aviation, medical technology, and toys (European Parliament 2024). The second category includes AI systems the fall into specific use cases outlined by the AI Act. This include biometrics, critical infrastructure, education and vocational training, employment and workers' management, essential public and private sector service benefits, law enforcement, asylum, border control & migration, and justice & democratic administration (Artificial Intelligence Act 2024, sec. ANNEX III). Articles 8-17 of the European Union AI Act places several regulatory obligations on the providers of these AI systems. This includes risk management, data quality controls, documentation, logging capabilities, user instructions, human oversight mechanisms, performance standards, and quality management systems to ensure regulatory compliance and safe deployment (Artificial Intelligence Act 2024).

[6] See note 7.

Finally, Article 5 of the AI Act bans AI systems and practices that pose unacceptable risks (Artificial Intelligence Act 2024). These include AI systems and applications designed to manipulate human behaviour, exploit socio-economic vulnerabilities, biometrically categorize, or socially score humans, assess individual likelihood of criminal activity, compile facial recognition databases, infer emotions without medical necessity, and 'real-time' biometric identification without just cause.

In addition to the AI Act, there are several other European Union regulatory initiatives that directly or indirectly regulate AI systems and applications. This includes the European Union's General Data Protection Regulation which de facto governs the handling of AI-training data in certain use cases (Sartor and Lagioia 2020), the Digital Services Act and Digital Markets Act—which are important tools for governing the proliferation of AI on social media platforms (Calvet-Bademunt and Barata 2024)—and the proposed Artificial Intelligence Liability Directive, which would establish tangible rules and remedies when AI systems cause harm (European Commission n.d.).

Together, these efforts reflect the governance-based approach being taken by the European Union in attempting to mitigate AI risks and promote human rights. However, it should be noted this approach is not uniform in Europe. For instance, French President Emanual Macron has criticized the AI Act during its development, expressing concern that the legislation would put the European Union at a competitive disadvantage against China and the United States (Caddle 2023). Although France ratified the AI Act after stymying for several months (Piquard 2024), the French vision of AI governance has grown less in line with Europe's risk-based approach and more in line with the principles of innovation (Pouget 2024).

2.3. *Regulatory Approaches to AI*

2.3.1 *Overview of OECD National AI Policies*

A question for policymakers has been how to translate guiding AI ethics sketched out in principles, guidelines, and reports, into tangible public policy. This has come in the form of a broad range of strategies, such as the development of government-initiated national AI strategies (Papyshev and Yarime 2023), the creation of ethical AI guidelines (Héder 2020), command-and-control regulation, industry-self-governance (Yeung and Bygrave 2022), financial incentives, and other various regulatory instruments.

One way to understand the array of different public policy options and governance mechanisms pursued by states for regulating AI would be to turn to oversight bodies that track these policies. OECD members first adopted the "OECD AI Principles" in May 2019, which were most recently revised in May 2024. These ethical principles are the first intergovernmental AI standards (OECD 2024a). The AI principles within OECD policy documents have acted as foundational frameworks for both governmental and inter-governmental AI regulatory initiatives, such as the European Union's AI Act (Russo and Oder 2023). Further, these principles act as a harmonization framework for national AI policies and provide policymakers recommendations in developing AI policies that promote innovation while incorporating value-based principles. These include inclusive growth, sustainable development and well-being, human rights and democratic values, transparency and explainability, robustness, security and safety, and accountability (OECD 2024h). The OECD AI Principles are adhered to by several OECD countries including the United States, United Kingdom, Canada, France, Germany, and Japan, but also by a handful of non-OECD members, including Brazil, Ukraine, and Singapore.

To help streamline the adoption of the OECD AI Principles, facilitate engagement with AI stakeholders, and centralize information on AI policies, the OECD AI Policy Observatory was created in 2020 (OECD 2024a). In fulfilling its mandate of facilitating information on AI policy development and implementation, the OECD AI Policy Observatory maintains a data repository of over one thousand government-led AI policy initiatives from 69 countries, territories, and intergovernmental bodies since 2021 (OECD 2024f). Government representatives, referred to as "national contact points" (NCPs) are invited to submit, review, and update new or pre-existing AI policies to the data repository (OECD 2023). When modifying or adding new policies to the repository, NCPs are instructed to label the policy under at least one of 25 policy instruments, of which are clustered under the themes of Governance, Financial support, Guidance and Regulation, and AI Enablers and Other Incentives. Table 1 overviews each of four AI policy themes and their corresponding policy instruments.

Three features of this list should be acknowledged. First, how policies are classified within the OECD's AI policy repository is at the discretion of the corresponding NPC based on a set of taxonomy guidelines provided by the organization. This fundamentally means that although there are reference points for how national AI policies should be organized, there is an inherent level of subjectivity in the classification of such polices. Second, the themes of Governance, Financial Support, Guidance and Regulation, and AI Enablers and Other Incentives and each theme's corresponding policy instruments are not inherently an exhaustive list of how national AI policies might be classified nor the only way they can be classified. Comparable to how there are

Table 1: OECD AI Policy Themes and AI Policy Instruments[7]

Governance	Financial Support	Guidance and Regulation	AI Enablers and Other Incentives
National strategies, agendas, and plans AI co-ordination and/or monitoring bodies Public consultation of stakeholders of experts AI use in the public sector	Institutional funding for public research Project grants for public research Grants for business R&D and innovation Centres of excellence grants Procurement programmes for R&D and innovation Fellowships and postgraduate loans and scholarships Loans and credits for innovation in firms Equity financing Indirect financial support	Emerging AI-related regulation Regulatory oversight and ethical advice bodies Labour mobility regulation and incentives Standards and certification for technology development and adoption	AI skills and education Labour market policies Public awareness campaigns and civil participation activities Data access and sharing AI computing and research infrastructure Networking and collaborative platforms Knowledge transfers and business advisory services Science and innovation challenges, prices, and awards

different and competing ways for classifying AI systems,[8] it is important to consider alternatives ways for classifying or schematizing national AI policies.[9] Third, a national AI policy may overlap across multiple policy instruments and policy themes. For instance, France's 2018-2026 "National

[7] Table compiled by author from OECD sources (OECD 2023, 2024f).
[8] For instance, some frameworks classify AI systems based on their technical characteristics and capabilities whereas other frameworks classify AI systems based on the degree of automation an AI system is characterized by (Aiken 2021, 9-10).
[9] This is particularly relevant when conceptualizing AI policies beyond the Westphalian system. For example, Veale, Matus, and Gorwa (2023) conceptualize AI policies as series of layers with increasing institutional complexity, including ethical codes and councils, industry governance, contracts and licensing, standards, international agreements, and converging and extraterritorial domestic regulation (Veale, Matus, and Gorwa 2023).

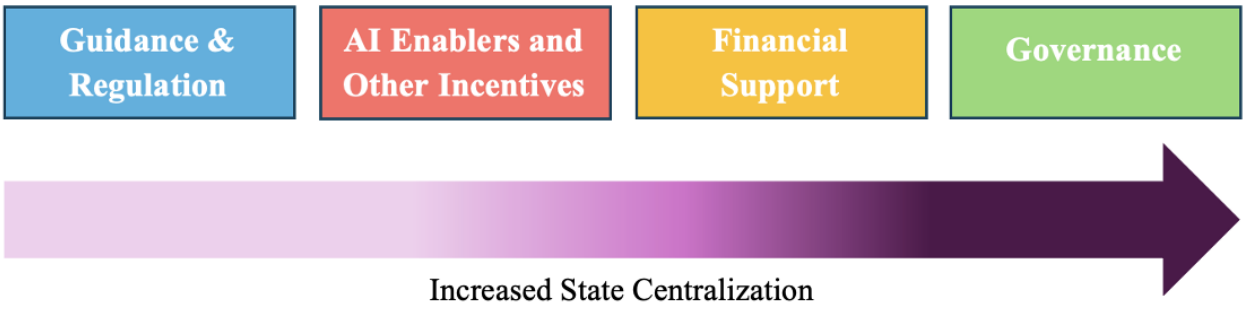
Strategy on AI" incorporates elements from several of the OECD's AI policy themes, including Governance through a 2019 pilot process for seeking technical expertise in regulating AI and Financial Support in the forms of research and development grants, scholarships, and policy challenges (OECD 2024g).

2.3.2. *Conceptualizing OECD AI Policy Themes*

One way for interpreting the OECD four policy themes is based on the level of centralization involved.[10] Based on this typology, Governance can be treated as a the most centralized, formal, and strongest type of regulatory instrument while Guidance and Regulation can be treated as a more decentralized and informal type of regulatory instrument. This is based on how Table 1 portrays Governance as more actionable and tangible public policy compared to the more hands-off policies that fall under the Guidance and Regulation category. Relatedly, Financial Support can be treated as a more centralized form of AI governance because it involves more state control (since it disburses public funds). AI Enablers and Other Incentives can be treated as a more decentralized type of public policy instrument because it focuses on AI implementation and support. Figure 1 helps to illustrate this level of centralization in conceptualizing the OECD AI policy themes.

[10] I am grateful to Tony Porter for this suggestion.

Figure 1: Level of Centralization and Formality of OECD AI Policy Themes[11]



2.4. *Implications of Different Regulatory Approaches*

How states seek to regulate AI in the now have significant consequences for AI in both a technical sense and future regulation. Firstly, policies that attempt to regulate how AI is designed, developed, and deployed, create path dependencies for AI technical properties. For instance, Chiodo, Müller and Sienknecht (2024) argue the early programming and design decisions made by developers impact subsequent AI systems. By not having policies that ensure ethical AI principles are incorporated into initial AI systems, there is a risk that the headwaters from which all other AI systems are designed from will also fail to incorporate ethical AI principles. From a political perspective, policy decisions made now about the technical aspects of AI will impact how systems are designed, developed, and deployed in the future. For example, a government unilaterally banning the use of copyrighted works to train AI systems would significantly hinder all technical AI design and development. Geopolitically, it makes sense for governments not to regulate the technical properties of AI—or at the very least, not adopt hardline technical regulations—to not

[11] In this example, the purple arrow represents increasing state centrality, formality, and organization involves within the OECD Policy type. At the lowest end are Guidance and Regulation and AI Enablers and Other Incentives, of which are operationalized as requiring limited amount of centrality. This is succeeded by Financial Support policies, which require some degree of state centrality to carry out the transfer of funds. Finally, Governance represents the most centralized OECD AI policy category, requiring a high degree of centralization to administer.

'lose' the AI race. For example, in September 2024, China refused to sign the non-binding *Blueprint for Action* that bans the use of AI to control nuclear weapons (Lee 2024).

Second, the types of AI policies that are conceptualised, pursued, and adopted in the present shape future policy considerations. As Greener (2005) highlights, the initial decisions made by policymakers can create lock-in effects on future decisions and outcomes. Similarly, the adoption of certain rules can institutionally shape effect the capacities of regulatory and governance bodies to formulate subsequent rules and policies (Tallberg et al. 2023). For example, the way global infrastructural cables were laid out across the Atlantic during the 1850s have both created digital divides between the global North and South and have limited the capacities of Northern governments to address those divides, instead deferring to platforms to amend digital cleavages (Tworek 2022). More applicably, for instance, a laissez-faire approach taken to AI governance in the present will make state interventionists' approaches in the future harder because of path-dependency and venue shopping.

Third, the types of national AI policies adopted by states domestically have broader implications for global AI governance. More specifically, it can be argued that fragmentation and competition that exists within global AI governance can understood as being at least partially the result of the relationships between states and the domestic political institutions they find themselves in reflecting on the global stage (Moravcsik 1997, 516-521). Empirically, this would mean that how domestic institutional arrangements shape the types of national AI policies states pursue also shape the types of international types of AI policies states pursue. Fragmentation in global AI governance, therefore, can be traced back to how states are comprised of different institutional arrangements that are not uniformly represented within international spaces. This could, for instance, be traced back to the market-driven approach of the United States, the rights-driven

approach of the European Union, or the state-driven approach by China (Klein and Patrick 2024). Ultimately, these implications show that how states use policy to regulate AI matters on several fronts.

2.5. *Research Overview*

2.5.1 *Literature Gap and Research Question*

The discussion above reveals several important considerations about the current literature and nature of the AI regulatory landscape. First, states have several policy options to choose from for regulating AI. This is demonstrated by the OECD's categorization of Governance, Financial Support, Guidance and Regulation, and AI Enablers and Other Incentives. We can understand these four themes as different policy instrument categories rather than different stages of policy development because they represent distinct yet sometimes overlapping approaches that governments deploy simultaneously, rather than sequentially. Second, states can and do pursue different approaches to domestic AI regulation. This is demonstrated by a review of the national AI policies by China (state-driven regulation), the United States (market-based regulation), and European Union (rights & risk-based regulation). Third, the types of policies these polities pursue have long-term consequences for both AI as a technology stack and future AI governance.

Despite these considerations, there remains an overarching gap in the academic literature: given the policy options available to states and the path dependency such policy options create, how can the types of AI policies that states pursue be accounted for? In other words, why do certain states pursue certain national AI policies? The regulatory approaches by China, the United States, and the European Union would indeed suggest there is regulatory variation in how these

polities govern AI, which, as discussed, has been thoroughly examined in the academic literature (Litwin and Racabi 2024; Roberts et al. 2023; Sheehan 2023). Yet, there is a lack of literature that critically attempts to explain *why* regulatory variation persists. Accordingly, the aim of this paper is to examine the relationship between democracy and national AI regulation. More precisely, this paper asks whether a country's level of democracy (independent variable) accounts for state AI policy preferences, based on the OECD's 4 policy areas (dependent variables).

2.5.2. *Democracy as a Predicator for National AI Policy Development*

In the field of political science, democracy is commonly used as an independent variable. This approach is particularly prominent in democratic peace studies. For example, Hegre (2014) examines the relationship between democracy and armed conflict, suggesting democracy and socio-economic development help to explain peaceful resolutions to political strife. Still, democracy has been used as an independent variable for socio-political outcomes beyond democratic peace theory. For instance, Acemoglu et al. (2019) examine the casual relationship between democracy and economic growth, finding that democratization has long-term positive impacts on GDP per capita growth. Li and Reuveny (2007) examine the relationship between a country's regime type on environmental degradation, finding a casual correlation between democracy and reduction in different types of environmental degradation. In a later study, Acheampong, Opoku, and Dzator (2022) find that a country's level of democracy is associated with greater levels of environmental degradation in sub-Sahara Africa. Davenport and Armstrong (2004) examines the casual relationship between democracy and human rights violations, finding that once states pass a high threshold of level of democracy, the likelihood of state repression significantly decreases.

2.5.3. *Linkages Between Democracy and AI Regulatory Approaches*

The discussion of China, the United States, and European Union serves to demonstrate that democracy acts as a key ontological prism for illuminating cause and effect relations that exist in the socio-political world. Similarly, these discussions provide linkages between a country's level of democracy and the types of national AI policies they would pursue. Some academic literature causally suggests a relationship may exist. For instance, Filguerias (2022) argues authoritarian countries such as China, Russia, and Saudi Arabia are making large efforts to accelerate AI R&D through public policy. This suggests that countries with low levels of democracy are inclined to have stricter AI governance policies than high-level democracy countries to prevent AI systems and technologies from being tools of democratization. This would align with the findings of Ibrahim (2024), who suggests that the more AI tools are used by the Saudi government, they more they become a tool of digital authoritarianism. Likewise, Cupać, Schopmans, and Tuncer-Ebetürk (2024) describe how AI is a tool of autocratic consolidation to amplify state power, suggesting a more centralized, top-down governance approach. The authors note this is particularly the case with China, where AI is being used to supplement existing authoritarian practices, including online censorship. This discussion of AI governance and utility in autocratic countries suggests the following hypothesis:

H1: Countries with low-levels of democracy tend to pursue more "Governance" policies than countries with high-levels of democracy.

Smuha (2021) finds that although China, the United States, and European Union are attempting to stimulate AI R&D through policy interventions, there is deviation amongst these nations in AI-enabling regulation and protection regulation. The literature notes that both high-

level and low-level democracy countries are attempting to support AI R&D, even if peripheral regulations on the types of AI systems and technologies that are being financed deviate depending on democracy level. For instance, Bradford (2023, 92) notes that China's "regulatory model also incorporates elements of the American market- driven model," including venture capital investments into (AI) technology stacks (Cupać, Schopmans, and Tuncer-Ebetürk 2024; Mallaby 2023). In higher democracy polities such as the European Union, AI has likewise received significant investments, including eight billion EUR from 2014 to 2020 (Santos, Molica, and Torrecilla-Salinas 2025). Furthermore, both high-level and low-level democracy countries are attempting to enable and incentivize AI R&D and deployment, even if the purposes of these policies differ across regime type. Consequently, because the literature points to both high-level and low-level democracy countries attempting to enable AI, the following hypotheses are posited:

H2: Countries with both high-levels and low-levels of democracy pursue "Financial Support" policies.

H3: Countries with both high-levels and low-levels of democracy pursue "AI Enablers and Other Incentives" policies.

Conversely, Cath et al. (2017) find democracies such as the United States have prioritized AI R&D but are also attempting to translate ethical principles into AI governance strategies. This is particularly the case with the European Union and its "Charter on Robotics" and United Kingdom policy documents suggest the government has a role in AI development. As opposed to more command-and-control or hard law regulations, high-level democracy countries have attempted to regulate through guidance and other non-governance mechanisms such as standards and oversight bodies (Jungherr 2023). The major exception to this is the European Union's AI Act. Nonetheless, this approach has been documented particularly in the United States and United Kingdom. From this, a fourth a final hypothesis can be devised:

H4: Countries with high-levels of democracy tend to pursue more "Guidance and Regulation" policies than countries with low-levels of democracy.

3. Methods and Research Design

To understand why nation-states pursue certain AI regulatory approaches over others, this study explores the association between level of democracy (independent variable) and number of national AI policies produced per the OECD National AI Policy Observatory database (dependent variable).

3.1. *Dependent Variable: OECD AI Policy List*

The OECD AI Policy Observatory, established in 2020 to facilitate the adoption of the OECD AI Principles, maintains a comprehensive data repository of over one thousand government-led AI policy initiatives from 69 countries, territories, and intergovernmental bodies since 2021 (OECD 2024f). This repository categorizes AI policies under four thematic classifications: Governance (encompassing national strategies, coordination bodies, public consultations, and AI use in public sectors); Financial Support (covering various funding mechanisms like institutional funding, grants, and equity financing); Guidance and Regulation (including emerging regulations, oversight bodies, and standards); and AI Enablers and Other Incentives (comprising skills education, infrastructure support, and collaborative platforms). Each policy is classified under at least one of 25 policy instruments distributed across these four themes, though classification involves some subjectivity as it depends on national contact points' discretion based on OECD taxonomy guidelines. The extensive collection and categorization system allows researchers to quantify and compare national AI policy approaches, making the number of policies

within each country and their distribution across thematic areas a valuable dependent variable for studying how different nations approach AI policies.

A review of OECD publications and the OECD AI Policy Observatory's webpage content shows that the organization does not specifically define the difference between the themes of Governance, Financial Support, Guidance and Regulation, and AI Enablers and Other Incentives. However, for each of the listed policy instruments in Table 1, the OECD does provide descriptive characteristics, referred to in OECD policy documents as "facet choices," for how NCPs might classify national AI policies when adding policies to or modifying policies within the data repository (EC/OECD 2023; OECD 2024f). Based on publicly available information provided to NCPs and a review of how current AI policies in the data repository have been classified, the follow subsections develop a theoretical framework for understanding and differentiating the four thematic classifications of national AI policies developed by the OECD.

3.1.1. *Governance*

The OECD's Governance AI regulatory theme refers to the structures, processes, and mechanisms put in place to oversee, direct, and manage the development, deployment, and use of AI systems (EC/OECD 2023). As noted, Governance policies can be understood as the most centralized OECD policy theme. Structurally, this includes the creation or reform of public, governance, regulatory, and oversight bodies to oversee science and technology innovation. For example, in February 2018, Kenyan government created a "Blockchain and AI Taskforce" to produce reports on how such technologies can be regulated (Akello, Nabenyo, and Oyeniyi 2022). This is considered an AI co-ordination and/or monitoring body policy instrument, which falls under the OECD's AI Policy Observatory theme of Governance (OECD 2024d). Governance

also includes national AI strategies, agendas, and plans that articulate government's priorities for scientific and technological innovation, consultations with stakeholders and industry experts, and policy intelligence that tune governance arrangements (EC/OECD 2023). Governance comprises policy intelligence that evaluates and improves existing governance arrangements, such as policy evaluations, technology assessments, benchmarking studies, and foresight exercises. Finally, Governance encompasses policy initiatives that incorporate or lay the groundwork for incorporating AI into a country's public sector, such as Mexico's "AI Use Cases in the Public Sector" initiative that fosters AI research and development for its implementation in Mexico's public sector, including mental health services and financial fraud detection (OECD 2024c).

3.1.2 *Financial Support*

The OECD's Financial Support theme includes all forms of direct and indirect monetary and financial assistance, incentives, or investments provided by public bodies to promote AI research, development, innovation, and adoption (EC/OECD 2023). Financial Support policies are the second most centralized OECD policy theme because of the transfer of funds from the state to state and non-state actors. This includes grant funding directly for AI research and development by private and private sector institutions, but also financing in the form of procurement programmes, fellowships, scholarships, loans, equity financing, and innovation vouchers. For example, between 2019 and 2022, Australia's Department of Industry, Science, Energy and Resources provided $1.4 million in PhD scholarships for Australian graduates researching AI and machine learning (OECD 2024b). Additionally, this OECD AI policy domain includes direct financial support, such as tax incentives for firms and individuals to invest in AI research and development and supports for financial lenders when firms default on loans

(EC/OECD 2023). For example, as part of Argentina's 2020 "Knowledge Economy Initiatives," tax promotions are made to firms that incorporate 4.0 technologies, including AI systems, into their production processes to incentivize industrial efficiency and competitiveness

3.1.3. *Guidance and Regulation*

The OECD's Guidance and Regulation refers to the development and implementation of rules, guidelines, standards, and legal frameworks that govern the creation, use, and impact of AI systems (EC/OECD 2023). It includes regulatory instruments such as laws, rules, and directives to directly or indirectly govern the conduct of AI-related activities or spheres, such as Canada's "Directive on Automated Decision-Making" on the federal government's use of decision-making systems and algorithms (OECD 2024e). It also includes authoritative and publicly funded bodies that assess, monitor and advise on AI regulatory or ethical frameworks, such as the United States National Institute of Standards and Technology 2021 "Four Principles of Explainable AI" (Phillips et al. 2021). Other policy instruments that fall under Guidance and Regulation include standards and certification for AI development and adoption, AI intellectual property regimes, and labour mobility regulation and incentives to attract trained professionals (EC/OECD 2023).

3.1.4. *AI Enablers and Other Incentives*

OECD policy documents show this fourth theme was originally called 'Collaborative Infrastructures', including policy instruments such as networking and collaborative platforms, dedicated support to research and technology infrastructures, and information services and access to datasets (EC/OECD 2023). Although some of these instruments have remained in the now re-

named AI Enablers and Other Incentives, this theme can be understood as policies and initiatives that create favourable conditions for AI development, adoption, and innovation. This includes collaborative infrastructure policy instruments aimed at facilitating AI innovation through multistakeholderism. For instance, in 2017 Germany's National Academy of Science and Technology and Federal Ministry of Education and Research began the "Plattform Lernede Systeme" which facilitates networked AI collaborations between industry experts and civil society (OECD 2024i). Other AI Enabler and Other Incentive policy instruments include knowledge transfers and business advisory services, AI skills training, education and labour market policies, AI dataset access and sharing, and AI computing and research infrastructures (OECD 2024f).

3.2. *Independent Variable: (Electoral) Democracy*

How 'democracy' should be conceptualized and operationalized is a long-standing debate in the field of political science. Generally, democracy is rule by the people, although even this simplistic definition is subject to scrutiny (Mulgan 1968, 4). This literal definition becomes more complicated when developing criteria for how democracy and democratic decision-making can measured in the social world (Dahl 1989). Other issues with this simplistic definition—if not all democratic conceptualizations—are that normative and empirical understandings of what constitutes democracy are in a permanent cycle of contestation and fluctuate over time (Oren 1995). Indeed, as noted by Ray (1998), accepting this proposition attenuates the ability of political science scholars to engage in democratic studies by prohibiting (un)democratic regime types from being systemically categorized in an appropriate way for comparative analysis (Ray 1998). Consequently, rather than viewing democratic studies as a debate over what polities are democratic in a philosophical sense or how the needs of communities that comprise these polities are met, it

instead makes sense to examine the practices, institutions and structures within different regimes commonly associated with democracy (Ray 1997).

This conceptual and empirical approach was famously undertaken by Diamond (1999) in which he distinguishes between 'electoral democracy' and 'liberal democracy' (Diamond 1999). Diamond describes electoral democracy as a "civilian, constitutional system in which the legislative and chief executive offices are filled through regular, competitive, multiparty elections with universal suffrage" (Diamond 1999, 10). This might accordingly be described as a minimalist definition of democracy as although constraints on executive power such as freedom of speech, press, association, and assembly are acknowledged, they are not necessarily de facto regime practices. Contrarily, Diamond's conceptualization of liberal democracy goes beyond viewing democracy as the practice of free and fair elections to account for institutional constraints on legislative and executive power, protections for individual and minority rights, and a rule of law (Diamond 1999, 11-13). From perspective of empirical criteria, this includes constitutional constraints on political power, subordination of the military to elected civilian offices, equal and non-discriminatory civilian protections under the law, and channels for civilian expression and representation beyond political parties and elections.

Ultimately, Diamond's (1999) conceptualizations of electoral and liberal democracies provide a framework for developing criteria to empirically evaluate and categorize political regimes. The question, then, becomes what empirical attributes should be ascribed to these different types of democracy? In other words, what specific characteristics should be associated with democracy so the 'democraticness' of a regime can be measured? One approach that has gained significant prominence in the democratization literature is Dahl's conceptualization of electoral democracy as "polyarchy" (Lührmann and Lindberg 2019, 1100-1101). Under this

conceptualization, electoral democracy can be operationalized as having elected officials, free and fair elections, freedom of expression, alternative sources of information, associational autonomy, and universal suffrage (Robert A. Dahl 1971; Dahl 1989; Teorell et al. 2019). At the core of the electoral democracy conceptualization is the idea that rule makers will be responsive to citizens through periodic elections (Coppedge et al. 2024). Whereas other conceptualizations of democracy attempt to account for other institutional and structural elements that facilitate democratic practices,[12] the electoral democracy concept serves as the bedrock as a regime cannot be considered 'democratic' without elections.

Accordingly, several potential methods for measuring level of (electoral) democracy emerge, though three stand out in the academic literature. The first electoral democracy measurement is by Freedom House, which qualitatively examines the laws and practices of countries and converts these findings into quantitative scores; countries that meet or surpass pre-determined thresholds are considered electoral democracies ("Freedom in the World 2024 Methodology Questions" 2024). Specifically, any country that receives a score of 20 or better on overall political rights, 30 or better on overall civil liberties, and a score of 7 or better in the Electoral Process subcategory is considered an electoral democracy. The second electoral democracy measurement is the Polity Project, which measures the concept of electoral democracy through de jure practices while considering the accountability dimension of liberal democracies (Marshall, Gurr, and Jaggers 2019; Pelke and Croissant 2021). The third electoral democracy measurement is the Varieties of Democracy (V-Dem) project, which attempts to capture and measure the core principles of different democracy types, including electoral, liberal, participatory,

[12] For instance, the liberal conceptualization of democracy, in addition to the criteria of electoral democracies, also enshrines the rule of law, protections for individual rights and liberties, and institutional limitations on political power as fundamental principles for democracy. These limitations are considered in Chapter 5.

deliberative, egalitarian, majoritarian, and consensual principles of democracy (Coppedge et al. 2024). Using an aggregate formula, V-Dem qualitatively examines countries in question to determine whether they meet the criteria of Dahl's polyarchy to mathematically calculate an Electoral Democracy Index (EDI, v2x_polyarchy) score for each country.

As noted by Vaccaro (2021, 680-681), the choice of how to measure democracy is crucial for any study as different measurements are not interchangeable nor are they equivalent (Vaccaro 2021). Accordingly, it is important to examine the shortcomings of the different methods used. Regarding Freedom House, one of the limitations with its methodology is that it broadly considers countries that meet a certain numerical criterion to be an electoral democracy. Although the model is excellent for converting qualitative case studies into quantitative measurements, these seem better reserved for substantively measuring the institutional structures of democracy (i.e., whether countries might be considered liberal) rather than measures of electoral democracy. Regarding the Polity Project's measurement of electoral democracy, one of the model's limitations is that it emphasizes de jure practices rather than de facto practices (Pelke and Croissant 2021). In a research scenario that examines de jure state institutions and policy outcomes, this model would be useful. However, the scope of this project is to account for the de facto practices that shape national AI policy preferences. A critique made against both Freedom House and the Polity Project in the academic literature are the lack of fine-grained democracy scores these measurements provide (Pelke and Croissant 2021). Accordingly, V-Dem's Electoral Democracy is best poised to act as the independent variable's level of democracy measurement.

3.3. *Methodological Approach*

In this study, the dependent variable is OECD National AI Policy count per country, per year. Each policy falls into at least one of the following categories: AI Enablers and Other Incentives, Governance, Financial Support, and Guidance and Regulation. Each observation was pulled from an excel sheet produced by the OECD.[13] Data was cleaned to remove observations with missing data. Data was cleaned to only include observations between 2016 and 2023. This was done because the OECD data only goes as far back as 2016 and because this timeframe is generally consistent with the AI boom (The Economist 2016). Similarly, values in the OECD database with no democracy independent variable (i.e., the African Union and European Union) were removed. In total, there were 2010 observations across 69 case studies (countries); 767 Governance policies, 372 Guidance and Regulation policies, 526 AI Enabler and Other Incentive policies, and 345 Financial Support policies. To evaluate the association between democracy and national AI policy preferences, this study uses a generalized multiplicative model.[14]

3.4. *Confounding Variables*

Since only observational data is available, confounding from country- and year-specific effects were controlled for by including a random effect of country and a nonlinear time trend.[15] Such methods are commonly used in political science to capture the effects of independent variables over several years (Davenport and Armstrong 2004; Sato and Wiebrecht 2024). Gross domestic product per capita is also controlled for to account for economic relationships.

[13] Replication materials can be found here: https://oecd.ai/en/dashboards/overview
[14] Put simply, this uses a statistical modeling technique that extends linear models by allowing for non-linear relationships between predictor variables and the response variable, while maintaining the additivity of the mode.
[15] A spline was used to allow for nonlinear effects of time on policy count.

One potential confounding variable that might explain AI policy trajectories is simply the number of policies that a country produces, describes broadly in the literature as policy growth or policy accumulation (Adam et al. 2019; Knill, Steinebach, and Zink 2024). After all, countries that generally produce a higher number of policies per annum would in theory produce more AI policies than countries that produce a lower number of policies Unfortunately, no master list exists that documents a country's total per annum public policy count. Consequently, this confounding variable is accounted for using the World Bank Group's *Government Effectiveness* (GE) *Index*, which "captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies" (Kaufmann, Kraay, and Mastruzzi 2010; Worldwide Governance Indicators 2025).

Another potential confounding variable has to do with level of technological capabilities of governments themselves to regulate AI. This is referred to in the academic literature as policy capacity, which describes "the set of skills and resources—or competences and capabilities—necessary to perform policy functions" (Wu, Ramesh, and Howlett 2015). Generally, because digital technologies involve complicated technology stacks, multi-stakeholder engagement, and underlying themes like sustainability, they require robust state policy capacity to regulate (Giest 2023). This is particularly the case with AI regulation, where state policy capacity must be robust enough to resist coordinated regulatory capture efforts by Big Tech (Khanal, Zhang, and Taeihagh 2024). To account for what might be described as digital policy capacity, this paper uses the United Nations E-Government Development Index,[16] (EGDI) which "incorporates the access

[16] The EGDI gives a performance rating of national governments relative to each other rather than describing e-government development in absolute terms. This is done on three dimensions: the Online Service Index, Human Capital Index, and Telecommunication Infrastructure Index. These dimensions are based on expert surveys that

characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people" (UN E-Government Knowledgebase 2025).

4. Results

The results of the study are disaggregated based on OECD AI policy type, which are presented in Table 2. In each case, the relationships between electoral democracy and OECD policy type are not statistically significant at an α of 0.05. This suggests there is no strong evidence that democracy directly influences the number of AI policies enacted across the four OECD categories. This is similarly confirmed in Table 3, which captures the total condition effect of democracy on the number of OECD AI policies a country enacts.

assess the performance of 193 United Nation Member States on these indicators (UN E-Government Knowledgebase 2025).

Table 2: Condition Effect of Democracy on AI Policies Per OECD Policy Type

	AI Enablers and Other Incentives			Financial Support		
Characteristic	**log(IRR)**	**95% CI**	**p-value**	**log(IRR)**	**95% CI**	**p-value**
Government Efficiency Index	0.34	-0.65, 1.3	0.5	-5.2	-7.6, -2.9	<0.001
E-Government Development Index	6.6	3.6, 9.7	<0.001	5.8	0.69	0.026
Gross Domestic Product Per Capita	0.00	0.00, 0.00	0.4	0.00	0.00, 0.00	0.5
Year			<0.001			<0.001
Country			<0.001			<0.001
Electoral Democracy Index			0.2			0.2

	Governance			Guidance and Regulation		
Characteristic	**log(IRR)**	**95% CI**	**p-value**	**log(IRR)**	**95% CI**	**p-value**
Government Efficiency Index	-0.34	-0.98, 0.30	0.3	0.16	-0.83, 1.2	0.7
E-Government Development Index	5.3	1.8, 8.9	0.003	4.6	-0.80, 10	0.095
Gross Domestic Product Per Capita	0.00	0.00, 0.00	0.7	0.00	0.00, 0.00	>0.9
Year			<0.001			<0.001
Country			<0.001			<0.001
Electoral Democracy Index			0.6			0.5

Abbreviations: CI = Confidence Interval, IRR = Incidence Rate Ratio

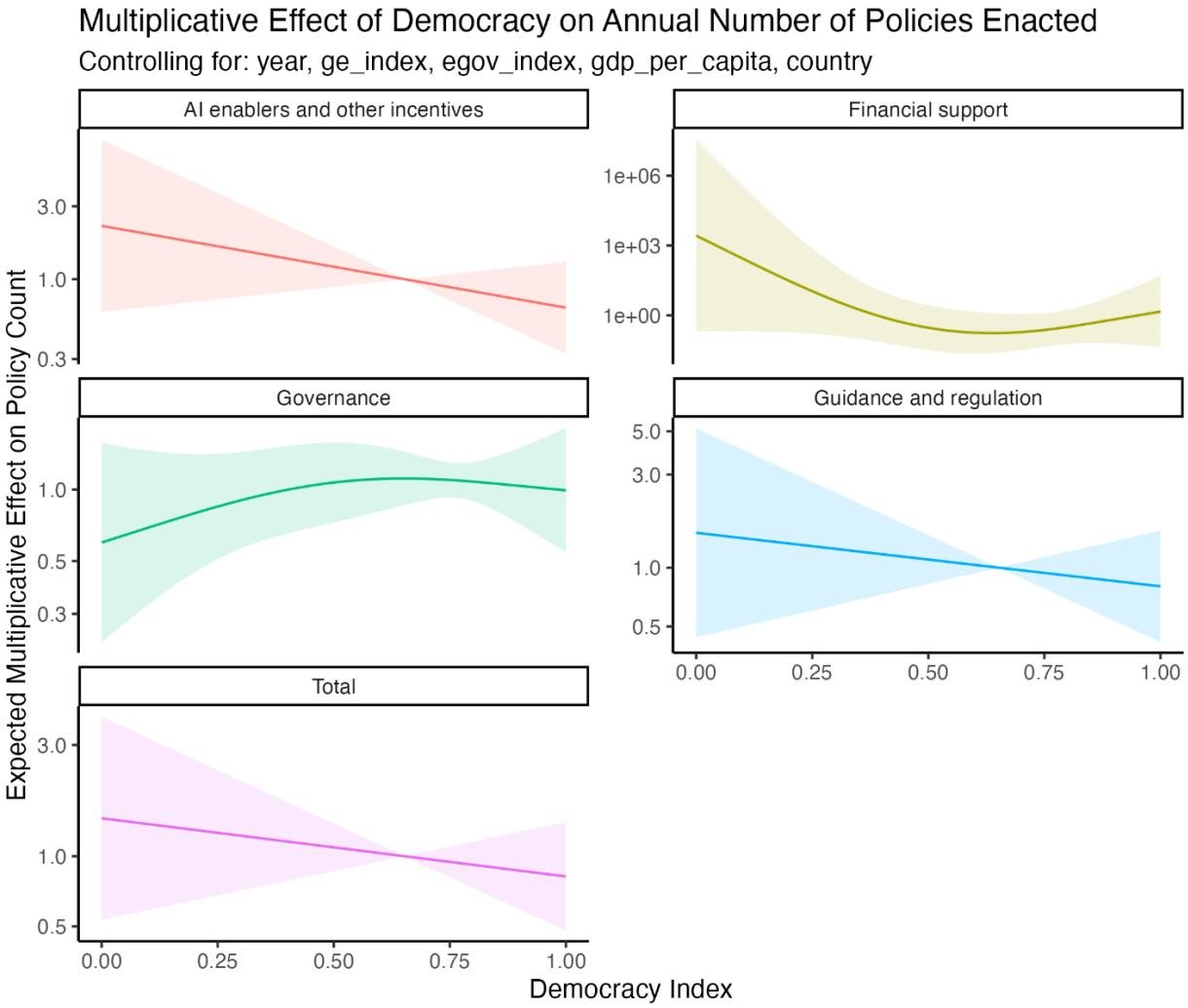
Table 3: Total Condition Effect of Democracy on OECD AI Policies

		Total	
Characteristic	**log(IRR)**	**95% CI**	**p-value**
Government Efficiency Index	-0.52	-1.2, 0.12	0.11
E-Government Development Index	6.6	3.6, 9.7	<0.001
Gross Domestic Product Per Capita	0.00	0.00, 0.00	0.4
Year			<0.001
Country			<0.001
Electoral Democracy Index (IV)			0.5

Figure 2 provides a more nuanced picture of the effect of democracy and predicated OECD AI policy outcomes. For AI Enablers and Other Incentives, there is a clean towards slope from left to right. As the multiplicative[17] effect of democracy increases from 0 to 1, the expected policy count decreases from around 2.8 to about 0.7. The confidence interval (pink shaded area) widens at both extremes, indicating more uncertainty at very low and very high democracy levels. Financial Support policies demonstrate the most dramatic negative relationship, plotted on a logarithmic scale that reveals an exceptionally expected steep decline as democracy increases, with slight flattening at the highest democracy levels. Governance policies stand as the notable exception, with the model showing a predicted positive relationship with democracy that follows an inverted U-shape, peaking at mid-to-high democracy levels before slightly declining. The model also predicts a negative association between Guidance and Regulation policies and democracy, decreasing from about 1.5 to 0.7 as democracy increases, though wide confidence

[17] Here, a multiplicative model describes the relationship between variables by multiplying them together, as opposed to simply adding them. This is done when the impact of one variable on another is dependent on the level of other variables or analyzing skewed data with nonlinear relationships (Sarathy and Muralidhar 2012).

Figure 2: Correlation Between Electoral Democracy and State OECD Policy Choices



intervals indicate substantial uncertainty in this relationship. The total effect across all policy types reveals an expected overall negative correlation between democracy and AI policy enactment, with the aggregate count decreasing from approximately 1.5 to 0.8 as countries move from least to most democratic, with most reliable estimates occurring in the middle democracy range. All these relationships are presented while controlling for temporal effects, government efficiency, e-government capabilities, economic development, and country-specific factors. The chart along with the crosstabs suggests that although a small association exists, they are not statistically significant. Further, the small sample size casts doubt on the results generalizability.

5. Discussion and Limitations

5.1. *Discussion of Results*

The results of this study are inconclusive because the results are not statistically significant. This is likely due to the study's small sample size, where the few numbers of OECD produced by each case study country does not generate sufficient data to draw statistically significant conclusions. Consequently, the previously proposed hypotheses cannot be definitively accepted or rejected. Nevertheless, in such cases, the academic literature points making suggestive and exploratory observations (Visentin, Cleary, and Hunt 2020; Visentin and Hunt 2017). Although the results are null, an exploratory inspection of the charts reveals some potential points of interest. First, exploratory observations around Governance policies suggests that as democracy increases, countries tend to enact more Governance policies, with the number of Governance policies enacted decreasing after a certain level of democracy is reached. Discussed in relation to H1: Countries with low-levels of democracy tend to pursue more "Governance" policies than countries with high-levels of democracy, the observations do not align with the predicted direction.

Regarding H2: Countries with both high-levels and low-levels of democracy pursue "Financial Support" policies, the observed null observations do not align with the hypothesis. Rather, the observation seemingly suggests modest Financial Support policies by low-democracy countries, before decreasing and making a u-shape as a country reaches high-level of democracy.

Figure 2 suggests that for both AI Enablers and Other Incentives and Guidance and Regulation policies indicates that as a country's level of democracy increases, the less likely they are to pursue these types of policies, demonstrated by the downwards trend on the graph. Discussed in

relation to, but not explicitly linked to the original hypothesis, the observations do not align with H3: Countries with both high-levels and low-levels of democracy pursue "AI Enablers and Other Incentives" policies. Rather, low-democracy states prima facie enacts such policies at a higher rate than democracies.

Finally, with respect to Guidance and Regulation, the null observations do not align with H4: Countries with high-levels of democracy tend to pursue more "Guidance and Regulation" policies than countries with low-levels of democracy. Rather, the observations suggest that countries with low levels of democracy tend to favour Guidance and Regulation policies, with the predicted number of such policies decreasing as level of democracy increases.

To be clear, this discussion is not an acceptance nor rejection of the proposed hypothesis; because the results are not statistically significant, no definitive acceptance nor rejection of this study's hypotheses can be made. Rather, these discussions are reported in relation to the study's original hypotheses, and whether the findings aligned with the directions predicted by the hypotheses.

5.2. *Limitations of Study*

The biggest limitation of this study was the small sample size of total number of AI policies enacted that are captured by the OECD AI Policy Observatory's database. As demonstrated by the wide confidence intervals, the generalizability of these results is tentative at best and require further case studies to verify their validity. Similarly, another limitation of this study is the use of reported national AI policies by OECD NCPs. The process taken by the OECD in constructing its National AI Policy repository means that there is inherent variation in how NCPs classify or do not classify

different AI policies. Similarly, this study is limited by potential cases of underreporting of domestic AI policies, particularly by countries not included in the OECD database.

5.3. *Suggestions for Future Research*

This study attempts to provide a more holistic understanding of domestic AI policy trajectories through the lens of democracy, in large part to move away from the American-, Chinese-, and European-centric analysis that dominates the academic literature. While the results of this study are inconclusive, it provides potential leads for understanding causal AI policy trajectories, such as the potential relationship between e-governance and AI policies.

Further, the inconclusiveness of the results points the importance of qualitative analysis in understanding current national AI policy trajectories. Indeed, the hundreds of AI policies listed in the OECD repository presents an excellent, largely untapped opportunity for understanding the different types of national AI policies states are pursuing. Future research involving qualitative analysis of such policies can lead to granular analysis.

6. Conclusion

The world is currently in a race to regulate AI (Smuha 2021), with countries developing a series of different policies to regulate the technology. Research into this global race has largely focused on China, the European Union, and the United States, of which have seemingly developed distinct regulatory approaches, despite the dozens, if not hundreds of potential ways to regulate AI. This raised an important question: what accounts for these distinct regulatory approaches? In answering this question, this study examined whether a country's level of

democracy could account for the types of AI policies pursued, categorized according to the OECD's four policy domains: Governance, Financial Support, Guidance and Regulation, and AI Enablers and Other Incentives. Despite preliminary observations suggesting potential relationships—such as decreasing AI Enablers and Other Incentive policies as democracy increases, and an inverted U-shaped relationship for Governance policies—the statistical analysis yielded inconclusive results. The non-significant findings are likely attributable to the limited sample size, with insufficient data points per country to generate statistically meaningful conclusions. Consequently, the four hypotheses proposed cannot be definitively accepted or rejected.

The study does, however, highlight several important considerations for understanding national AI policy development. First, the E-Government Development Index showed a statistically significant relationship with AI policy adoption across multiple categories, suggesting that a country's digital governance capacity may be more predictive of AI policy trajectories than its democratic characteristics. Second, the preliminary patterns observed in the data, while not statistically significant, offer potential avenues for future research with larger datasets. This research contributes to shifting the academic discourse beyond the dominant American-, Chinese-, and European-centric analyses that characterize much of the current literature on AI governance. It demonstrates the value of examining AI policy development through a broader comparative lens that includes a diverse range of countries.

Future studies would benefit from larger samples as more countries develop and implement AI policies, as well as from complementary qualitative approaches that could provide granular insights into policy formulation processes. Additional research might also explore other potential determinants of AI policy preferences, such as technological capacity, institutional

arrangements, or geopolitical considerations. As AI technologies continue to evolve rapidly and diffuse globally, understanding the factors that shape regulatory approaches remains crucial for anticipating how AI governance will develop across different political contexts. This understanding will be essential for addressing the long-term implications of AI policy decisions and their effects on technological development, human rights, economic growth, and geopolitical relations.

Bibliography

Abbott, Kenneth W., Gary E. Marchant, and Elizabeth A. Corley. 2012. "Soft Law Oversight Mechanisms for Nanotechnology." *Jurimetrics* 52(3): 279–312.

Adam, Christian, Steffen Hurka, Christoph Knill, and Yves Steinebach. 2019. *Policy Accumulation and the Democratic Responsiveness Trap*. 1st ed. Cambridge University Press. doi:10.1017/9781108646888.

Aiken, Catherine. 2021. *Classifying AI Systems*. Washington D.C., United States: Center for Security and Emerging Technology. https://cset.georgetown.edu/publication/classifying-ai-systems/.

Akello, Jackline, Ekai Nabenyo, and Kenneth Oyeniyi. 2022. *Artificial Intelligence in Kenya*. Paradigm Initiative. https://paradigmhq.org/wp-content/uploads/2022/02/Artificial-Inteligence-in-Kenya-1.pdf.

Allyn, Bobby. 2025. "Judge Allows 'New York Times' Copyright Case against OpenAI to Go Forward." *NPR*. https://www.npr.org/2025/03/26/nx-s1-5288157/new-york-times-openai-copyright-case-goes-forward.

Almeida, Denise, Konstantin Shmarko, and Elizabeth Lomas. 2022. "The Ethics of Facial Recognition Technologies, Surveillance, and Accountability in an Age of Artificial Intelligence: A Comparative Analysis of US, EU, and UK Regulatory Frameworks." *AI and Ethics* 2(3): 377–87. doi:10.1007/s43681-021-00077-w.

Arcesati, Rebecca, Wendy Chang, Antonia Hmaidi, and Kai von Carnap. 2023. *AI Entanglements: Balancing Risks and Rewards of European-Chinese Collaboration*. Berlin, Germany: Mercator Instititute for China Studies.

Artificial Intelligence Video Interview Act. 2022. 820 ILCS 42 https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=4015&ChapterID=68.

Attard-Frost, Blair, Ana Brandusescu, and Kelly Lyons. 2024. "The Governance of Artificial Intelligence in Canada: Findings and Opportunities from a Review of 84 AI Governance Initiatives." *Government Information Quarterly* 41(2): 101929. doi:10.1016/j.giq.2024.101929.

Borowiec, Steven. 2016. "Google's AlphaGo AI Defeats Human in First Game of Go Contest." *The Guardian*. https://www.theguardian.com/technology/2016/mar/09/google-deepmind-alphago-ai-defeats-human-lee-sedol-first-game-go-contest.

Bostrom, Nick. 2020. "Ethical Issues in Advanced Artificial Intelligence." In *Machine Ethics and Robot Ethics*, eds. Wendell Wallach and Peter Asaro. Routledge, 69–75. doi:10.4324/9781003074991-7.

Bradford, Anu. 2023. *Digital Empires: The Global Battle to Regulate Technology*. New York: Oxford University Press.

Budhiraja, Raghav. 2024. "AI Race Between China,USA and Europe." *SSRN Electronic Journal*. doi:10.2139/ssrn.4949888.

Caddle, Peter. 2023. "EU's AI Regulation Framework 'Not a Good Idea', Macron Says." *Brussels Signal*. https://brusselssignal.eu/2023/12/eus-ai-regulation-framework-not-a-good-idea-macron-says/.

Calvet-Bademunt, Jordi, and Joan Barata. 2024. "The Digital Services Act Meets the AI Act: Bridging Platform and AI Governance." *Tech Policy Press*. https://www.techpolicy.press/the-digital-services-act-meets-the-ai-act-bridging-platform-and-ai-governance/.

Cantero Gamito, Marta. 2021. "From Private Regulation to Power Politics: The Rise of China in AI Private Governance Through Standardisation." *SSRN Electronic Journal*. doi:10.2139/ssrn.3794761.

Chen, Brian. 2024. "The New ChatGPT Offers a Lesson in A.I. Hype." *The New York Times*. https://www.nytimes.com/2024/05/31/technology/personaltech/chatgpt-4o-openai-review.html.

Cheng, Jing, and Jinghan Zeng. 2023. "Shaping AI's Future? China in Global AI Governance." *Journal of Contemporary China* 32(143): 794–810. doi:10.1080/10670564.2022.2107391.

Chesterman, Simon. 2021. *We, the Robots?: Regulating Artificial Intelligence and the Limits of the Law*. 1st ed. Cambridge University Press. doi:10.1017/9781009047081.

Chesterman, Simon, Yuting Gao, Jungpil Hahn, and Valerie Sticher. 2024. "The Evolution of AI Governance." *Computer* 57(9): 80–92. doi:10.1109/MC.2024.3381215.

Chiodo, Maurice, Dennis Müller, and Mitja Sienknecht. 2024. "Educating AI Developers to Prevent Harmful Path Dependency in AI Resort-to-Force Decision Making." *Australian Journal of International Affairs* 78(2): 210–19. doi:10.1080/10357718.2024.2327366.

Chun, Jon, Christian Schroeder de Witt, and Katherine Elkins. 2024. "Comparative Global AI Regulation: Policy Perspectives from the EU, China, and the US." doi:10.48550/ARXIV.2410.21279.

Cihon, Peter, Matthijs M. Maas, and Luke Kemp. 2020. "Should Artificial Intelligence Governance Be Centralised?: Design Lessons from History." In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, New York NY USA: ACM, 228–34. doi:10.1145/3375627.3375857.

Coppedge, Michael, John Gerring, Carl H Knutsen, Staffan I Lindberg, Jan Teorell, Kyle L Marquardt, Juraj Medzihorsky, et al. 2024. *V-Dem Methodology V14*. University of Gothenburg: Varieties of Democracy (V-Dem) Project. https://v-dem.net/documents/39/v-dem_methodology_v14.pdf.

Cupać, Jelena, Hendrik Schopmans, and İrem Tuncer-Ebetürk. 2024. "Democratization in the Age of Artificial Intelligence: Introduction to the Special Issue." *Democratization* 31(5): 899–921. doi:10.1080/13510347.2024.2338852.

Dahl, Robert A. 1971. *Polyarchy: Participation and Opposition*. New Haven (Conn.): Yale university press.

Dahl, Robert Alan. 1989. *Democracy and Its Critics*. Nachdr. New Haven: Yale University Press.

Davenport, Christian, and David A. Armstrong. 2004. "Democracy and the Violation of Human Rights: A Statistical Analysis from 1976 to 1996." *American Journal of Political Science* 48(3): 538–54. doi:10.1111/j.0092-5853.2004.00086.x.

Diamond, Larry Jay. 1999. *Developing Democracy: Toward Consolidation*. Baltimore: Johns Hopkins University Press.

EC/OECD. 2023. *EC/OECD Science, Technology and Innovation Policy (STIP) Survey, Edition 2023*. OECD AI Policy Observatory. https://stip.oecd.org/assets/downloads/STIPCompassTaxonomies.pdf.

Engler, Alex. 2023. "The EU and U.S. Diverge on AI Regulation: A Transatlantic Comparison and Steps to Alignment." *Brookings Institute*. https://www.brookings.edu/articles/the-eu-and-us-diverge-on-ai-regulation-a-transatlantic-comparison-and-steps-to-alignment/#anchor3.

European Commission. 2024. "AI Act." https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai.

European Commission. "Liability Rules for Artificial Intelligence." https://commission.europa.eu/business-economy-euro/doing-business-eu/contract-rules/digital-contracts/liability-rules-artificial-intelligence_en.

European Commission and AI HLEG. 2019. *Ethics Guidelines for Trustworthy AI.* LU: Directorate General for Communications Networks, Content and Technology, Publications Office. https://data.europa.eu/doi/10.2759/346720 (December 29, 2024).

European Parliament. 2024. "EU AI Act: First Regulation on Artificial Intelligence." *European Union*. https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence#ai-act-different-rules-for-different-risk-levels-0.

Filgueiras, Fernando. 2022. "The Politics of AI: Democracy and Authoritarianism in Developing Countries." *Journal of Information Technology & Politics* 19(4): 449–64. doi:10.1080/19331681.2021.2016543.

Finocchiaro, Giusella. 2024. "The Regulation of Artificial Intelligence." *AI & SOCIETY* 39(4): 1961–68. doi:10.1007/s00146-023-01650-z.

Fjeld, Jessica, Nele Achten, Hannah Hilligoss, Adam Nagy, and Madhulika Srikumar. 2020. "Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-Based Approaches to Principles for AI." *SSRN Electronic Journal*. doi:10.2139/ssrn.3518482.

Freedom in the World 2024 Methodology Questions. 2024. Freedom House. https://freedomhouse.org/sites/default/files/2024-02/FIW_2024%20MethodologyPDF.pdf.

Freedom on the Net 2024: China. 2024. Freedom House. https://freedomhouse.org/country/china/freedom-net/2024.

Future of Life Institute. 2024. "High-Level Summary of the AI Act." *EU Artificial Intelligence Act*. https://artificialintelligenceact.eu/high-level-summary/.

Giest, Sarha. 2023. "Policy Capacity Mechanisms for Addressing Complex, Place-Based Sustainability Challenges." In *The Governance of Place-Based Policies Now and in the Future*, OECD. https://www.oecd.org/content/dam/oecd/en/about/projects/cfe/place-based-policies-for-the-future/policy-capacity-mechanisms-for-addressing-complex-place-based-sustainability-challenges.pdf.

Gong, James, and Harry Qu. 2023. "What You Need to Know About China's New Generative AI Measures." *Bird & Bird*. https://www.twobirds.com/en/insights/2023/china/what-you-need-to-know-about-china%E2%80%99s-new-generative-ai-measures.

Greener, Ian. 2005. "The Potential of Path Dependence in Political Studies." *Politics* 25(1): 62–72. doi:10.1111/j.1467-9256.2005.00230.x.

Grynbaum, Michael, and Ryan Mac. 2023. "The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work." *The New York Times*. https://www.nytimes.com/2023/12/27/business/media/new-york-times-open-ai-microsoft-lawsuit.html.

Gutierrez, Carlos I, and Gary Marchant. 2021. "How Soft Law Is Used in AI Governance." *Brookings Institute*. https://www.brookings.edu/articles/how-soft-law-is-used-in-ai-governance/.

Haenlein, Michael, and Andreas Kaplan. 2019. "A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence." *California Management Review* 61(4): 5–14. doi:10.1177/0008125619864925.

Hagendorff, Thilo. 2020. "The Ethics of AI Ethics: An Evaluation of Guidelines." *Minds and Machines* 30(1): 99–120. doi:10.1007/s11023-020-09517-8.

Héder, Mihály. 2020. "A Criticism of AI Ethics Guidelines." *Információs Társadalom* 20(4): 57. doi:10.22503/inftars.XX.2020.4.5.

Hickman, Tim, Sylvia Lorenz, Zarlush Zaidi, and Daniel Mair. 2024. "AI Watch: Global Regulatory Tracker - European Union." *White & Case - AI Watch: Global Regulatory Tracker*. https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-

european-union#:~:text=The%20EU%20AI%20Act%20is%20intended%20to%20promote%20the%20uptake,functioning%20of%20the%20internal%20market.

Hirsch, Lauren. 2024. "Homeland Security Department to Release New A.I. Guidance." *The New York Times*. https://www.nytimes.com/2024/11/14/business/dealbook/homeland-security-ai.html?unlocked_article_code=1.Z04.eBmm.VPOyaDwfdDfL.

Hoffmann, Stacie, Dominique Lazanski, and Emily Taylor. 2020. "Standardising the Splinternet: How China's Technical Standards Could Fragment the Internet." *Journal of Cyber Policy* 5(2): 239–64. doi:10.1080/23738871.2020.1805482.

Holdren, John. P., Afua Bruce, Ed Felten, Michael Garris, and Terah Lyons. 2016. *Preparing for the Future of Artificial Intelligence*. Washington D.C., United States: Executive Office of the President National Science and Technology Council Committee on Technology. https://obamawhitehouse.archives.gov/sites/default/files/whitehouse_files/microsites/ostp/NSTC/preparing_for_the_future_of_ai.pdf.

Hull, Alfred. D., Jim. K-S. Liew, Kristian. T. Palaora, Mark Grzegorzewski, Michael Klipstein, Pablo Breuer, and Michael Spencer. 2022. "Why the United States Must Win the Artificial Intelligence (AI) Race." *The Cyber Defense Review* 7(4): 143–58.

IBM. "Deep Blue." https://www.ibm.com/history/deep-blue#:~:text=In%201997%2C%20IBM's%20Deep%20Blue,match%20under%20standard%20tournament%20controls.

IBM. "Watson, 'Jeopardy!' Champion." https://www.ibm.com/history/watson-jeopardy.

Ibrahim, Nayera Mohamed Hamed. 2024. "Artificial Intelligence (AI) and Saudi Arabia's Governance." *Journal of Developing Societies* 40(4): 500–530. doi:10.1177/0169796X241288590.

Iphofen, Ron, and Mihalis Kritikos. 2021. "Regulating Artificial Intelligence and Robotics: Ethics by Design in a Digital Society." *Contemporary Social Science* 16(2): 170–84. doi:10.1080/21582041.2018.1563803.

Ishihara, Kohji, and Tamami Fukushi. 2010. "Introduction: Roboethics as an Emerging Field of Ethics of Technology." *Accountability in Research* 17(6): 273–77. doi:10.1080/08989621.2010.523672.

Jobin, Anna, Marcello Ienca, and Effy Vayena. 2019. "The Global Landscape of AI Ethics Guidelines." *Nature Machine Intelligence* 1(9): 389–99. doi:10.1038/s42256-019-0088-2.

Johnson, Walter G., and Diana M. Bowman. 2021. "A Survey of Instruments and Institutions Available for the Global Governance of Artificial Intelligence." *IEEE Technology and Society Magazine* 40(4): 68–76. doi:10.1109/MTS.2021.3123745.

Jungherr, Andreas. 2023. "Artificial Intelligence and Democracy: A Conceptual Framework." *Social Media + Society* 9(3): 20563051231186353. doi:10.1177/20563051231186353.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2010. *The Worldwide Governance Indicators: Methodology and Analytical Issues*. World Bank Group. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130.

Khanal, Shaleen, Hongzhou Zhang, and Araz Taeihagh. 2024. "Why and How Is the Power of Big Tech Increasing in the Policy Process? The Case of Generative AI." *Policy and Society*: puae012. doi:10.1093/polsoc/puae012.

Kircher, Madison Malone. 2025. "People Love Studio Ghibli. But Should They Be Able to Recreate It?" *The New York Times*. https://www.nytimes.com/2025/03/27/style/ai-chatgpt-studio-ghibli.html.

Klein, Emma, and Stewart Patrick. 2024. "Envisioning a Global Regime Complex to Govern Artificial Intelligence." *Carnegie Endorment for International Peace*. https://carnegieendowment.org/research/2024/03/envisioning-a-global-regime-complex-to-govern-artificial-intelligence.

Knill, Christoph, Yves Steinebach, and Dionys Zink. 2024. "How Policy Growth Affects Policy Implementation: Bureaucratic Overload and Policy Triage." *Journal of European Public Policy* 31(2): 324–51. doi:10.1080/13501763.2022.2158208.

Laskai, Lorand, and Graham Webster. 2019. "Translation: Chinese Expert Group Offers 'Governance Principles' for 'Responsible AI.'" *New America*. https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-chinese-expert-group-offers-governance-principles-responsible-ai/.

Lee, Joyce. 2024. "Sixty Countries Endorse 'blueprint' for AI Use in Military; China Opts Out." *Reuters*. https://www.reuters.com/technology/artificial-intelligence/south-korea-summit-announces-blueprint-using-ai-military-2024-09-10/ (December 9, 2024).

Li, Yugang, Baizhou Wu, Yuqi Huang, and Shenghua Luan. 2024. "Developing Trustworthy Artificial Intelligence: Insights from Research on Interpersonal, Human-Automation, and Human-AI Trust." *Frontiers in Psychology* 15: 1382693. doi:10.3389/fpsyg.2024.1382693.

Lipton, Eric. 2025. "Trump Begins Selling New Crypto Token, Raising Ethical Concerns." *The New York Times*. https://www.nytimes.com/2025/01/18/us/politics/trump-meme-coin-crypto.html.

Litwin, Adam Seth, and Gali Racabi. 2024. "Varieties of AI Regulations: The United States Perspective." *ILR Review* 77(5): 799–812. doi:10.1177/00197939241278956a.

Lo, Leo S. 2023. "AI Policies across the Globe: Implications and Recommendations for Libraries." *IFLA Journal* 49(4): 645–49. doi:10.1177/03400352231196172.

Lührmann, Anna, and Staffan I. Lindberg. 2019. "A Third Wave of Autocratization Is Here: What Is New about It?" *Democratization* 26(7): 1095–1113. doi:10.1080/13510347.2019.1582029.

Mallaby, Sebastian. 2023. *The Power Law: Venture Capital and the Making of the New Future*. [London] UK: Penguin Books.

Marshall, Monty G, Ted R Gurr, and Keith Jaggers. 2019. *Political Regime Characteristics and Transitions, 1800-2018 - Dataset Users' Manual*. Polity IV Project. https://www.systemicpeace.org/inscr/p4manualv2018.pdf.

Maslej, Nestor, Loredana Fattorini, Erik Brynjolfsson, John Etchemendy, Katrina Ligett, Terah Lyons, James Manyika, et al. 2023. "Artificial Intelligence Index Report 2023." doi:10.48550/ARXIV.2310.03715.

Michael Coppedge et al. 2024. "V-Dem Dataset V14." doi:10.23696/MCWT-FR58.

Migliorini, Sara. 2024. "China's Interim Measures on Generative AI: Origin, Content and Significance." *Computer Law & Security Review* 53: 105985. doi:10.1016/j.clsr.2024.105985.

Moravcsik, Andrew. 1997. "Taking Preferences Seriously: A Liberal Theory of International Politics." *International Organization* 51(4): 513–53. doi:10.1162/002081897550447.

Mulgan, R. G. 1968. "Defining 'Democracy.'" *Political Science* 20(2): 3–9. doi:10.1177/003231876802000201.

Mustak, Mekhail, Joni Salminen, Matti Mäntymäki, Arafat Rahman, and Yogesh K. Dwivedi. 2023. "Deepfakes: Deceptions, Mitigations, and Opportunities." *Journal of Business Research* 154: 113368. doi:10.1016/j.jbusres.2022.113368.

OECD. 2023. "Guidance to National Contact Points Contributing to the OECD Database of National AI Policies." *OECD AI Policy Observatory*. https://oecd.ai/en/ai-survey-guidance (April 10, 2024).

OECD. 2024a. "About the OECD.AI." *OECD AI Policy Observatory*. https://oecd.ai/en/about/background (April 10, 2024).

OECD. 2024b. "AI PhD Scholarships." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-24378.

OECD. 2024c. "AI Use Cases in the Public Sector." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27149 (September 10, 2024).

OECD. 2024d. "Blockchain and AI Task Force." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-26983 (September 11, 2024).

OECD. 2024e. "Canada's Directive on Automated Decision-Making." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-24240 (September 10, 2024).

OECD. 2024f. "National AI Policies & Strategies." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/overview/policy (April 10, 2024).

OECD. 2024g. "National Strategy on AI." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-25374 (September 10, 2024).

OECD. 2024h. "OECD AI Principles Overview." *OECD AI Policy Observatory*. https://oecd.ai/en/ai-principles (April 10, 2024).

OECD. 2024i. "Plattform Lernede Systeme - Germany's Platform for AI." *OECD AI Policy Observatory*. https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-15632 (September 10, 2024).

OpenAI. 2022. "Introducing ChatGPT." https://openai.com/index/chatgpt/.

Oren, Ido. 1995. "The Subjectivity of the 'Democratic' Peace: Changing U.S. Perceptions of Imperial Germany." *International Security* 20(2): 147–84.

Papyshev, Gleb, and Masaru Yarime. 2023. "The State's Role in Governing Artificial Intelligence: Development, Control, and Promotion through National Strategies." *Policy Design and Practice* 6(1): 79–102. doi:10.1080/25741292.2022.2162252.

Pelke, Lars, and Aurel Croissant. 2021. "Conceptualizing and Measuring Autocratization Episodes." *Swiss Political Science Review* 27(2): 434–48. doi:10.1111/spsr.12437.

Phillips, P Jonathon, Carina A Hahn, Peter C Fontana, Amy N Yates, Kristen Greene, David A Broniatowski, and Mark A Przybocki. 2021. *Four Principles of Explainable Artificial Intelligence*. Gaithersburg, MD: National Institute of Standards and Technology (U.S.). doi:10.6028/NIST.IR.8312.

Piquard, Alexandre. 2024. "France Agrees to Ratify the EU Artificial Intelligence Act after Seven Months of Resistance." *Le Monde*. https://www.lemonde.fr/en/economy/article/2024/02/03/france-agrees-to-ratify-the-eu-artificial-intelligence-act-after-seven-months-of-opposition_6489701_19.html.

Pollard, Chris. 2025. "Artists Issue 'game over' Copyright Warning over New ChatGPT Tool That Can Mimic Their Style in Seconds." *Daily Mail*. https://www.dailymail.co.uk/news/article-

14548163/Artists-issue-game-copyright-warning-new-ChatGPT-tool-mimic-style-seconds.html.

Porter, Tony, and Aiden McIlvaney. "Governing Artificial Intelligence Globally: Beyond Agile Regulation." McMaster University.

Pouget, Hadrien. 2024. "France's AI Summit Is a Chance to Reshape Global Narratives on AI." *Carnegie Endorment for International Peace*. https://carnegieendowment.org/posts/2024/07/france-ai-summit-reshape-global-narrative?lang=en.

Prescott, Tony, and Michael Szollosy. 2017. "Ethical Principles of Robotics." *Connection Science* 29(2): 119–23. doi:10.1080/09540091.2017.1312800.

Rafanelli, Lucia M. 2022. "Justice, Injustice, and Artificial Intelligence: Lessons from Political Theory and Philosophy." *Big Data & Society* 9(1): 20539517221080676. doi:10.1177/20539517221080676.

Ray, James Lee. 1997. "The Democratic Path to Peace." *Journal of Democracy* 8(2): 49–64.

Ray, James Lee. 1998. "Does Democracy Cause Peace?" *Annual Review of Political Science* 1(1): 27–46. doi:10.1146/annurev.polisci.1.1.27.

Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA Relevance). 2024. https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng.

Roberts, Huw, Josh Cowls, Emmie Hine, Jessica Morley, Vincent Wang, Mariarosaria Taddeo, and Luciano Floridi. 2023. "Governing Artificial Intelligence in China and the European Union: Comparing Aims and Promoting Ethical Outcomes." *The Information Society* 39(2): 79–97. doi:10.1080/01972243.2022.2124565.

Roberts, Huw, Josh Cowls, Jessica Morley, Mariarosaria Taddeo, Vincent Wang, and Luciano Floridi. 2021. "The Chinese Approach to Artificial Intelligence: An Analysis of Policy, Ethics, and Regulation." *AI & SOCIETY* 36(1): 59–77. doi:10.1007/s00146-020-00992-2.

Russo, Lucia, and Noah Oder. 2023. "How Countries Are Implementing the OECD Principles for Trustworthy AI." *OECD AI Policy Observatory*. https://oecd.ai/en/wonk/national-policies-2 (November 10, 2024).

Saheb, Tahereh, and Tayebeh Saheb. 2024. "Mapping Ethical Artificial Intelligence Policy Landscape: A Mixed Method Analysis." *Science and Engineering Ethics* 30(2): 9. doi:10.1007/s11948-024-00472-6.

Santos, Anabela Marques, Francesco Molica, and Carlos Torrecilla-Salinas. 2025. "EU-Funded Investment in Artificial Intelligence and Regional Specialization." *Regional Science Policy & Practice* 17(7): 100190. doi:10.1016/j.rspp.2025.100190.

Sarathy, Rathindra, and Krish Muralidhar. 2012. "Perturbation Methods for Protecting Numerical Data: Evolution and Evaluation." In *Handbook of Statistics*, Elsevier, 513–31. doi:10.1016/B978-0-44-451875-0.00019-1.

Sartor, Giovanni, and Francesca Lagioia. 2020. *The Impact of the General Data Protection Regulation (GDPR) on Artificial Intelligence*. Brussels, European Union: European Parliament. https://data.europa.eu/doi/10.2861/293.

Sato, Yuko, and Felix Wiebrecht. 2024. "Disinformation and Regime Survival." *Political Research Quarterly* 77(3): 1010–25. doi:10.1177/10659129241252811.

Schmitt, Lewin. 2022. "Mapping Global AI Governance: A Nascent Regime in a Fragmented Landscape." *AI and Ethics* 2(2): 303–14. doi:10.1007/s43681-021-00083-y.

Sheehan, Matt. 2023. *China's AI Regulations and How They Get Made*. Washington, D.C: Carniege Endowment for International Peace. https://carnegieendowment.org/2023/07/10/china-s-ai-regulations-and-how-they-get-made-pub-90117 (January 26, 2024).

Smuha, Nathalie A. 2021. "From a 'Race to AI' to a 'Race to AI Regulation': Regulatory Competition for Artificial Intelligence." *Law, Innovation and Technology* 13(1): 57–84. doi:10.1080/17579961.2021.1898300.

Stix, Charlotte. 2021. "Actionable Principles for Artificial Intelligence Policy: Three Pathways." *Science and Engineering Ethics* 27(1): 15. doi:10.1007/s11948-020-00277-3.

Tabassi, Elham. 2023. *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*. Gaithersburg, MD: National Institute of Standards and Technology (U.S.). doi:10.6028/NIST.AI.100-1.

Tallberg, Jonas, Eva Erman, Markus Furendal, Johannes Geith, Mark Klamberg, and Magnus Lundgren. 2023. "The Global Governance of Artificial Intelligence: Next Steps for Empirical and Normative Research." *International Studies Review* 25(3): viad040. doi:10.1093/isr/viad040.

Teorell, Jan, Michael Coppedge, Staffan Lindberg, and Svend-Erik Skaaning. 2019. "Measuring Polyarchy Across the Globe, 1900–2017." *Studies in Comparative International Development* 54(1): 71–95. doi:10.1007/s12116-018-9268-z.

The Economist. 2016. "The Return of the Machinery Question." https://www.economist.com/special-report/2016/06/23/the-return-of-the-machinery-question.

The White House. 2023. "Fact Sheet: Biden-Harris Administration Secures Voluntary Commitments from Leading Artificial Intelligence Companies to Manage the Risks Posed by AI." *The White House Fact Sheets*. https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/21/fact-sheet-biden-harris-administration-secures-voluntary-commitments-from-leading-artificial-intelligence-companies-to-manage-the-risks-posed-by-ai/.

The White House. 2025. "Fact Sheet: President Donald J. Trump Takes Action to Enhance America's AI Leadership." *The White House Fact Sheets*. https://www.whitehouse.gov/fact-sheets/2025/01/fact-sheet-president-donald-j-trump-takes-action-to-enhance-americas-ai-leadership/.

Turk, Žiga. 2024. "Regulating Artificial Intelligence: A Technology-Independent Approach." *European View* 23(1): 87–93. doi:10.1177/17816858241242890.

Tworek, Heidi. 2022. "The Path Dependency of Infrastructure: A Commonly Neglected Aspect of Platform Governance." *Centre for International Governance Innovation*. https://www.cigionline.org/articles/the-path-dependency-of-infrastructure-a-commonly-neglected-aspect-of-platform-governance/ (December 9, 2024).

UN E-Government Knowledgebase. 2025. "E-Government Development Index (EGDI)." https://publicadministration.un.org/egovkb/en-us/About/Overview/-E-Government-Development-Index.

Vaccaro, Andrea. 2021. "Comparing Measures of Democracy: Statistical Properties, Convergence, and Interchangeability." *European Political Science* 20(4): 666–84. doi:10.1057/s41304-021-00328-8.

Veale, Michael, Kira Matus, and Robert Gorwa. 2023. "AI and Global Governance: Modalities, Rationales, Tensions." *Annual Review of Law and Social Science* 19(1): 255–75. doi:10.1146/annurev-lawsocsci-020223-040749.

Veruggio, Gianmarco. 2006. "The EURON Roboethics Roadmap." In *2006 6th IEEE-RAS International Conference on Humanoid Robots*, University of Genova, Genova, Italy: IEEE, 612–17. doi:10.1109/ICHR.2006.321337.

Veruggio, Gianmarco, and Fiorella Operto. 2008. "Roboethics: Social and Ethical Implications of Robotics." In *Springer Handbook of Robotics*, eds. Bruno Siciliano and Oussama Khatib. Berlin, Heidelberg: Springer Berlin Heidelberg, 1499–1524. doi:10.1007/978-3-540-30301-5_65.

Vesnic-Alujevic, Lucia, Susana Nascimento, and Alexandre Pólvora. 2020. "Societal and Ethical Impacts of Artificial Intelligence: Critical Notes on European Policy Frameworks." *Telecommunications Policy* 44(6): 101961. doi:10.1016/j.telpol.2020.101961.

Visentin, Denis C., Michelle Cleary, and Glenn E. Hunt. 2020. "The Earnestness of Being Important: Reporting Non-Significant Statistical Results." *Journal of Advanced Nursing* 76(4): 917–19. doi:10.1111/jan.14283.

Visentin, Denis C., and Glenn E. Hunt. 2017. "What Do the Stats Mean? Improving Reporting of Quantitative Nursing Research." *International Journal of Mental Health Nursing* 26(4): 311–13. doi:10.1111/inm.12352.

Worldwide Governance Indicators. 2025. "Government Effectiveness." https://databank.worldbank.org/metadataglossary/worldwide-governance-indicators/series/GE.EST.

Wu, X, M Ramesh, and M Howlett. 2015. "Policy Capacity: A Conceptual Framework for Understanding Policy Competences and Capabilities." *Policy and Society* 34(3–4): 165–71. doi:10.1016/j.polsoc.2015.09.001.

Yeung, Karen, and Lee A. Bygrave. 2022. "Demystifying the Modernized European Data Protection Regime: Cross-disciplinary Insights from Legal and Regulatory Governance Scholarship." *Regulation & Governance* 16(1): 137–55. doi:10.1111/rego.12401.

Zaidan, Esmat, and Imad Antoine Ibrahim. 2024. "AI Governance in a Complex and Rapidly Changing Regulatory Landscape: A Global Perspective." *Humanities and Social Sciences Communications* 11(1): 1121. doi:10.1057/s41599-024-03560-x.

Zhu, Junhua. 2022. "AI Ethics with Chinese Characteristics? Concerns and Preferred Solutions in Chinese Academia." *AI & SOCIETY*. doi:10.1007/s00146-022-01578-w.

Zhuk, Alesia. 2024. "Navigating the Legal Landscape of AI Copyright: A Comparative Analysis of EU, US, and Chinese Approaches." *AI and Ethics* 4(4): 1299–1306. doi:10.1007/s43681-023-00299-0.

Zou, Mimi, and Lu Zhang. 2025. "Navigating China's Regulatory Approach to Generative Artificial Intelligence and Large Language Models." *Cambridge Forum on AI: Law and Governance* 1: e8. doi:10.1017/cfl.2024.4.