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To cite this version:
Musckaan Chauhan, Isabel M Perera. Artificial Intelligence: Promises, Perils and Political Economy. 2024. hal-04453447

HAL Id: hal-04453447
https://sciencespo.hal.science/hal-04453447
Preprint submitted on 12 Feb 2024

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Artificial Intelligence:
Promises, Perils – and Political Economy

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How to cite this publication:
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Abstract
The advent of artificial intelligence introduces significant changes to contemporary society. But are these changes promising or perilous? This essay reviews the political science literature to explore how a comparative political economy lens can help to answer this question. Our findings highlight a growing concern about the perils of AI; however, important gaps in the literature remain that, if addressed, could alter or even reverse this presumption. In particular, we highlight the problem of conceptual imprecision. Closer attention to the ways in which AI may be similar or different to other (non-intelligent) technologies could reveal a far more nuanced political economy.

Keywords: artificial intelligence, comparative political economy, states, firms, technology
The Promise of Artificial Intelligence?

Emmanuel Macron has set his sights on making France a worldwide leader in artificial intelligence (AI). As part of his France 2030 plan, the president of the Republic committed 500 million euros toward developing the technology – a move partially intended to counter the “Anglo-Saxon bias” in this area (as he himself put it, see France24 2023; Chatterjee and Volpicelli 2023). His is not the only government betting on the promising possibilities of artificial intelligence. Although Macron is perhaps most concerned about competition from U.S.-based Google and OpenAI, his counterparts in Germany, Norway, and at the European Union have launched similar investments and plans to support the use of artificial intelligence in key sectors (Reuters 2023; Milne 2023; EC 2021).

Gaining as much attention as the promises of AI, though, are its perils. On the far right, the issue has divided leadership, where supporters have run up against traditionalist concerns about moral and ethical consequences of allowing AI to run amuck (Gatinois 2023; Guillou and Piquard 2023). Such concerns, moreover, are shared across language and even political boundaries. In a provocative 2018 article in The Atlantic, American foreign policy giant Henry Kissinger argued that artificial intelligence was “How the Enlightenment Ends.” In particular, he warned that AI would lack the context to deliver appropriate results; that these decontextualized results, in turn, could change human thought processes and values; and that, even if AI did deliver context-appropriate results, its super-computational power might not be able to explain the rationale for those results in a way that the human mind could understand. AI, in short, could overpower human consciousness – compromising the central thread of social relations.

Debates between pundits and politicians aside, it is clear that AI introduces significant changes to contemporary politics and society. But to what effect? Moreover, what has academic political science to say about this purportedly transformational technological development? Will states and markets transform as well? This article reviews recent scholarship in the discipline to explore the relationship between artificial intelligence and political economy. To do so, we reviewed the top 50 political science journals, as ranked by Scimago, from 1990 to the present, searching for articles on or related to artificial intelligence. Our findings highlight a growing concern among political scientists about the perils of AI, namely its ability to consolidate power in the hands of states or firms. But this outcome is hardly a foregone conclusion. In fact, we find some important gaps in the literature that, if addressed, could alter or even reverse this presumption. In particular, we argue that closer attention to the ways in which AI may be similar or different to other (non-intelligent) technologies could reveal a far more nuanced political economy.
Two Perils, and a Possible Solution

The (limited) political scholarship on AI has noted that its development threatens the achievement, maintenance, and the regulation of political power. Two branches of concern have emerged. On the one hand, political scientists are concerned that granting the state control over AI could render it an ultra-powerful agent of surveillance. On the other hand, granting the market control over AI might allow particular firms to displace states as sites of authority. In both cases, questions arise as to how to check this accumulation of power—that is how to “govern” it. In the first scenario, AI could produce increasingly powerful authoritarian states. In the second scenario, increasingly powerful technology firms (“Big Tech”) could take over the regulation of the AI they produce, ushering an era of “algorithmic” or “digital” “governance” that replaces existing state infrastructure. In brief, if AI falls into the “wrong” hands, be they of the state or firms, then it can make those entities very powerful.

I. Peril 1: AI and the accumulation of state power

Political scientists, especially those studying international relations, have highlighted how introducing AI into government activities could enhance its power. Certainly, authoritarian regimes are chief users of these technologies. For example, authoritarian states can use AI to repress democratic social movements. A burgeoning literature examines the “digital repression” of internal dissidence in states such as Syria, where AI-based technology supercharges that repression (Conduit 2023; Earl et al 2022; Frantz et al 2020; Michaelson and Thumfart 2022). Note also that states deploy these techniques across borders as well, sparking vivid debates in security studies about the effects of displacing human decision-making in warfare with AI decision-making (Amoore and Raley 2016; Goldfarb and Lindsay 2022; Heath-Kelly 2016; Horowitz and Lin-Greenberg 2022; Jensen et al 2020; Maas 2019; Mollicchi 2016; Payne 2018; Roberts and Elbe 2016; Whyte 2023)

As such, it is not only authoritarian states that deploy AI. Indeed, liberal democracies are increasingly using AI – not only for warfare, but also for international trade and domestic surveillance purposes (Feldstein 2019). From a trade standpoint, France, Japan, and Germany have played significant roles in supplying these technologies to other countries. So too has the European Union. According to Böçü and Al-Jizawi (2023), the EU has been instrumental in providing digital infrastructure and elevating the digital repressive capabilities against target populations of the Turkish state under the authoritarian rule of the Justice and Development Party. Note how liberal societies invest in AI to combat trade deficits with China as well, as was the case of the EU’s Smart Specialization policy in 2011, which sought to boost the competitiveness of key European sectors through AI tools (Wigger 2022).

From a domestic policy standpoint, liberal democracies have begun using AI surveillance to hamper civic participation (Dauvergne 2021) and reinforce biased internal policing strategies

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1 The political literature is so limited, in fact, that keyword searches of articles published in the 10 highest-ranked journals in the discipline as of August 2023 for ‘artificial intelligence’ yielded only one result that dealt explicitly with the political implications of AI technology, instead of technology writ large (Goldfarb and Lindsay 2022).
Further, the use of information and communication technologies (ICTs) to control the movement of migrants (see the 2022 special issue of the *Journal of Ethnic and Migration Studies*) indicates how digital resources already serve as an important tool in state arsenals. As an example, Soysüren and Nedelcu examine how France relies increasingly on databases and biometrics (stored in the Eurodac) to deport foreigners. The use of AI surveillance will only accelerate these migration control processes.

More generally, state use of AI threatens “digital privacy.” Whitford and Yates (2022) define this term as “an individual’s appropriate expectation of privacy regarding personal data and control over who has access to it.” Although international organizations have begun calling for digital privacy protections in the name of human rights (Chapman and Li 2023; Soh and Connolly 2021), not all states agree on how to manage this risk. For example, the European Union’s AI Act of 2023 seeks to regulate and ban AI systems that pose a risk to fundamental human rights and digital sovereignty. Its approach stands in stark contrast to the United States Innovation and Competition Act of 2021, which “prioritizes AI innovation, voluntary standards and guidelines, and the application of existing consumer protection standards to new technologies” (Broeders et al 2023). What constitutes as the misuse of AI even in liberal democracies is hence a highly complex and controversial subject, marked by geopolitical and economic priorities.

II. Peril 2: AI and the accumulation of firm power

Political scientists, especially those studying the global economy, have also raised concerns about the accumulation of business power through AI. A recent special issue of the *Review of International Political Economy* (2021) notes this anxiety in the area of global finance. In its introduction, the editors note how AI might change the very “infrastructure” of banking— that is, how these technologies can undergird basic financial activities, such as making payments and setting prices. In the editors’ view, AI impacts global finance at the level of such “background functions.” The market actors that control the functioning and ownership of these infrastructures, then, gain significant political power and leverage.

Several research articles in that special issue point to the accumulation of market power by AI-enabled banking. For example, Brandl and Dietrich (2021) show how new technologies overtake old ones in the centralized global payment system: in the banking sector until early 1980s, in multi-national firms in the 1990s, and in tech-driven companies in the early 2000s. Further, rapid changes in global financial infrastructures create unequal outcomes that exacerbate existing market inequalities. Studies in this special issue show how big data is impacting financialization by altering the infrastructures of fringe finance and “finance inclusion,” expanding the number of indebted marginalized people, particularly in the Global South (Bernards 2019; Langevin 2019; Singh 2019). In China, financial technology (“Fintech”) platforms, or those that use technology, have been granted a central position in the rollout of the digital yuan (Liu 2023).
As such, this branch of the literature notes how the Fintech and Big Tech firms at the forefront of AI development could become too powerful, should they continue to control its use. In this scenario, “Governance,” which is traditionally taken to be the work of state infrastructure, gets overtaken by Big Tech, ushering in an era of “algorithmic governance” or “digital governance.” By using AI and emerging technologies to control global supply chains and global finance, hoard data and manipulate the ways in which information gets exchanged, Big Tech firms seem poised to take over as political authorities par excellence, displacing the state and its infrastructure.

The solution? “AI Governance”

Political scientists hence have become concerned that AI can lead to an excess of power, be it of the state or of the market. Although AI could facilitate and improve some aspects of human society, its unchecked use could disproportionally certain actors. In other words, if AI, as a tool, falls into the “wrong” hands, then it can make those entities very powerful. “Wrong” hands could be those of the state, tech firms, or political groups seeking to further their agenda. To correct this excess accumulation of power, political scientists have recommended updating regulatory structures. A scholarly literature on “AI Governance” hence has burgeoned.

Major edited collections have begun to appear on this topic. In 2021, Policy and Society dedicated an issue to the “Governance of AI and Robotics” (Taeihagh 2021). There, Gahnberg (2021) offers an overarching framework for AI regulation. He proposes formal rule-making in four different areas: 1) the design of the artificial agent’s decision-making capability, 2) the environment it learns from and operates in, 3) the physical/digital/motor actions that an artificial agent can take, and 4) the information that an artificial agent can retrieve from its environment. Scholars also now await the publication of the Oxford Handbook of AI Governance (in press), which promises to analyze and elaborate on such policy prescriptions further. We believe that this scholarship constitutes an important intellectual advance, for it begins to state the observable implications of AI regulation for both states and markets.

Political Economy: Who accumulates power and what determines its regulation

But far more is left to be analyzed and explained. While scholars of international relations and international political economy have paved the way in alerting the discipline to the ways in which states and markets can accumulate power through AI, less has been said about the political determinants of this outcome. When, why, and how do states or market actors accumulate power through AI? And, if improving governance structures can correct this imbalance, who are the actors interested in checking that power? Attention to domestic politics and especially comparative political economy can help scholars identify the conditions under which state or markets accumulate that power, how so, and what regulatory regimes might subsequently result.
Recent studies have attempted to map the variation in AI regulation policy across countries. Papyshev and Yarime (2023) organize 41 states by their national AI strategies. In their view, countries either “develop,” “promote,” or “control” AI. Countries in both the promotion group (e.g., the United Kingdom, the United States, India) and the development group (e.g., China, Japan) prioritize innovation over protection. While the countries that “promote” AI tend to take a decentralized approach and take a backseat to private sector development, those that “develop” it collaborate actively and directly with the private sector. Meanwhile, governments in the “control” group (the European Union, Mexico) emphasize the development of a robust regulatory framework for protection from risks created by AI use.

Comparative political economists can help to identify this macro-level variation and, just as important, explore its political determinants. Existing frameworks (e.g., Varieties of Capitalism, welfare state types, growth models) can help, in that they help to identify the distributive politics that produces alternative state-market relations. Liberal market economies and welfare states, for instance, are inclined to advantage the private sector and its firms. This pattern could help to explain why countries like the U.S., or the U.K. have adopted a promotion, not development or control, strategy toward AI. The longstanding emphasis on consumer protections in the European Union (perhaps a byproduct of its efforts to integrates multiple national growth models) might help to explain its pursuit of the control strategy.

These preliminary hypotheses require much more robust empirical testing – and a clearer articulation of the preferences of key actors across varying institutional contexts. Present work has emphasized that AI firms shape AI policies (Ulnicane et al 2021; Radu 2021). But the comparative political economy literature has taught us that a firm’s characteristics, such as its size or production strategies, matter greatly for its preferences and, by extension, public policy outcomes (Estévez-Abe et al 2001; Mares 2003). Scholars have only just begun to identify the relevant political-economic characteristics of AI firms (e.g., Tallberg et al 2023), noting also that rapid technological changes can shift their preferences just as quickly (for examples from Fintech, see Campbell-Verduyn and Lenglet 2022, Brown and Piroska 2022). Identifying the precise preferences of firms, both those that produce AI and those affected by it, will be a crucial first step toward understanding the regulatory structures for which they advocate.

Moreover, the political battle over AI regulation is not simply between firms. Comparative political economists also have emphasized that the strength and preferences of labor can counterbalance those of business (e.g., Korpi 2006). Few efforts have been made to study how AI shapes worker preferences, as the literature has tended to focus on the effects of older technologies such as automation or robotics. As Kurer and Gallego (2022) note in their review of this literature, there is mixed evidence as to whether workers at higher risk of being displaced by automation support increased spending on unemployment benefits, social protection, and a universal basic income. How technological change affects workers’ political preferences is also highly contextual: workers may begin to vote for a non-establishment party but that depends on whether automation as an issue has been sufficiently politicized or not. Further, workers may (mis)attribute the reasons for their economic decline, blaming

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2 The study excludes France the scope of its AI strategy goes beyond AI.
globalization and/or competition from immigrants instead of digitalization, a reason that is both hard to observe because of the gradual nature of structural change and the political primacy of the link between economic downturn and immigration and trade.

If the effect of automation on workers produces heterogenous effects on worker preferences, will AI be any different? Perhaps. While automation and robotics threatened lower and middle-income earners, AI de-stabilizes higher-income, knowledge-intensive professions (O’Donovan 2020). For example, digital platforms like Uber now use algorithms to perform managerial tasks, rendering middle-class knowledge works redundant in their business model. Now that AI can produce document research and typewriting, professions such as law and journalism, are under threat. Workers in these higher-educated or higher-income professions, though, may have more sway in public policy than their lower-income, automation-threatened counterparts. The recent Hollywood writers’ strike offers a case in point (Foroohar 2023). Here, higher-educated scriptwriters successfully mediatized their grievances against AI, winning significant concessions from employers. Crucially, the scriptwriters were unionized.

Indeed, a key question for political economists will be whether and how worker and firm preferences aggregate, as well as under what institutional constraints. AI development firms in countries with tech-driven growth regimes may more successfully configure regulatory regimes in their favor than those in other growth regimes (Baccaro and Pontusson 2016; Hassel and Palier 2020). Meanwhile, well-represented, higher-income professions may successfully advocate for regulatory controls that prevent their displacement. These are the politics that will condition who accumulates power and who governs it.

**Implications and next steps**

For all its promises, then, AI poses its fair share of perils. We have argued that introducing a macro political economy approach to this field can help to explain just how perilous AI might beyond under what conditions equitable solutions might emerge. Core to this approach will be shifting attention to preference formation, interest aggregation, and institutional context. Lessons might be learned, moreover, from scholarship on the effects of older technologies, such as automation and robotics. To close, we highlight that extending these lessons will require clearly operationalizing what makes “this time different” (to use Kurzer and Gallego’s 2022 language).

Simply put, what exactly is “artificial intelligence”? A clear definition of this term will clarify how its disruptive effects might differ from previous technological changes and, by extension, how political-economic actors might respond differently to it. Doing so, we have found, requires paying attention to both the rapidity with which the technology changes and the extent to which it replaces human decision-making. First, AI changes so quickly that it can outpace the responses politics can offer. Not only might it produce more instability in firm and labor preferences than previous technologies; historically sticky regulatory institutions might be too

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3 For a sample conceptualization and empirical application of this term in public policy and sociology, see Carroué and Bergeron 2023.
slow to keep up. Second, AI might take on a life of its own. Its independent functions could shape the interactions among actors, their access to resources, and the ways in which they process information, and the rules of the institutions in which they operate. Thinking through each of these dimensions will help analysts better understand the distributive implications of France 2030 and plans like it on twenty-first century societies.
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