Book Review

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The Handbook on Public Policy and Artificial Intelligence

by: Regine Paul, Emma Carmel and Jennifer Cobbe (Editors)

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Big Data's flood threatens to drown us, but artificial intelligence (AI) is the life raft. AI, fuelled by this data, learns unseen patterns, predicting your next purchase or illness. It unlocks phones with a glance and answers your questions like a tireless friend. AI is not here to steal our jobs, but to supercharge them. Imagine surgery with AI assistance or designs optimised by its tireless calculations. As AI evolves, so do we, becoming a powerful team with a future brimming with possibilities (Wang, 2023).

As per Correia et al. (2024), AI implementation in public administration can streamline processes, reduce bureaucracy, and enhance accessibility, improving citizens' experiences. In smart cities, AI can expedite urban transformation and elevate residents' quality of life. Legally, AI-driven administrative actions must be adequately justified, considering their unique characteristics to ensure validity. Future research should focus on identifying AI systems suitable for smart governance and examining the challenges and benefits they pose to citizens, especially in reducing bureaucratic processes.

In late 2021, when the editors of this Handbook on Public Policy and Artificial Intelligence (AI) began assembling themes and contributors, the field was still nascent, despite growing recognition. Social science research and key discussions surrounding platform capitalism's impact, AI's influence on democracies and work, and the development of ethical AI governance principles were already gaining traction. However, public policy and public administration scholars were largely absent from the conversation on the social and political ramifications of AI's widespread adoption. Notably, many early social science publications on AI displayed a lack of political awareness and failed to incorporate crucial frameworks and questions relevant to these disciplines. This gap has been directly addressed through the authors' Handbook project.

The 2015 introduction of Emma, a chatbot by the US Citizenship and Immigration Services (USCIS), serves as a landmark instance of Artificial Intelligence Technologies (AITs) being embraced within the public sphere. This computer-generated virtual assistant, capable of answering user queries and directing them to relevant sections of the

USCIS website in both English and Spanish (US Citizenship and Immigration Services, 2018), exemplifies the growing adoption of AI in government processes.

This Handbook furthers the discourse on such advancements by exploring their multifaceted implications. It delves into the policy, political, legal, and administrative roles played by AI applications like Emma within the public policy landscape. By meticulously examining the visible and hidden impacts of these technologies across diverse geographical, socio-economic, technical, and political environments, the Handbook aims to generate valuable public policy and governance insights. This analysis contributes significantly to the burgeoning field of critical AI studies (e.g., Lindgren, 2023).

A comprehensive Handbook (31 chapters) tackles the critical relationship between AI and public policy. Unresolved tensions and complexities surround AI governance. This opening chapter proposes a framework to examine "public policy and AI" beyond narrow technical views. It pushes for broader discussions by outlining three key vantage points for further exploration:

- 1 **Conceptualising AI:** This examines how AI is understood and defined within policy. It explores the normalisation of contested principles like "ethics" and "transparency" for democratic AI governance.
- 2 **AI practices in policy:** This views AI design, development, use, and regulation as dynamic "assemblages" integrating specific meanings, strategies, technological capabilities, and their real-world policy impacts.
- 3 **Global AI landscape:** This focuses on the uneven global political economy of AI production and regulation, exploring how AI interacts with public policy within this power-disparate landscape.

In line with authors' objective of unpacking the complex and ambivalent relationship between AI and public policy – beyond techno-solutionist claims and positivist methodologies – the Handbook is structured into four parts reflecting our vantage points for critical inquiry.

1 AI and public policy: challenges to key concepts

This section addresses the conceptual foundations for understanding the relationship between AI and policy. It explores how AI challenges traditional notions of public administration and policymaking, such as power, bureaucratic decision-making, and discretion. The discussion extends these concepts beyond simplistic man/machine dichotomies, ensuring public policy is not depoliticised. The contributions include:

- A systematic literature review by Andreas Öjehag-Pettersson, Vanja Carlsson, and Malin Rönnblom, highlighting the surprising lack of engagement with the political nature of AI in social science research.
- Lena Ulbricht's chapter, which discusses different concepts of power in AI and public policy.
- Roy L. Heidelberg's examination of AI in the public sector as the potential realisation of an ultra-rational bureaucracy.

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• A reflection by Frans af Malmborg and Jarle Trondal on how AI technologies transform or clash with existing public sector logics.

 Peter André Busch and Helle Zinner Henriksen's analysis of how AI technologies reconfigure discretion in street-level bureaucracy and the implications for democracies and the rule of law.

2 AI and the politics of governance: deconstructing normative precepts

This section unpacks the political work done by guiding principles for AI regulation and governance in various contexts. Chapters critically review debates in research and policy, covering themes such as accountability, bias, ethics, explainability, interoperability, sustainability, transparency, and trust/trustworthiness. The authors map the history of these debates, identify key shifts, and examine the implications of what remains out of scope in research and public discourse on AI technologies.

3 AI and the political economy of public policy and regulation

This section places the Handbook's contributions within the wider context of AI technology production and its implications for global justice. Contributions include:

- Catriona Gray's review of decolonial critiques of AI and their implications for policy and regulation development.
- Sally Brooks' examination of the detrimental socio-economic and political effects of deploying AI technologies in development policy contexts.
- Adekemi Omotubora and Subhajit Basu's discussion on colonial path dependence and copycat dynamics in AI legislation in the Global South.
- Cary Coglianese's analysis of AI's dual implications for public procurement.
- Daniel Mügge's critical reflection on regulatory interdependence and global AI governance.
- Regine Paul's exploration of "AI competition states" and their strategic role in regulating AI technologies.

4 AI and public policy on the ground: practices and contestations

This section offers insights into the diverse technologies used across 10 selected policy domains, the various public purposes behind AI deployment, and the struggles over AI technology use in different contexts. It includes widely discussed AI applications, such as predictive policing and welfare fraud detection, as well as less researched but impactful areas. Chapters cover military uses of AI, policing and law enforcement, migration and border control, judicial decision-making, labour and employment, welfare services, social care, child protection, healthcare, and urban governance.

This comprehensive Handbook provides a nuanced examination of the interplay between Artificial Intelligence (AI) and public policy, extending beyond narrow technical perspectives to foster broader discussions. Public policy researchers, practitioners, regulators, and consultants will find this Handbook invaluable. Graduate students and civil society actors focusing on public policy and AI will also benefit greatly from this essential resource.

The eBook version is priced from £20/\$26 from eBook vendors while in print the book can be ordered from the Edward Elgar Publishing website. Get your copy, and you will not be disappointed. This book is a must-read!

References

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