## Birch Kean (2023) Data Enclaves. Cham: Palgrave Macmillan. 139 pages. ISBN: 978-3-031-46401-0

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Kean Birch's Data Enclaves presents a theoretically and methodologically engaged contribution to critical scholarship on data capitalism, digital data governance, and the political economy of technoscience. It examines the infrastructures, ideologies, and institutional practices through which digital personal data is transformed into political-economic assets. Birch's key intervention lies in demonstrating how 'Data Enclaves' - i.e. private, controlled, and monopolized ecosystems constructed by Big Tech – undermine the ideal of open markets and aggravate informational asymmetries. Drawing from STS, political economy, and critical digital data studies, Birch argues that the contemporary data-driven economy no longer reflects the traditional functioning of markets, but constitutes a new form of rentier technocapitalism through data enclaves that are driven primarily by parasitic innovation. The book is not only an analytical deconstruction of the assetisation of data but also a call to rethink the governance structures surrounding collection and use of digital personal data. It challenges orthodox techno-libertarian and economistic narratives that dominate policy debates around innovation, privacy, and digital data regulation. Birch invites scholars as well as policymakers to confront the performative power of data enclaves in how they reconfigure market dynamics, concentrate power, and restructure knowledge production in digital economies.

In the book, Birch analyses how Big Tech firms primarily Apple, Google (Alphabet), Amazon, Meta (Facebook), and Microsoft have constructed proprietary environments to extract, hoard, and monetise digital personal data. These enclaves are not merely technical spaces but politicaleconomic formations, sustained by infrastructural dominance, legal protections, and exploitative informational asymmetries. Birch thus emphasises that data, instead of being 'raw' or naturally occurring, is produced through what he terms 'techcraft'; the socio-technical practices and architectures that render personal data measurable, legible, and monetisable. A central argument for this is that data is not a commodity, but an artefact or construction of digital collection architectures that have particular purposes. This moves away from commodification to assetisation, which aligns with Birch's broader project on technoscientific capitalism (Birch and Muniesa, 2020). Data assets are from this perspective both speculative as well as relational: they generate value not through direct exchange, but through anticipated future rents based on their entanglements. Birch argues that markets are no longer functioning in the conventional sense; they are being replaced by pseudo-markets, governed by a handful of monopolistic firms. Unlike traditional narratives of innovation as inherently progressive or beneficial, Birch also identifies parasitic innovation as extractive, deceptive, and exclusionary. He argues that innovation in Big Tech is less about creating public

value and more about entrenching dominance by locking users into ecosystems, exploiting vulnerabilities, circumventing regulation, and maximising engagement metrics for profit.

Birch's conceptual framework intervenes in multiple scholarly conversations. Within STS, it contributes to ongoing debates about the co-construction of technology and society by showing how digital architectures both reflect and reproduce existing power relations. More specifically, the notion of techcraft - inspired by 'statecraft' (Scott, 2020) - is used to explain platform capitalism. Birch identifies accounting and valuation practices complicit in techcraft, reshaping social life under digital regimes. Within political economy, the text builds on and extends critiques of neoliberalism and market fundamentalism. Birch makes a compelling case that rentier logics, instead of competition or innovation, are the dominant force behind data-driven technological development. This critique is related to shared concerns of governments around the world to regulate data monopolies and platform power effectively. Birch's critique of valuation practices, particularly the opaque and performative processes through which personal data is rendered economically valuable, intersects with broader conversations in accounting and financialisation studies. Birch argues that even though personal data is widely recognised as a valuable resource, it remains absent in accounting standards and formal economic models, thereby evading public accountability and democratic oversight.

Among the compelling strengths of Data Enclaves is its theoretical synthesis. Birch brings together strands of STS, political economy, as well as accounting and valuation studies to craft a multidimensional analysis of data capitalism. The clarity with which concepts such as techcraft, assetisation, parasitic innovation, and data enclaves are presented, is commendable. These concepts are not only analytically powerful but also insightful for interdisciplinary scholars and other readers. The extended discussion of Google's AdTech ecosystem for example offers a clear demonstration of how data enclaves operate in practice, entrenching asymmetrical power relations under the guise of market exchange. Another strength of the arguments and discussion

of the book is its normative direction. Birch does not merely critique existing arrangements but calls for new forms of collective data governance that would open up space for alternatives such as data co-operatives, trusts, or public mandates for open data that could democratise access to and control over digital infrastructures.

As limitations of the book, the text is theoretically rich, yet relatively light on empirical details beyond select case studies like Google's advertising infrastructure or Tinder's discriminatory pricing models. While Birch's methodological preference for abstraction is justified within his framework, a deeper empirical grounding particularly in how different data valuation models operate across sectors could have strengthened the text's evidentiary base. Additionally, the text's engagement with Global South contexts is minimal. Given that Big Tech's data extraction and enclosure are profoundly transnational, it would have been useful to explore how data enclaves manifest in diverse regulatory environments beyond North America and Europe. This omission is especially notable in discussions about surveillance capitalism and platform governance, where regional variance plays a significant role in shaping user experiences and regulatory possibilities.

Within STS, Data Enclaves contributes to a growing subfield concerned with the material, infrastructural, and economic conditions of knowledge production through digital technologies. It complements existing work (Srnicek, 2017; Viljoen, 2021; Birch and Bronson, 2022; Zuboff, 2023) while offering a distinct focus on innovation, valuation, and rentiership. A key perspective for Birch is stressing the importance of the economic architecture of data capitalism; i.e. its asset forms, performative capabilities and practices, accounting opacity, and pseudo-market dynamics. The book is here particularly insightful with regard to regulatory and policy debates around antitrust, privacy, and digital sovereignty. Birch's argument that "there are no markets anymore" (p. 120) challenges the foundational assumptions of market-based regulation. If data enclaves constitute pseudo-markets governed by a monopolistic logic, then current antitrust frameworks that rely on assumptions of market competition are ill-suited to address the concentration of power in the digital economy.

The book is recommended reading for scholars in STS, political economy (of technoscience), and digital platform governance. It will also be of interest to policy analysts and regulators contending with the economic and ethical challenges of Big Tech as well as students and researchers seeking to understand structural logics of digital platform capitalism. *Data Enclaves* makes a bold statement towards uncomfort-

able truths about the political economy of data. By theorising the rise of parasitic innovation, the reframing of data as assets, and the demise of traditional markets, Birch provides a compelling framework for rethinking how personal data is produced, governed, and valued. In a world increasingly governed by invisible infrastructures and opaque algorithms, *Data Enclaves* is a reminder that data is never neutral, and neither is its governance.

## References

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