



Digital powers: Surveillance and economic logics in a datafied world

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review of

Zuboff, S. (2019) *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. London: Profile Books. (HB, pp. 691, \$ 24, ISBN: 9781781256848)

Some scholars churn out paper after paper with small arguments and thinly sliced contributions, and may compile them into books that connect the dots and offer broader perspectives. Others leave fewer, but much bigger footprints. Shoshana Zuboff, professor emerita at Harvard Business School, certainly falls in the second category. Her first book, *In the age of the smart machine: The future of work and power* (Zuboff, 1985), remains a pillar in fields of research focusing on digital technologies, information systems, organization and management, and knowledge production. Fast forward to today, and her second monograph *The age of surveillance capitalism: The fight for a human future at the new frontier of power* has landed smack in the middle of heated discussions about the role of technology in society, the dominance of tech companies, contemporary mutations of capitalism, and how to protect fundamental human values in the face of these forces. It is a big and bold book, and its impact is already visible. It was listed as number one in former president Barack Obama's 2019 list of favorite books, in the *New York*

Times, *Time Magazine*, *The Guardian*, and a wealth of other lists of top books. Zuboff's thoughts about our dark digital future have also been picked up in more popular contexts, such as Jeff Orlowski's new documentary *The social dilemma* and DJ Shadow's new album *Our pathetic age*.

The diagnosis

Zuboff's main argument is that we have grossly underestimated the consequences of the business models and commercial desires of Silicon Valley companies such as Google, Facebook and Amazon. For a long time, these companies successfully cast themselves as drivers of freedom, innovation, democracy and community, and as noble providers of smart and free services. While this image of the tech industry has lost its gloss in recent years, our responses and forms of critique remain fuzzy, scattered and feeble. We may be concerned that social media platforms spread fake news and misinformation, or take little responsibility for harmful contents. Some may also be pushing for approaches to data extraction that are more ethical, and asking for our privacy to be better protected. And others are asking critical questions about what the size and monopoly-like positions of these large tech companies will mean for existing industries and institutions. But according to Zuboff, such concerns and conversations simply distract our attention from a much bigger phenomenon – a looming threat to our human future. She calls it 'surveillance capitalism' and uses the first page of the book to define this term as a 'new economic order that claims human experience as free raw material for hidden commercial practices of extraction, production, and sales', and a 'parasitic economic logic' that seeks to control human behavior, undermine democracy, provide total certainty about human lives and social order, and otherwise dominate society. Human experience – our emotions, voices, fears and personalities – is what surveillance capitalism harvests and uses for its commercial exploitation.

It is important to stress that in Zuboff's account, the root of the problem is not technology, digital transformations, or even individual companies, although her account largely focuses on the role of Google in the making of surveillance capitalism. At the core of surveillance capitalism lies a business

model and a corporate project that seeks to turn human lives into commercial profit, just like earlier forms of capitalism sought to turn nature into the raw material for purposes of economic gain. This mutation of capitalism is an overlooked phenomenon that we lack proper vocabularies to understand and the necessary political mobilization to counter. *The age of surveillance capitalism* is oriented to both academic and political goals, and has also been picked up by key actors in the regulatory space, such as the European Commission's executive vice-president Margrethe Vestager.

Zuboff's diagnosis suggests that the growth of the internet and the spread of digital technologies and data-driven approaches have paved the way for surveillance capitalism. However, the problem is not technology itself, but the commercial and ideological forces that have propelled surveillance capitalism into its present and dominant form. The book is an important contribution to research focusing on the political economy of digital transformations. In her detailed account, Zuboff traces the historical events, political choices and corporate strategies that turned the digital space into a commercial surveillance machine. In her account, events like the terrorist attacks on 9/11 and the ensuing 'war on terror' cancelled regulatory efforts and solidified the lack of governmental demands for privacy protection by internet companies. Also, Zuboff highlights how the pressure from shareholders made Google's founders drop their ideals about not mixing search results and advertisements, and develop very aggressive approaches to data-mining and targeting for purposes of advertising. As a result, technological developments that could have been used for noble purposes became instruments of dark powers that let commercial logics dominate. This also implies that Zuboff sets out to remind us that we could – and still can – use digital technologies in less damaging ways, and with a focus on human, organizational and societal progress. But for now, we are stuck with a few dominant companies that control approximately 70% of all internet traffic and largely set the conditions for developments in the digital domain. This situation has more profound and extensive ramifications than we may realize at the moment, and Zuboff offers a number of disturbing scenarios and lines of argument.

Key ideas

To this reviewer the most dramatic of these insights revolves around the ability of tech companies to both pursue strategies that focus on intensified information control and hidden behavioral modification. Let me unpack these two issues and their linkages.

Tech companies now have ambitions that go beyond dominating the market for advertising or controlling digital infrastructures. They are increasingly engaged in what Zuboff terms the ‘reality business’ [194], and have ambitions to extract, control and modify human realities. The book highlights how Google and Facebook early on realized that digital technologies and data can be used to affect human emotions and behavior in hidden and extensive ways. Their business model is no longer limited to selling products or enabling advertising, and the next step is to anticipate and control behavior in more extensive ways. Whereas digital technologies in the past constituted a separate domain, a ‘cyberspace’ that we could log onto and off again, they now infiltrate most parts of our lives. This means that it becomes easier for tech companies to control what information we encounter, measure how we react and modify our behavior for commercial and political purposes. As Zuboff puts it: ‘There was a time when you searched Google, but now Google searches you’ [248].

Surveillance capitalists have created a totalitarian utopia that revolves around perfect information, total visibility and absolute certainty when it comes to knowing what individuals do and want. And opacity and secrecy when it comes to the operations of their own companies and practices. This information asymmetry is central to Zuboff’s argument, and she offers a range of examples of its problematic consequences, also in other contexts. Insurance companies are now able to track driving behavior in real time and adjust premiums immediately if a driver does not use seatbelts or takes chances in traffic. The book also highlights the (now abandoned) Google Sidewalk project in Toronto that was intended as an extensive experiment engaging data-driven approaches to understand and shape human lives and communities. To Zuboff, such ‘smart solutions’ are nothing but euphemisms

that hide the real motive: to remove uncertainty, control behavior and turn human lives into ‘behavioral surplus’ [318] for surveillance capitalism.

But the information asymmetry also has more fundamental consequences, and one of the key arguments in the book is that surveillance capitalism creates new forms of inequality and divisions that are not only economic, but also about knowledge. She terms this ‘the ultimate institutionalization of a pathological division of learning. *Who knows? Who decides? Who decides who decides?*’ [415] and suggests that this is how power and control work in a digital, datafied world. The more tech companies know about us, the more they are able to control ‘the production of meaning’ (Zuboff, 2020), which is yet another way in which Zuboff draws parallels to earlier forms of capitalism that sought to control the ‘means of production’. In her account, the dominance over knowledge and insight, and the commercialization of our experience and lives have become the battleground where our ‘fight for a human future’ will have to be fought out in years to come. The book asks why we should allow human experiences and futures to be harvested as free, raw material and instrumentalized for strictly commercial purposes that work against freedom, democracy and human progress. And should we even allow this ‘trade in human futures’ when we do not for instance allow the trade in human organs, as Zuboff (2019) put it forcefully at a recent talk? These questions about the limits of digitalization and datafication are increasingly central in public discourse and regulatory efforts in Europe and beyond. As Zuboff reminds us, the issue is not digital technology itself, but the conditions and driving forces that technology come with at the moment. Her book both unifies such long-standing concerns and supercharges the debate about the possibility of creating a digital future that benefits humans and societies, and not a handful of companies in Silicon Valley and the powers they serve. And what is at stake is not technology or market shares, but our social order.

The book is both a deep analysis of an emergent, important phenomenon and a call to arms when it comes to countering the forces that have turned digital transformations into ‘an overthrow of the people’s sovereignty’ [8]. But it is not a nuanced book when it comes to acknowledging that most people willingly and eagerly use digital technologies and share their data.

Digital technologies have become the backbone of so many parts of social life because people embrace them, seek information and are excited about the services and solutions tech companies offer. The so-called ‘privacy paradox’ (Gerber et al., 2018) – that many people may voice concerns about their personal data and privacy, but also share data carelessly and rarely spend time protecting them – is absent from Zuboff’s account. Rather than discussing this gap between attitudes and behavior, the book depicts tech companies as villains that deceive people and undermine free will. Scholarly work seeking to emancipate people from hidden, dominant forces has a long history, and Zuboff’s book also speaks from a privileged, critical position with little attention to the human desires for technology that have also made digital platforms and tech companies thrive. Not many other theorists of digital transformations would get away with leaving out this important dimension, but Zuboff offers a forceful account that places corporate strategies and the economic and political forces they have enrolled at its core.

This focus on the political economy of digital transformations and datafication makes Zuboff’s book a valuable contribution to earlier and emergent research that connects questions about technology to economy, politics and societal transformations. Such work has explored how the emergence of digital platforms raises questions about politics and economics (Gillespie, 2010; Srnicek, 2017; Langley and Leyshon, 2017), or focused on processes of datafication as the foundation of ‘data capitalism’ (West, 2017). Other research has explored the intersection of datafication and knowledge production (Beer, 2019), exposure (Harcourt, 2015) and visibilities (Flyverbom, 2019) with a focus on questions about power. Furthermore, Zuboff’s book ties in with work on the problems and dangers of algorithmic operations for democracy and society (Pasquale, 2015; O’Neil, 2016). I believe we will see a surge in scholarly work that connects and extends these important issues into new empirical and theoretical domains.

Avenues for future research

In years to come, the ideas in this book will shape scholarly work in multiple fields. The kind of mapping offered in this book should be a source of inspiration for a wealth of future avenues of research for scholars in sociology, communication, and organization and management studies. One research stream that I hope Zuboff's work will energize further revolves around questions about information, visibility and power. Digital technologies and data-driven, algorithmic approaches make the exposure of social life easier and more invasive than ever before, and offer new ways of seeing, knowing and governing organizational affairs. Such research will both take us back to fundamental conversations about knowledge and epistemology, and into new terrains marked by automation and technological alternatives to human perception and insight.

An important research avenue is how digital transformations shape our democratic institutions when logics of surveillance capitalism travel from the private sector into the public sector. Policing, health care and the provision of public services increasingly rely on algorithmic, automated decision-making, and this raise questions about fairness, bias and the intersection of humans and machines. Zuboff's book can inform such research through its articulation of the political and commercial forces that have defined the terms and conditions for the digital domain, and its focus on how to facilitate and strengthen alternative futures. Through more empirical investigations of the workings of digital systems in the public sector, we may also create awareness about the institutional and political choices that we face if we want to enable digital transformations on other terms. Such work could also offer more elaborate empirical accounts of algorithmic operations (O'Neil, 2016) and situated studies of how logics of surveillance capitalism seep into organizational settings.

Future research could also explore how digital and datafied possibilities for observation create new dynamics related to both recognition and control, and lead to new forms of individual and collective behavior. When everything can be exposed, people need to develop new competencies and ways of navigating in social settings, and Zuboff's work may provide a

valuable backdrop to such studies of the character and conditions of digital communication environments. Such work may be particularly powerful if focusing on how digitalization and datafication paves the way for new organizational phenomena, places new demands on professions and employees, and leads to new forms of management. This would open up research avenues combining insights from Zuboff's first book, *In the age of the smart machine*, with newer ones about surveillance and data capitalism. Additional research may focus on how digital transformations condition particular forms of knowledge production, epistemologies and ontologies. As Zuboff suggests, surveillance capitalism (re)introduces claims about truth, objectivity and certainty that require us to return to fundamental questions about knowledge claims and representations. Such research will offer more situated accounts of how contemporary digital and datafied infrastructures support and constrain particular forms and regimes of knowledge, with a focus on the issue of divisions and inequality articulated by Zuboff.

Engaging with this excellent book will help organization and management scholars pursue research that connects long-standing concerns about knowledge and power with novel insights about digital ubiquity and the political economy of technology. Pursuing such research will not only translate Zuboff's broader diagnosis into situated and nuanced investigations of the workings and dynamics of technological transformations, but also help us envision and craft our own digital future and develop organizations that take responsibility for technological transformations on other terms than those we are offered at the moment.

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