





"The Age of Surveillance Capitalism

The fight for a human future at the new frontier of power"

by Shoshana Zuboff, 2019 ISBN: 978 1 78125 684 8

"The Age of Surveillance Capitalism" is an important work: a landmark describing the massive, shadowy forces that are driving much of the Digital Revolution in the West. Reading it will cause you to consider whether we are being swept unwittingly into digital people-hives constructed by Google, Facebook, Amazon and Microsoft solely for their commercial gain and whether in the process we are inadvertently relinquishing human agency. Prof. Zuboff's evidence and argument challenged my core values – and they may do the same for you. Reading through over 500 pages of core content (far more if you follow through the copious end notes) will take significant time and effort, but it was an investment that I found returned much more than I had to put in myself.

Surveillance Capitalism

"Surveillance Capitalism", says Zuboff, "concerns the science of prediction". Like traditional capitalism, it takes things things hitherto outside the market, commoditises and trades them in the marketplace. Surveillance capitalism seizes ownership of our <u>private human experience</u> as a free raw material to be turned into behavioural data. It is fed into the surveillance capitalism supply chain and converted into 'Prediction Products'. These products are traded, claiming to predict what we will do now... soon ... and later. It is this market that drives the precision targeting of digital advertising today but will eventually underpin all forms of advertising and promotion. Surveillance capitalism was born at a moment of financial emergency: after the dot.com crash, when Google's premier investors were questioning whether they would ever see a return. Google already knew the potential value to be gained from analysing the digital exhaust of our web searches but had rejected using it on the grounds that it would taint the value of their search results. In early 2000 they suspended their historic rejection of advertising revenues and started to capitalise on that ability to predict click-through rates.

The Beginning

The story begins back in 2000: the early days of the Digital Revolution (what World Economic Forum calls the Fourth Industrial Revolution).

Zuboff describes a Georgia Tech project called the "Aware Home"; designed to be a "living laboratory" for the study of "ubiquitous computing". They were combining information from in situ sensors with that coming from wearable devices. Three assumptions underpinned this work:

- 1. Information produced from this study would represent an entirely <u>new domain of knowledge;</u>
- 2. the rights to use that new knowledge would belong exclusively to the occupants of the house and
- 3. the home however modern, would remain the private sanctuary of those who live there.



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We are now entering an explosive phase of growth in 'Smart Home' products. In 2018 the market was worth \$36bn USD and it is expected to grow to \$151bn by 2023. However, that growth has come at a high price for consumers. Google/Nest is a leading provider of Smart Home devices. They (along with most other players in the market – though not all) have seized control of this new domain of knowledge for their own benefit. They have obscured their activity behind a byzantine web of complex end-user agreements. In a study cited by Prof. Zuboff, University of London researchers estimate that accepting the standard user agreement that accompanies a single Nest smart thermostat (which is required to use the device effectively) gives assent to almost 1000 connected agreements. Companies like Google, who own the Android mobile phone operating system as well as Nest and sell many other 'smart' devices use the information they can gather to build incredibly intimate, near real-time pictures of the daily lives of individuals and households in their reach. Far from being a private sanctuary, most 'smart' homes are now well-equipped people labs, providing industrial volumes of raw behavioural data to equipment providers. To suggest that the smart home users have given informed consent to this use of the private information is absurd. The dream of a 'smart home' envisaged at Georgia Tech has turned very sour.

In Zuboff's mind, this intrusion goes even further when we are 'required' to wear smart watches or install black-boxes in our cars that provide telemetry information in order to provide insurance companies with near-certain outcomes to their contracts. The Digital Revolution has created massive asymmetries of power and knowledge in modern life, where the rights of individual self-determination are being overwhelmed by the Surveillance Capitalists.

Where Google led, others followed

Google may have been the first to exploit the 'behavioural surplus', but Facebook followed close behind. Wrestling with the same financial challenges as Google, they hired Sheryl Sandberg from Google to help them make money. Sandberg took her Google experience and applied it to Facebook; leading Prof. Zuboff to give her the epithet the 'Typhoid Mary of surveillance capitalism'. Facebook's surveillance data has one massive advantage over most of the competing surveillance businesses, in that their information was provided directly by us, and from our own networks. Amazon under Jeff Bezos and Microsoft's CEO, Satya Nadella are also described as 'mainlining surveillance capitalism'. The growth of their advertising revenues suggests the recipe is working well for them as well. Surveillance capitalism is a powerful engine that generates massive profits for the few who have the means to use it.

Google and businesses like them have discovered that staggering wealth can be generated by harvesting every trace (seemingly by fair means or foul) of behavioural surplus, enriching it and trading 'Prediction Products'. The initial forms of surveillance capitalism were built entirely from our forays into the virtual world through search engines on the internet. Now this surveillance has moved into the physical world: in public and increasingly in spaces we considered to be private – like our cars and our homes.

Dispossession Cycle

Prof. Zuboff describes the repeating pattern of ever deepening incursions into our lives by the Surveillance Capitalists. She suggests each act of 'kidnapping' our experience follows this pattern:

- Stage 1: Incursion deliberate, uninvited intrusion into a hitherto 'private space' to gather our data.
- Stage 2: Habituation sustained occupation of that 'private space' by the intruder for as long possible.
- **Stage 3:** Adaptation public announcement in the face of outrage offering modified practice.
- Stage 4: Redirection diversion of public focus, while reverting to largely unmodified behaviour.



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Numerous examples of this pattern are shown throughout the book – including the development of Google Street View, many of the information gathering activities of Facebook, most of the deployments of so-called digital assistants, wearable technology and increasingly 'smarter' vehicles and social GPS systems like Waze. Our lives are being laid bare by the surveillance capitalists, and we are being manipulated to maximise their commercial gain despite the valiant attempts of legislation like the European General Data Protection Regulation (GDPR).

'Behaviour Modification' and Free Will

Facebook and of the Human Dynamics Lab at MIT get special attention from Prof. Zuboff. She sees Sandy Pentland of MIT and his Social Physics as the digital heir to the legacy of BF Skinner and radical behaviourism.

Zuboff is horrified by unannounced 'behaviour modification' experiments conducted on the public by the Surveillance Capitalists. She describes a secret experiment conducted by Facebook which took place on November 2nd, 2010. 61 million adults reportedly participated in an experiment to determine the impact of political messages and the influence of our friends on the day of US congressional elections. A button appeared on the Facebook news feed of most users (aged 18+) who could indicate 'I voted'. They could see how many people had clicked the button on a counter, and some of them were able to see which of their friends had done so through a set of randomly selected profile pictures. Detailed analysis of the experimental results combined with actual voting behaviours indicated that about 238,000 more votes were cast as a result of the Facebook intervention. Zuboff challenges the right of anyone to conduct these secret experiments on moral and ethical grounds. She worries that some academic researchers and federal groups may see collaboration with companies like Facebook as a means of avoiding the ethical scrutiny that is required for legitimate research. She sees this activity as another example of the 'Dispossession Cycle' driving ever deeper into society.

In 2016 Niantic Labs – a Google startup built from the remains of Keyhole (a satellite imaging and mapping business with CIA connections, bought by Google) launched a new augmented reality game - Pokémon Go. In this game, players search the physical world for Pokémon, which can only be 'seen' on their mobile devices. The object is to 'catch' as many of these creatures as you can. In an internet world that does not shy away from hyperbole – this game has been a phenomenon: downloaded over 1 billion times. However, this game was also a shady experiment in harvesting user data and exploring the degree to which behaviour could be 'managed' through the game. In the course of its viral spread Niantic/Google were able to demonstrate to advertisers that they could all but guarantee business outcomes in return for profit.

"The freedom of will is the existential bone structure that carries the moral flesh of every promise, and my insistence on its integrity is not an indulgence in nostalgia or a random privileging of the pre-digital human story as somehow more truly human. This is the only kind of freedom we can guarantee ourselves, no matter the weight of entropy or inertia, and irrespective of the forces and fears that attempt to collapse time into an eternity of shadowboxing now, and now, and now. These bones are the necessary condition for the possibility of civilization as a "moral milieu" that favors the dignity of the individual and respects the distinctly human capacities for dialogue and problem solving. Any person, ideas or practice that breaks these bones and tears this flesh robs us of a self-authored and we-authored future." ¹

¹ The Age of Surveillance Capitalism, pages 330-331, © Shoshana Zuboff 2019



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Prof. Zuboff is at her most compelling exploring and explaining the necessity of human agency. She accuses the surveillance capitalists of trying to steal that right by imposing a Walden 2-like behaviourist world by stealth. These accusations are serious and merit careful consideration. If you accept her argument, then we must ask ourselves 'What are we going to do to fight back and reclaim the right to a self- and we-authored future?'

Digital Impacts on Democracy

The Age of Surveillance Capitalism inevitably addresses the Cambridge Analytica/Facebook scandal: the 2016 US Presidential election and the Brexit referendum. Zuboff dissects the appalling abuses of privacy and manipulation that she sees in these actions as further examples of the dispossession cycle, and manipulation of human behaviour. She goes further back in time than those examples and looks at the influence Eric Schmidt (Google co-founder) had on the Obama's election and his early years in power. She describes Google's infiltration of leading academic institutions, and its excessive influence on the debates around regulation, ethics and practice. She describes a world where these businesses have become almost too large and important to be subject to control. She also describes an uneasy alliance between the Big Tech companies and Big Government enabling the surveillance of our citizens outside of the normal legal controls in our respective countries ... but that takes us into the territory of Edward Snowden's "Permanent Record".

Authoritarianism versus Instrumentarianism

We can see many parallels between the behaviour of the surveillance capitalists with authoritarian regimes, like China. The Chinese experiment in the Social Credit system looks like the kind of behavioural controls that Sandy Pentland and BF Skinner have advocated. Though there are similarities of action, Zuboff draws a firm distinction between the motives and sources of power exercised by the Chinese State and the Western Technology Giants.

In Conclusion

"Let there be a digital future, but let it be a human future first".²

In conclusion, Prof Zuboff says that it is intolerable for humanity to have to spend our lives worrying about how we can escape the grasping tentacles of the 'Big Other' – her label for the insidious clutches of the surveillance capitalists. I share that opinion. However, I have two concerns regarding this book. Shoshana Zuboff has a message that is of massive importance to Society as a whole, our political, community, religious and educational leaders in particular - but in her quest to create a thorough and an compelling case, she has written a book that few will have the time or ability to read and digest. The core messages of her book deserve to be heard and understood by a much wider audience than will ever read the 'Age of Surveillance Capitalism'.

My second concern is that this book demands action – yet Zuboff has little to offer us on what we should do in response. The core of Zuboff's 'cause for hope' is that democracy will save us, as it has saved us from tyranny and oppression in the past. Perhaps Prof. Zuboff is leaving space for a sequel. At the end of the book, I was left with an uneasy sense that the music had not reached a final cadence. We haven't found a way to return to the home key. Perhaps that is the ultimate challenge that Shoshana Zuboff has left with us.

Jonathan Ebsworth

² Ibid pages 522