

# Surveil and Predict

About: Shoshana Zuboff, *The Age of Surveillance Capitalism*, Public Affairs

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**A new capitalist era has begun, with companies ready to use every means available to know, predict and transform individual behaviour. S. Zuboff warns us of the dangers this represents for individual autonomy and democratic sovereignty.**

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Following a first article on the subject in the *Frankfurter Allgemeine* in 2013, Shoshana Zuboff, emeritus professor at Harvard Business School, has popularised the idea of ‘surveillance capitalism’ both in the scientific world and among digital rights activists. This syntagm designates the new form of capitalism created by Silicon Valley behemoths, and more specifically by Google and Facebook, whose income depends on harvesting and analysing our data. *The Age of Surveillance Capitalism*, a voluminous and ambitious work released in the United States on 15 January 2019, and already widely commented since, provides a detailed analysis of this social and economic phenomenon.<sup>1</sup> With her vigorous and invigorating style, S. Zuboff interweaves a history, a theory and a critique of the path taken by capitalist accumulation.

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<sup>1</sup> Among the numerous reviews already published in English, let us mention Nicholas Carr, ‘Thieves of Experience: How Google and Facebook Corrupted Capitalism’, *Los Angeles Review of Books*, 15 January 2019, <https://lareviewofbooks.org/article/thieves-of-experience-how-google-and-facebook-corrupted-capitalism> ; Evgeny Morozov, ‘Capitalism’s New Clothes’, *The Baffler*, 4 February 2019, <https://thebaffler.com/latest/capitalisms-new-clothes-morozov>

## **A History of ‘Surveillance Capitalism’**

According to S. Zuboff, ‘surveillance capitalism’ was invented at Google. In 2001, the company was facing difficulties. Despite its search engine’s success with users, it had still not found a profitable economic model and the investors were growing impatient. Drawing on economist Hal Varian’s ideas, Google decided to use the data and metadata provided by its users to offer personalized advertising. This decision went against the dislike the company’s founders, Sergey Brin and Larry Page, had earlier expressed for advertising. But the investors were not going to wait forever for their returns, and L. Page had no desire to become another Nikola Tesla, the extraordinary engineer who died without ever benefitting from his inventions. Further, Google had access to vast mines of information and possessed exceptional scientific skills to convert these data into predictions about individuals likely to click on the advertisements displayed. And so Google invented ‘surveillance capitalism’. Between 2000 and 2004, its income increased by 3590 %!

This model went on to be adopted by other major actors in the digital economy. Steered by Sheryl Sandberg, a defector from Google, in 2008 Facebook became an advertising giant. Mark Zuckerberg’s firm made use of its main asset: its deep knowledge of each individual’s connections or ‘social graph’. It also invented numerous ways of increasing and refining its data harvesting system, for example by introducing the ‘Like’ button in April 2010. In 2014, Microsoft also shifted to ‘surveillance capitalism’ with the development of the voice assistant Cortana, a highly efficient data vacuuming tool, and the acquisition of the professional social network LinkedIn, with its 450 million users. Amazon followed close behind, with its voice assistant Alexa, as did the American telecom giants: Verizon, AT&T and Comcast.

Born in the digital world, ‘surveillance capitalism’ also spread to the ‘real’ world. As individuals became increasingly geolocated, and their physiological processes and emotions were measured and deduced, and as cities installed thousands of sensors and houses were filled with ‘intelligent objects’, the whole world was transformed into data. ‘Surveillance capitalism’ then entered new sectors like insurance, finance, health, or retail. Car insurance is one of the most striking examples. Once every driver’s behaviour can be precisely measured, the risk he represents can be calculated down to the finest detail. The terms of insurance can then be tailor-made, or adapted in real time, according to the driving data collected. For insurance companies, these systems serve to encourage certain types of driving behaviour, to reduce uncertainty and... to ensure their profits.

Another enlightening example is Pokémon Go, incubated at Google. According to S. Zuboff this game is every ‘surveillance capitalist’s’ dream. It enables the harvesting of data in public and private space, indoors and outdoors. The fun aspect is incredibly efficient when it

comes to encouraging players to behave in a particular way: nudging them, for instance, to go to a shop that has signed a partnership agreement with the game's publisher. Indeed, Niantic Inc., the company behind Pokemon Go, quickly contracted with McDonald's and Starbucks to bring them potential customers. This 'sponsored locations' economic model works just like Google's advertising model. Client companies pay a 'cost per visit' just as advertisers pay Google a 'cost per click' (p. 316).

## **A Critical Theory of 'Surveillance Capitalism'**

Drawing on her take on the history of the past twenty years, S. Zuboff offers a general theory of 'surveillance capitalism'. According to this theory, everything begins with the transformation of human experience into 'behavioral data' thanks to digital technology. The author sees this as an act of *dispossession*: the economic actors involved in 'surveillance capitalism' appropriate our experience by extracting it from 'the nonmarket spaces of everyday life' (p. 139). Given that they serve not only to improve the service provided, these data constitute a 'behavioral surplus'. They are the raw material from which '*predictive products*' are manufactured, using algorithmic procedures. The value of these products is related to their anticipation of future behaviour: the likelihood of an individual clicking on an advertisement, having a car accident, etc. Thus, 'surveillance capitalism' is a process that transforms our present behaviour into profitable predictions of our future behaviour.

The market value of predictive products is closely correlated to their degree of certainty. For the buyer of predictive products, the higher the certainty, the greater the guarantee of profits: the certainty that a user will click on an advertisement is preferable to a high probability, which is itself preferable to a low probability, etc. The logic of accumulation that underpins 'surveillance capitalism' thus tends towards a search for certainty. And the surest way to predict the future is to create it, by shaping individual behaviour. This is how the manufacturing of 'predictive products' gradually evolves into the development of systems that modify individual behaviour, like in Pokemon Go where the players are encouraged to go to specific places. The future of 'surveillance capitalism' is hence to become a *capitalism of behavioural modification* that reaches far beyond the frontiers of the digital economy.

More than 'surveillance', in the strict sense of the word, S. Zuboff's critique targets the logic of behavioural manipulation.<sup>2</sup> Her critique is rooted in the fundamental values of political liberalism: individual freedom and democratic sovereignty. The author emphasises the way 'surveillance capitalism' endangers the progress associated with the historic emergence of the individual: respect for interiority and private life, as well as free will, self-determination

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<sup>2</sup> This point has been noted by E. Morozov, *Op. cit.*

and the right to make our own future. According to S. Zuboff, ‘surveillance capitalism’ is a new form of ‘tyranny’. (p. 513) that obliterates political deliberation and destroys individual freedom by manipulating and instrumentalising our behaviour.

The originality of the book lies in connecting this critique, expressed in classical liberal terms, with the political economy described above, that is to say with a type of analysis generally favoured by Marxist critiques. The loss of individual freedom and the erosion of democracy are seen as the *consequences* of the logic of accumulation of ‘surveillance capitalism’. S. Zuboff is however more evasive when it comes to the means of responding to these threats, although she calls for laws that could put a stop to ‘the illegitimate transformation of human experience into behavioral data’ (p. 344). The somewhat imprecise nature of her recommendations can be explained, I think, by what she leaves unsaid.

## **Just Another Form of Capitalism**

S. Zuboff’s analysis focuses almost exclusively on the relationship between ‘surveillance capitalism’ companies and their users. According to her, the latter are neither consumers (they do not pay for Google or Facebook’s services), nor workers (they do not ‘operate the means of production’, p. 69). They are data providers and the objects of systems of behavioural modification. In short, ‘surveillance capitalism’ is based on the *dispossession of experience*, not on the *exploitation of labour*.

This argument explains why the book addresses few of the issues related to work and employment in the digital economy, although ‘surveillance capitalism’ companies provide goods and services that require a vast amount of work: that of their employees, obviously, as well as work that is outsourced, or done by users, be it the production of content uploaded on social networks or the training of artificial intelligence programmes.<sup>3</sup> None of this is mentioned in the book, nor is the production of the very goods that ‘predictive products’ *in fine* serve to sell. And yet, the existence of targeted advertising, to take only this example, assumes the pre-existence of the goods that it promotes!

These remarks point towards a more fundamental ambiguity in S. Zuboff’s theory: the precise definition and boundaries of ‘surveillance capitalism’. Is it a sub-sector of the digital economy that focuses on data exploitation? The digital economy as a whole? Capitalism as a whole, as it is today? The book provides arguments in support of each of these propositions. The author however, seems to favour the third interpretation, as we can infer from the recurring comparisons between Google and Ford. Just as the automobile manufacturer is seen

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<sup>3</sup> On this subject, see Antonio A. Casilli, *En attendant les robots*, Paris, Seuil, 2019.

as the inventor of 20<sup>th</sup> century capitalism—‘mass-production-based managerial capitalism’ (p. 63)—Google is described as the inventor of 21<sup>st</sup> century capitalism. S. Zuboff sees this as a major historical shift that destroys the earlier forms of reciprocity between companies and consumers.

The hypothesis of the emergence of a ‘new capitalism’ is, however, not convincingly established. One of the book’s weaknesses is that it never seriously discusses the older or more recent theoretical attempts to periodise the history of capitalism and distinguish its different varieties.<sup>4</sup> This shortcoming leads the author to exaggerate the novelty of the systems that seek to modify behaviour for commercial purposes. Companies have long understood that to win market shares and maintain their profitability, they have to manipulate the masses through advertising or any other means available to them. One only has to read Edward Bernays, the founder of the modern public relations industry, to realise that this project already existed in the 1920s, and that its implications for individual freedom were already perfectly clear! At the time, E. Bernays described the consumer subjected to propaganda as determined ‘by outside influences which unconsciously control his thought’. According to him he was, ‘as if actuated by the pressure of a button’<sup>5</sup>...

It hence seems more logical to approach ‘surveillance capitalism’ as an aggravation of what already existed, rather than as a rupture. And if the fundamental problem lies in companies’ tendencies to want to control individual behaviour, the obvious conclusion is that this is nothing new! Thanks to big data and algorithmic tools ‘surveillance capitalism’ only perfects a pre-existing logic. The normative content of S. Zuboff’s arguments should hence lead her to a more general critique of capitalism, but this does not occur. Obsessed by her desire to demonstrate that ‘surveillance capitalism’ is a perversion of capitalism, S. Zuboff does not see that it is essentially just another of its incarnations.

## **The Limits of ‘Radical Behaviourism’**

Finally, we can wonder whether the critique expressed in the book does not, at least partly, miss its mark. In the third section, ‘surveillance capitalism’ is presented as the implementation of ‘radical behaviorism’, earlier championed by the psychologist B.F. Skinner, who suggested modelling mass behaviour using behavioural technologies. According to S. Zuboff, this social engineering project has been revived today, as its potential is amplified by big data. Labelling it ‘social physics’, MIT researcher Alex Pentland is trying to model,

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<sup>4</sup> Here we can mention the works by Fernand Braudel or Giovanni Arrighi, as well as those of the regulation school or of theorists of ‘cognitive capitalism’.

<sup>5</sup> Edward Bernays, *Propaganda*. Routledge, 1928, pp. 49 and 59.

predict and modify human behaviour. He considers that behavioural data ‘tell a more accurate story of our lives than anything we choose to reveal about ourselves’ (quoted p. 422) and he claims to have found a ‘mathematical explanation of why society reacts as it does’ (quoted p. 434). One of the numerous commercial ventures he has created boasts it can even ‘explain and predict any sort of human behavior’ (quoted p. 425).

There is no doubt these claims are fascinating for Silicon Valley entrepreneurs, but should we really, like S. Zuboff, see them as a precise description of ‘surveillance capitalism’? This would be forgetting that the digital economy is an economy of promises. And to attract investors, it is better to promise too much than too little. This would also be giving A. Pentland's assertions more credit that they deserve, as their positivist naivety should surprise anyone who has a minimal culture in the social sciences. And yet, S. Zuboff validates A. Pentland's declarations, when she criticises their social and political implications. She is convinced too, that big data provides an exhaustive knowledge of the social world and that companies involved in the digital economy ‘know more about you than you know about yourself’ (p. 285)<sup>6</sup>. She thus maintains that B.F. Skinner and A. Pentland unveil the *truth* about ‘surveillance capitalism’, when they are in fact only shaping its *ideology*.

This misapprehension explains the often-emphatic tone of the book and the constantly reiterated idea that ‘human nature’ is in danger. A closer evaluation of the accuracy and efficiency of predictive and manipulative technologies would probably encourage a greater sense of moderation. This would help complete S. Zuboff's analysis, and perhaps lead to a different appreciation of the main threats posed by ‘surveillance capitalism’. More than the risk of a complete disappearance of the self-determined individual, we should focus on employment precarity, the new effects of social stratification,<sup>7</sup> and new forms of economic injustice. This is what S. Zuboff does not do, and what prevents *The Age of Surveillance Capitalism* from being totally convincing, despite its stimulating arguments.

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<sup>6</sup> While showing important similarities with S. Zuboff's work, Antoinette Rouvroy specifically insists on how ‘digital behaviourism’ never manages to grasp what constitutes an individual's life.

<sup>7</sup> Cf. Marion Fourcade and Kieran Healy, ‘Classification Situations: Life-Chances in the Neoliberal Era’, *Accounting, Organizations, and Society*, vol. 38, pp. 559–572.