The Unfolding of Reality in the Age of Surveillance Capitalism

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In the near future, according to Joseph A. Paradiso, Alexander W. Dreyfoos Professor in Media Arts and Sciences at the MIT Media Lab, information will stream "directly into our eyes and ears" and "the boundaries of the individual will be very blurry" [1]. Until a very recent past, the perceived distinction between the individual and the environment grounded the possibility of representing and controlling the external world. In turn, such possibility of representation and control was inscribed in the fundamental institutions, like property or representation, of liberal societies. However, the incredible development of Information and Communications Technology (ICT) makes the distinction fade away, letting emerge a novel model of economic and political organization of society.

Shoshana Zuboff's *The Age of Surveillance Capitalism*[2] is one of the first attempts to reconstruct the genealogy of this momentous turn. The story told in Zuboff's book begins in the first years of the new millennium, when the founders of Google, Sergey Brin and Larry Page, are forced to resort to targeted advertising in order to save their creature from the economic recession caused by the dot-com companies crisis. Since its establishment in 1988, Google search engine had collected very large amounts of behavioural data. However, as Zuboff explains in the third Chapter of her book, in the early stages of Google's development "behavioural data were put to work entirely on the user's behalf" [3]: they were harvested to improve speed, accuracy, and relevance and to build additional products such as translation, which were offered at no cost to users. But those data, as Brin and Page suddenly realised, could be combined with Google's

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[1] J.A. Paradiso, "Our Extended Sensoria: How Humans Will Connect with the Internet of Things", available at: https://www.bbvaopenmind.com/en/articles/our-extended-sensoria-how-humans-will-connect-with-the-internet-of-things/.

[2] Sh. Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York, PublicAffairs, 2019.

[3] *Ibidem*, p. 69.

powerful analytic capabilities to produce predictions of user behaviour. Those "*prediction products* became the basis for a preternaturally lucrative sales process that ignited *new markets in future behaviour*"[4].

The discovery of the impressive economic value of behavioural data – what Zuboff calls "behavioural surplus" – changed everything. Indeed, in the subsequent years Google and the other big companies of the net economy – such as Facebook, Microsoft, Apple, Amazon – started to organize their business around the "Extraction Imperative", that is the rule that commands to gather as much information as possible about their users's lives and to use it to extend the predictive power of their machines so to build up better advertisements. This moment marks the birth of a new kind of capitalism, one in which behavioural data have taken the place of labour: Surveillance Capitalism (SC). In a way that reminds us of classic capitalist appropriation of waged labour, surveillance capitalists amass the data provided by the users of the services they furnish. In turn, such data become the raw materials of a new form of capitalistic exploitation.

Zuboff clearly states that profitability within SC depends on the ability of the capitalists to achieve economies of scale in their raw-material supply operations. This requires a continuous enlargement of the scope and the depth of the extraction. As a consequence, Zuboff says, "surveillance capitalists are forced from the virtual world into the real one"[5]. For this reason, tracking of behavioural data cannot ignore any aspect of the users' life, including internal feelings. New machine processes are required, in order to carry out the "rendition" of all traits of human experience into behavioural data. Computation becomes ubiquitous to find ubiquitous supply opportunities, while prediction products are increasingly expected to approximate certainty and therefore to guarantee behavioural outcomes. In turn, such processes lead to the establishment of a pervasive control over individual lives.

This stage too must be surpassed. In a third phase, surveillance capitalists discover the necessity of economies of action based on new methods that go beyond tracking, capturing, analysing, and predicting behaviour in order to intervene in the state of play and actively shape behaviour at the source. The result is that the means of production are

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[4] *Ibidem*, p. 338, italics in text.
[5] *Ibidem*, p. 175.

subordinated to an elaborate new means of behavioural modification, which relies upon a variety of machine processes, techniques, and tactics to shape individual and group behaviour in ways that continuously improve their approximation to guaranteed outcomes. Just as industrial capitalism was driven to the continuous intensification of the means of production, so surveillance capitalists are now locked in a cycle of continuous intensification of the means of behavioural modification.

In the last part of the book, Zuboff puts forward her interpretation of SC. Zuboff thinks that SC cannot be compared to twentieth-century totalitarianism, because the latter aimed at changing our souls, whereas the former wants only to correct our behaviour. SC can rather be termed as a kind of "instrumentarianism, defined as the instrumentation and instrumentalization of behaviour for the purposes of modification, prediction, monetization, and control" [6]. This last point unveils the thread that links SC to Burrhus Skinner's behaviourism. As Zuboff forcefully argues, the reforming attitude exhibited by ICT apologists, like Alex Pentland, is but an updating of Skinner's utopian fancy of a fully rational society[7]. Such project is informed by a holistic approach that flattens individual qualities in order to achieve the best stability of the whole society. The target is what Zuboff names "hive society", in which individuality disappears and in which relations between people are structured in ways that maximize certainty. In this model, the truth of smart procedures replaces politics as a means to govern society. The book ends with Zuboff asserting that the plans of surveillance capitalists must be resisted because in their battle for certainty and against unpredictability they jeopardy the possibility of opposing a "sanctuary" of individual freedom to the intrusiveness of machines.

It is hard to disagree with Zuboff's praise of the "right to sanctuary". However, it must be noted that the possibility of withdrawing oneself in an interior space that is shielded from outer glances is not the same thing as a right to control the data and the metadata that we left back during our onlife[8], because the latter could possess an

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[6] *Ibidem*, p. 352.

[7] Compare Skinner and Pentland books: B.F. Skinner, *Beyond Liberty and Dignity*, Harmondsworth, Penguin, 1971; A. Pentland, *Social Physics: How Social Networks Makes Us Smarter*, New York, Penguin, 2014.

[8] I am borrowing the neologism "onlife", popularized by the Italian philosopher Luciano Floridi to express the symbiotic commingling between daily life and online experience. Cf. L. Floridi, *The Fourth*

interpersonal significance the former does not have. More generally, Zuboff's book shows several weaknesses. While the author touches on an extraordinarily vast array of topics, she too often contents herself of stating her views without discussing contrary opinions and without addressing reasonable objections. It is not just the case of intricate legal issues. It is notable, for example, the absence of any attempt to deepen the technical matters that constitute the backbone of the story she tells. Moreover, there is no reference to the works of such authors as Jeremy Rifkin, Luciano Floridi, Paul Mason, and Nick Srnicek, who have reshaped our way of conceiving the relation that contemporary capitalism bears to ICT[9]. Finally, one could blame the uniformly apocalyptic tone that Zuboff maintains throughout the 700 pages of her book. After all, exploiting behavioural data seems preferable to exploiting human labour. What is insufferable within the contemporary scenario are the gigantic inequalities between the wealth of a few surveillance capitalists and that of legions of common workers.

Having said that, I think that *The Age of Surveillance Capitalism* is a very important book, which helps us form an entirely new image of our time putting forward a number of ideas that require extended reflection. In the last part of this critical notice, I would like to try to say something about the prospect of democracy in the time of SC.

Modern representative democracy departs from the assumption that the legislative power is expression of the will of free, rational and autonomous individuals. This assumption fell under scrutiny many times, for example, with the elitist attempts to highlight the way in which restricted oligarchies control the popular vote. However, it is fair to say that the picture that Zuboff portrays, in which a holistic attitude towards the whole society prevails, while the boundaries between individuals and environment get

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Revolution: How the Infosphere is Reshaping Human Reality, Oxford, Oxford University Press, 2014. See also L. Floridi (ed.), *The Onlife Manifesto: Being Human in a Hyperconnected Era*, Berlin, Springer, 2015.

[9] See J. Rifkin, *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*, New York, Palgrave Macmillan, 2014; L. Floridi, *The Fourth Revolution*, cit.; P. Mason, *Postcapitalism: A Guide to Our Future*, London, Allen Lane, 2015; N. Srnicek, A. Williams, *Inventing the Future: Postcapitalism and a World Without Work*, London, Verso, 2015; N. Srnicek, *Platform Capitalism*, Cambridge, Polity Press, 2017. See also the essays collected in D. Chandler, Ch. Fuchs, *Digital Objects, Digital Subjects: Interdisciplinary Perspectives on Capitalism, Labour and Politics in the Age of Big Data*, London, University of Westminster Press, 2019.

blurry, is completely irreconcilable with the basic premises of democratic thinking.[10] This point is clearly acknowledged by Zuboff herself. The efforts of surveillance capitalists to regulate and influence people's actions prelude to a world in which the organization of society follows technocratic rules rather than being entrusted to political bodies. This change could take place seamlessly, without a manifest revolution: if we think of the extraordinary ability in controlling and predicting our behaviour that surveillance capitalists achieved, we must conclude that they already have the material power to decide the outcome of political elections. In other words: the establishment of technocracy does not require a patent subversion of democratic regime.

This grim outlook could quickly get even darker. Indeed, the limits of the predictive capability of current technologies impose a short time horizon to all attempts to organize social and economic relations. But with the next developments of those systems, we could imagine a situation in which it is possible to plan a long term project of institutional reforms of society, in the sense that a political leader might plan her/his further moves in order to ensure the best prospects for success, thanks to the predictive power of machines. In this way, efficiency will be coupled with stability at the expenses, however, of a complete "virtualization" of politics, in a fully actualization of the "Singapore Model" that Danilo Zolo envisioned in the last pages of *Democracy and Complexity*[11].

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[10] There is a growing literature on the theme of collective intelligence. See, for example, G. Mulgan, *Big Mind: How Collective Intelligence Can Change Our World*, Princeton, Princeton University Press, 2018.

[11] D. Zolo, *Democracy and Complexity: A Realistic Approach*, Cambridge, Polity Press, 1992, pp. 182-4.