Book Review

Smith, Jason E. 2020. *Smart Machines and Service Work. Automation in an Age of Stagnation*. London: Reaktion Books.

Sigurd M. N. Oppegaard

University of Oslo & Fafo Institute for Social and Labour Research

Today, the mantra of automation, of robots taking over new jobs and the possibility of a workless future, is repeated time and again – by researchers, commentators, politicians, entrepreneurs. Smart digital technologies, machine learning and artificial intelligence, we are told, will soon outperform humans in more and more tasks. While previous waves of automation enabled machines to perform routinised and manual tasks and replaced humans in the manufacturing sector, the technologies on the horizon today are said to handle non-routinised and cognitive tasks, and thus replace humans in the service sector.

To understand the future, we must first understand the present. In *Smart Machines and Service Work: Automation in an Age of Stagnation*, Jason E. Smith critically

examines the rhetoric on automation, robots taking over jobs and a future without work in the context of a stagnating global economy. In the exceptional post-war period, the ‘golden age’ of the US labor movement, rises in productivity have generally been followed by increases in real wages. From the 1960s, workers displaced by automation in the manufacturing sector found work in the growing service sector. New opportunities in new industries were, however, not equally distributed – as the American militant union activist and writer James Boggs ([1963]2009), whom Smith cites regularly, noted: black workers who had left the

Jim Crow in the Southern United States for factory work in the North now had ‘nowhere to go.’ According to today’s rhetoric of automation, the labor-saving technologies of tomorrow will reduce employment in the service sector drastically, potentially producing technological mass-unemployment.

While automation in the post-war period took place during an economic boom, the current period is characterised by economic stagnation (Benanav 2020). Beginning in the 1970s but particularly visible in the wake of the 2008 financial crisis, advanced economies have experienced slowing GDP and productivity growth, a decline in real wages and labor share of income, as well as a sharp drop in business investments. Simultaneously, we have seen the rise of smartphones, online shopping, digital platforms and other technologies that have had a transformative effect on our everyday lives, culture and financial markets, but, surprisingly, perhaps, ‘neglectable effects on one key economic variable: labor productivity in the workplace,’ Smith writes (p. 10).

This paradox was famously noted by Robert Solow in 1987: ‘You can see the computer age everywhere but in the productivity statistics.’ Smith highlights three core reasons for why new technologies have had a relatively insignificant effect on labor productivity growth rates. First, the tasks new technologies today are supposed to perform to replace workers in the service sector generally require skills that computers and machine struggle to master, such as intuition, embodied and social knowledge. Second, the technological limits are reinforced by the availability of cheap labor, Smith argues. As workers have no other labor market opportunities, they are willing to accept very low wages, providing capital little incentive to invest in expensive technology. Third, there has been a steady decline in private-sector business investments in the US economy since the 1980s, with a further dramatic drop from 2000 onwards. The prevalence of cheap labor power and stagnant wages can thus be seen as an effect of collapsing investments, Smith argues, since wage increases have been dependent on productivity gains and productivity gains require investments in technology. Behind these developments, Smith identifies a crisis of profitability in the advanced capitalist economies driven by the expansion of ‘unproductive’ labor.

In *Smart Machines and Service Work: Automation in an Age of Stagnation*, Smith covers a wide array of themes. His analysis, an accessible and informative application of key concepts from Marxist economics, endeavour to explain the paradoxes of contemporary capitalism characterised by the automation rhetoric, increasingly shiny gadgets tracking our every move and capturing attention combined with severely stagnating economies with sluggish productivity gains, falling real wages, un- and underemployment.

Chapter 1 provides short history of automation, while Chapter 2 discusses the technological and economic stagnation of the last 50 years and Smith highlights

the important point that the technologies we have seen emerging over the last 20 years have not primarily been aimed at increasing labor productivity (p. 41ff). Instead, according to Smith, citing Andrew Ure, these technologies function ‘chiefly for public amusement or mystification.’ In Chapter 3, these tendencies are connected to labor productivity, wages and employment in the US. Chapter 4 discusses the notion of the ‘service sector.’ Smith argues that this broad categorisation ‘conceals as much as it clarified’ (p. 76), collapsing a myriad of different activities, occupations, skill levels, wage levels, types of enterprises and levels of capital intensity. The only similarity between a teacher and a banker is that neither work in agriculture or manufacturing! Smith analyses the heterogeneity of the ‘service sector,’ detailing and discussing William Baumol’s ‘cost disease’ in light of a decomposed ‘stagnant’ sector.

In Chapter 5 Smith discusses the reasons for the economic slowdown in advanced capitalist economies. In the context of declining average profit rates, Smith notes in dialogue with Marx (p. 96), capital will lower wages and/or endeavour to ‘sweat’ more output with the same number of workers, rather than expanding production. ‘Sweating’ requires supervisory labor to discipline and control workers. Supervisory labor is one of two primary forms of what Marx calls ‘unproductive’ labor, i.e. activities that do not produce a product that can be sold for a profit. The other form, circulation labor, denotes the activities necessary for the circulation of goods, from security and warehousing to accounting, banking and insurance services. Smith argues that the transformations of advanced capitalist labor markets over the last 50 years is not best described as a reallocation of labor from manufacturing to the ‘service sector,’ but as ‘a shift of a larger and larger share of labor activities toward “unproductive” activities’ (p. 100–101). The chapter ends with a stimulating discussion of how technology is employed by capital in the context of a stagnating economy (p. 109ff). Instead of replacing circulation labor, Smith argues, technology replaces managers and supervisors. These ‘unproductive’ activities are increasingly carried out by algorithms of digital platforms in the gig economy (Oppegaard 2021), wearable devices promoting efficiency and disciplinary surveillance.

Chapter 6 combines the analysis of the previous chapters in detailing the development of what Smith terms the ‘servant economy,’ an economy where a large share of the new employment is in low-waged personal services – cooking, serving and delivering food, customer service, cleaning and so on. These jobs, at the bottom of the labor market, are on the one hand often difficult to automate, and, on the other, growing in number because automation has displaced workers in other sectors of the economy. Smith goes on to discuss the highly social notion of ‘skills,’ before, in the final chapter, drawing on Marx’s analysis of machinery in *Capital Vol. I* to summarise the book’s argument.

In the final pages, Smith discusses the predicament of the US labor movement (p. 138). The wage gains trade unions were able to secure in the post-war period were on the one hand tied to rapidly increasing labor productivity and high profit rates that made possible a compromise between capital and labor: increased wages were exchanged for stability, peace and the maintenance of the capitalist relations of production. On the other hand, there were also organisational factors that enabled strong unions in the manufacturing sector in this period: Factories are large workplaces that gather a number of workers performing the same labor in one capital-intensive place, making it possible for them to develop solidarity and a collective, as well as coordinated strategies with easily identifiable and disruptable targets. There were also unifying tendencies across enterprises: similar labor processes, skill levels and struggles. With deindustrialization and the rise of the 'servant economy,' Smith notes (p. 14), workers are dispersed into smaller and smaller workplaces that gather fewer and fewer workers together with less capital valorised. This dispersive tendency, a fragmentation across the labor market and working class as a whole, undermines the prospects of rebuilding a labor movement. Still, Smith notes, the mobilisation of teachers and other public sector occupations illustrates the potential for struggles based not on the workers' position in the technical division of labor, but on their position in the social division of labor.

Smith combines a detailed theoretical argumentation with rigorous empirical analysis to produce an enlightening explanation of the technological, economic and social conditions that have shaped and continue to shape the world of work today. Overall, *Smart Machines and Service Work: Automation in an Age of Stagnation* is targeted critique of today's decontextualised automation rhetoric and an impressively broad analysis of the US economy and labor market.

References

- Benanav, A. 2020. *Automation and the Future of Work*. London: Verso.
- Boggs, J. [1963]2009. *The American Revolution: Pages from a Negro Worker's Notebook*. New York: Monthly Review Press.
- Oppegaard, S. M. N. 2021. Regulating Flexibility: Uber's Platform as a Technological Work Arrangement. *Nordic Journal of Working Life Studies* 11(1): 109–127. <https://doi.org/10.18291/njwls.122197>