

Jathan SADOWSKI
**THE MECHANIC AND
THE LUDDITE: A RUTHLESS
CRITICISM OF TECHNOLOGY
AND CAPITALISM**

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In *The Mechanic and the Luddite*, Jathan Sadowski analyses currents of technology in contemporary capitalism. Sadowski, a senior lecturer at the Faculty of Information Technology at Monash University in Melbourne, continues and extends the critical trajectory he started in his 2018 book *Too Smart: How Digital Capitalism is Extracting Data, Controlling Our Lives, and Taking Over the World*.

From disputes over “rare earth minerals”, calls for deregulation in the development and deployment of artificial intelligence to ongoing trade wars – primarily between the United States and China – Big Tech and those within it have positioned themselves as major vectors of power. The technologies they produce are often portrayed as democratising, revolutionary, labour-free, omnipresent and all-encompassing. It seems as if innovation and new apparatuses are our only possibility for moving forward. In his book, Sadowski rejects such simplifications of the system and offers a well-structured and materially based critique.

The book is structured in eight chapters, each addressing a key dimen-

sion of technology within the capitalist system. In the first two chapters, Sadowski outlines the main focus of his analysis, before clarifying the perspective from which he approaches these phenomena. The six chapters that follow explore the core mechanisms and dynamics of the contemporary techno-capitalist system, examining how innovation is defined, data sustains the system’s operation, human labour is obscured and misrepresented, and ownership structures and risk management shape its development. In the final chapter, he discusses possible futures of technology within capitalism, where he refrains from adopting grand narratives and focuses instead on the socially constructed nature of those futures and the importance of action in shaping them.

He commences his analysis by asserting that capitalism and technology are interconnected structures that both emerge from and shape human action. Sadowski states: “*Technology and capitalism work in tandem to create mutually reinforcing systems, which we must then work for within, and against. We cannot understand one without understanding how it is connected to the other. They have fused together into a dual system: technological capitalism*” (p. 2). Historically, technology has always played a crucial role in the development and intensification of capitalism, providing the tools by which capital can move and accumulate freely, exploit workers, and subsume other spheres of social life.

Sadowski asserts a materialist stance from the outset and appropri-

ately applies capitalist mechanisms and characteristics to current developments in technology, thus showing the great importance of such approaches, while at the same time keeping the language approachable for a wider audience. By employing common Marxist terminology like structures, (data) capital, and subsumption, among many others, the book establishes clear connections between foundational theory and today's reality. In this way, the author moves beyond commonsense and mystifying understandings of technology, offering a much needed and under-represented perspective within current technological research.

Sadowski moves to the ideology of technocratic progress and views it as a beacon of technological capitalism's power and influence. Central to this ideology is the assumption that other forms of progress (social, economic, political, moral) are secondary, if not irrelevant, and can only be achieved once sufficient technological advances have been made. By demonstrating the central role of ideology, the book rejects the seemingly objective, value-neutral and 'progressive' nature of information communication technologies (ICTs). As part of this ideology, innovation functions as both its moral and economic engine.

Innovation and all of its various (capitalist) understandings and definitions serve as the pillar of technological capitalism. The term "innovation" is abstract, meaning that it can be specifically defined by those with power over it. Innovation is therefore always a politicised concept since those who determine what counts as innovation

effectively shape the future. In modern capitalism, this role is played by venture capitalists who are the principal funders and promoters of new technologies, particularly in Silicon Valley. Their position grants them structural power and the ability to steer the digital economy in ways that favour their interests – typically promoting start-ups oriented to rapid profit maximisation (scalability) and capital accumulation, yet neglecting other forms of development and progress. Sadowski introduces the concept of *innovation realism*, an adaptation of Mark Fisher's idea of *capitalist realism*, to describe the tech sector's inability not only to secure funding through alternative models but also to imagine forms of technological development that fall outside the logic of venture capital. To understand technological capitalism, one must look beyond innovation to the force that sustains it: data.

Data plays a vital role in the construction of novel technologies and, via its entanglement with the capitalist system, has acquired conceptions, mechanisms and modes of operation, influenced by it. It is critical to reject the naturalising understandings surrounding data, for example terms like "data mining" that legitimise the extraction of supposedly "raw" material, while in actuality data is always manufactured and stems from human action. As such, it is better understood as a form of capital because it is essential for the production, extraction and circulation of value by digital systems and embodies the familiar imperatives of capital, notably the relentless drive to capture and accumulate as much (data)

as possible. Sadowski also observes how data companies (read: virtually all major corporations), through their capture of immense amounts of personal information and its integration into complex analytic systems, which are effectively and increasingly harnessed for surveillance and control, successfully turn subjects into objects. Technologies routinely objectify individuals, a process also visible in how human labour is misrepresented within such systems.

Sadowski rejects the notion of modern technologies as *autonomous*¹ or labour-free mechanisms. Instead, he focuses on how and where human agency is hidden or suppressed within their operations. Human labour, he argues, lies at the centre of both technology and capitalism since both depend on and originate from it, even as they seek to minimise its value and obscure its significance. The author introduces the analytical label of Potemkin AI – a reference to the Russian minister who built fake villages to impress Catherine the Great and hide the true state of affairs – to describe how ‘smart’ technologies are portrayed as being powered solely by neural networks, while much of the cognitive labour required for their operation, such as data annotation or content moderation, is outsourced, typically to well-known destinations in the Global South. Together with the black-boxing and mystifying language surrounding AI, which conceal its in-

ner workings and present it as objective, neutral and efficient, these systems embed themselves in social life, cultivating dependency and operating as a form of soft, (neo)imperial power.

Throughout the book, Sadowski demonstrates his ability to construct clever and often witty analytical tools – such as Potemkin AI, Habsburg AI, and the Tinkerbell effect – which not only help researchers make sense of the phenomena and reveal the underlying mechanisms, but also engage the general public by using numerous real-life and broadly recognisable examples. Although the focus on everyday politics may appear to limit his analysis, the book intentionally avoids delving into the finer details of technological capitalism, preferring to encourage further research than offer clear-cut answers.

Sadowski deliberately avoids making grand theoretical projections or prescriptions for the future, instead concentrating on how such visions are constructed and sold by the actors and prophets driving technological developments. Visions of the future are always idealised: they arise from immaterial ideas rather than material conditions and often possess a performative or generative character – they become self-fulfilling prophecies when supported by sufficiently powerful actors like CEOs and venture capitalists. By manufacturing expectations surrounding technological development, via the management of hype cycles these actors exercise power over utopias and enable capital to render the future as a colonial frontier. In so doing, they effectively eliminate alternative imaginaries of what is possible, placing capitalist

¹ Here, we refer to Langdon Winner's conception of *autonomous* technology developed in his 1977 book of the same name, which describes a condition whereby technology has somehow escaped human control and proceeds according to its own logic or momentum.

imagination/realism at the centre of futurism. At the end, Sadowski reiterates the importance of critically examining such manifestations given that they are always products of social struggle, and – quoting Karl Marx and Brian Merchant – highlights the need to understand how technologies function (*the Mechanic*) and what makes them socially useful (*the Luddite*).

The Mechanic and The Luddite provides both an introduction to and foundation for the critical (Neo-) Luddite tradition. It is a collection of his previous works where every chapter can also be understood as a stand-alone essay on a selected topic. This is what makes the book great at what it was intended to be; namely, an introductory text for both the academic and general publics, where certain mechanisms, characteristics and concepts are presented in theory and supported with relevant contexts and examples. While the claimed shortcomings of the book

arise from what it was never meant to be, Sadowski occasionally avoids going into too much detail, remaining on the surface level. However, he is the first to acknowledge this limitation, which stems from the book's very broad scope. In turn, he invites readers to explore these topics further by providing numerous references to relevant authors and researchers.

Overall, the book successfully presents technological capitalism as a structure that shapes our actions, rejects simplistic notions of techno-solutionism, and illuminates the many processes underlying its operation. It also represents an important continuation of Sadowski's work, seamlessly combining rigorous academic analysis with his engagement with the day-to-day political economy on *This Machine Kills*, a podcast he co-hosts with Edward Ongweso Jr.

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