

# The hidden abode of digital production

Moritz Altenried, *The Digital Factory: The Human Labor of Automation* (Chicago: University of Chicago Press, 2022). 217pp., £76.00 hb., £22.00 pb., 978 0 22681 549 7 hb., 978 0 22681 548 0 pb.

Since the beginning of spring 2022, many countries have witnessed the return to supposedly ‘normal’ rhythms of life after the closures and restrictions that followed the latest pandemic. During this period, discussions in the Global North have emerged about the ‘great escape’ (or ‘great resignation’) from work – where, in the US at least, this connoted an increasingly collective inclination to reject working tedious jobs for very low wages. Summer marked the arrival of ‘quiet quitting’, an expression deployed to mark both a refusal to perform tasks beyond one’s assigned contractual duties and an intention to be less psychologically invested into one’s job. These two (real or apparent) trends are restricted only to a very limited section of the working population, for which remote working expanded (and improved) by developments in digital technologies seems to have suddenly unveiled the inherently exploitative character of many existing working arrangements. And yet, what about the plurality of other workers – usually not falling into the already inadequate category of ‘white-collar’ – whose work has in the last two decades intensified by virtue of the implementation of digital technology and that could not ‘quietly quit’ precisely because of this?

Moritz Altenried’s book, *The Digital Factory*, intervenes in these discussions to unmask many false assumptions that exist about the vast realm of digital labour, its transformations and the effects on its working agents. It is a clearly written and nuanced overview of broad transformations of labour processes in contemporary capitalism, structured around the chosen lens of the human labour that forms an essential part of what is (or appears as) ‘automation’. Despite the false promises, optimistic views, and even threats of a world liberated from work by the development of full automation, the capture, organisation and exploitation of people’s time and forces still characterise life under capitalism. What the reader finds in Altenried’s book is a clearly systematised set of arguments that shed light on the manifold forms of digital labour hidden behind ‘the magic of algorithms’. Every technological development, the author

points out, displays a strong ‘continued importance of human labor’. Most importantly, with his book Altenried manages to individuate and grant voice to a heterogeneous and geographically dispersed army of digital labourers. These include platform crowdworkers shaping a ‘distributed bedroom factory’, content moderators on social media, search engine ‘raters’, ‘gold farmers’ and ‘testers’ in the gaming industry, not to mention the logistics sector with its temp workers in distribution centres or absorbed within contemporary manifestations of the gig economy (such as the ‘last mile’ of e-commerce delivery). Altenried lucidly charts the varied ways the work of these labourers has been progressively standardised, decomposed, quantified, overseen and managed for an increased control and efficacy within what he calls the ‘digital factory’ and its infrastructures.

One of the most important kernels of the book is the idea that, with the development and implementation of digital technologies, the factory – understood here as a labour regime – has exploded or spread beyond the concrete physicality of an industry workshop. As a consequence, the factory has also begun assuming different (and primarily) spatial forms such as the digital platform. The four central chapters comprising *The Digital Factory* and the research areas chosen for its ethnography – logistics, gaming, crowdwork and social media – concretely outline the materiality of the impact of digital technologies regarding more recent forms of labour exploitation allowed by and intensified by digital technologies. In places that often do not resemble traditional workshops, these new forms of control and management of labour processes have some striking similarities to labour relations that ‘one might assume only exist in traditional factories’. In this sense, and the argument is solidly presented throughout the book, the reader is often reminded that the factory should never lose its central place for a critical understanding of contemporary digital capitalism, despite its substantial transformations compared to its more traditional physical form.

Two main theoretical axes – or, as Altenried calls

them, ‘vectors’ – on which the book’s chapters spin are the notions of ‘digital Taylorism’ and ‘multiplication of labour’. This latter notion draws extensively upon Sandro Mezzadra and Brett Neilson’s work and signifies here ‘the heterogeneity of living labor in a time characterized by the increasing coalescing of labor and life, the increasing flexibilization of labor, as well as shifting and overlapping geographies in the ongoing processes of globalization’. But it is with the concept of ‘digital Taylorism’ that Altenried provides a key tool to understand the foundations and the tendencies of current transformations of labour practices.



To put it succinctly, Altenried argues that as one of main ways to control and manage labour in the era of advanced digital technologies, digital Taylorism – through a combination of software and hardware – opens up further possibilities for the rationalisation, decomposition and surveillance of the labour process in view of increased performances and outputs. However, there are three main differences in contrast to traditional Taylorism, which congeal in characteristics that often emerge in novel and unexpected ways: the plurality of spaces outside the factory as physical unit, the heterogeneity of figures of labour which are in stark contrast with the homogenised mass worker of the Fordist period and, relatedly, the increasing hyperflexibility of employment arrangements that often lack legal protections. In other words, digital Taylorism, as a pillar of the functioning of

the digital factory, allows for a level of ‘scientific’ management and disciplining of the labour process that was unthinkable in Taylor’s time. This has to be understood also in relation to a workforce which, due to the proliferation of smartphones and the extension of the mobile internet infrastructure, has increasingly become global and geographically scattered. In this respect, Altenried’s problematisation of the concept of ‘digital migration’ is particularly significant and is used as a conceptual provocation to disengage the definition of migration from its physical referent. The book does an excellent job in exposing the racialised and gendered dimensions of such a multiplication of the figures of labour, its transformed regimes and forms (such as ‘crowdwork’, where these dimensions emerge with particular clarity).

Altenried’s foremost aim is to shed light, as the book’s subtitle specifies, on the labour hidden behind digital technologies. In contrast to a more common outline of the labour of the creatives of digital industries (coders, designers, etc.) – a section of the working population at times fetishised by the theorists of so-called immaterial labour – Altenried prefers the path of mapping the wretched of the digital factory. In this less visible section of the labour force subsumed by capital, what becomes visible is the materiality of the exploitation of these workers that is supported and enhanced by algorithmic control, together with the all-too-traditionally tedious and repetitive nature of the tasks required. Gaming testers, for instance, are required to play specific parts of a videogame for hours on end, and the workers who train different types of artificial intelligence (AI) – usually working from countries in the Global South – are logged on to digital labour platforms to categorise pictures or optimise search engine results. Content moderation on social media platforms is a particularly interesting example showing the limitations of automated systems of content selections, since Altenried maintains that the AI is still far from being programmed with the right socio-cultural capacities possessed by human beings. The AI, as he clarifies, lacks the cultural knowledge especially when marked by contextual parameters behind language (nudity, hate speech, violence, and so on).

This leads us to a crucial point that the book outlines regarding automation: labour is not completely automated within the world of digital technology. And even when the AI is trained with a view to prospective automa-

tion in the future, labour reappears in other forms (and other places) to fill in the needs of the transformations of labour triggered by the implementation of automated processes. By keeping the category of value at its centre, Altenried often directly invokes Marx in decisive moments in the book. Against the spectre of automation, Altenried aptly maintains that ‘digital technology can automate many tasks but generates at the same time new tasks and problems that require human labor’.

While charting such an army of hidden digital labourers and their hyperflexible working arrangements, it is striking that Altenried rarely uses the word ‘precarity’. The author understands very well that precarity is not a novel phenomenon in the world of capitalist labour. Rather, the casualisation and fractalisation of labour represented by the word ‘precarity’ denotes contractual arrangements that have existed since the dawn of industrial production, even if their use was temporarily interrupted by the historical parenthesis of the Fordist phase (and only on the Atlantic axis of the US and Western Europe). Hence, Altenried seems to prefer the word ‘contingency’ to describe working arrangements put in place to satisfy the necessity of real-time supply chains (the book reminds us about, for instance, temp workers hired only for the Christmas season in Amazon’s fulfilment centres). Moreover, as Altenried notes, the contingent nature of contemporary supply chains paves the way to a logic of constant acceleration in the management of labouring practices. As he puts it, the accumulation of data regarding working practices, aided by the algorithm, ‘allows for a radicalising of Taylor’s concepts [and] fulfils a historical wish of scientific management’. The objective quantification to measure qualitatively different types of labour (or sub-tasks) is unmasked by Altenried’s ethnography as not in the least objective, yet implemented in order to forge and maintain a sort of hyperexploitative labouring regime.

It is clear that *The Digital Factory* opens up avenues for further research in the field of contemporary political economy. One of those concerns the potential forms of resistance to these newly multiplied forms of labour in the digital factory. The theme is somewhat underexplored in the book, especially in the chapter on crowd-

work. However, the emergence of a workforce that unknowingly cooperates on digital platforms, but whose members work as isolated units, makes political organisation particularly challenging. It should not be surprising that a researcher would find it challenging to trace forms of resistance within such a scattered and irregularly employed labour force. Instead, the book offers a valuable analysis of many new (often invisible) forms of exploitation generated, maintained and reproduced by the development of digital technologies. At the same time, Altenried correctly asserts that ‘[a] crucial dimension of successful struggles will be the development of new tools of digital organising’.

In addition, even though Altenried specifies from the outset that the reconfiguration of space is a crucial dimension to the developments in the world of digital labour mapped in his book, essential transformations in the dimension of time and temporality are also part of such a multiplication of labour and workers. Indeed, Altenried (somewhat obliviously) points out the problem when dealing with the vocational character of certain figures in the gaming sector, the testers, who are taken advantage of to enforce overtime, increasingly blurring the line between life and labour, and progressively accepting disadvantageous conditions of work. For a long time this trick has been part of capital’s arsenal to maintain a tight grip over labour.

The significance of *The Digital Factory* is even more clear after the first two years experience of working during a global pandemic. The tendencies in some sectors of digital labour described in the book – whose manuscript had already been completed by the first months of 2020 – have harshly intensified in the past year or so. In a configuration of capitalism where social cooperation is still crucial, but one in which workers are physically distant or digitally not connected with each other, how to organise new forms of resistance to labouring practices under digital conditions? This is the implicit question present throughout *The Digital Factory*. A nuanced enquiry into the current dynamic transformations of labour in digital capitalism, Altenried’s book provides a first necessary step in finding ways to answer it.

Yari Lanci