



Fondazione  
Giangiacomo  
Feltrinelli

# Unboxing AI

## Understanding Artificial Intelligence

Edited by

**Elinor Wahal**

With the preface of

**Antonio Casilli**

**Utopie / 108**

**Futuro del lavoro**

# UTOPIE

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## THE TEXT

Over the last decade, Artificial Intelligence (AI) has steadily surged in popularity, with AI solutions being increasingly adopted in a wide range of industries. AI's rapid technological advancements have also prompted the enthusiasm of many consumers: for instance, during 2019 the unit sales of voice assistants like Google home and Amazon Alexa increased by 70% compared to the previous year.

Concomitantly, there is a growing fear over smart technologies' negative impact on societies, with mainstream media routinely discussing security risks, job displacement, and algorithmic discrimination. This contrast has sparked scholars' interest in the economic conditions, the political tensions, and even the philosophical assumptions underlying intelligent technologies.

From Amazon fulfillment centers to cyber-automation and data colonialism, this volume sheds light on the bodies at work in AI, providing a variety of approaches to the study of AI and its social, economic, and ethical implications.



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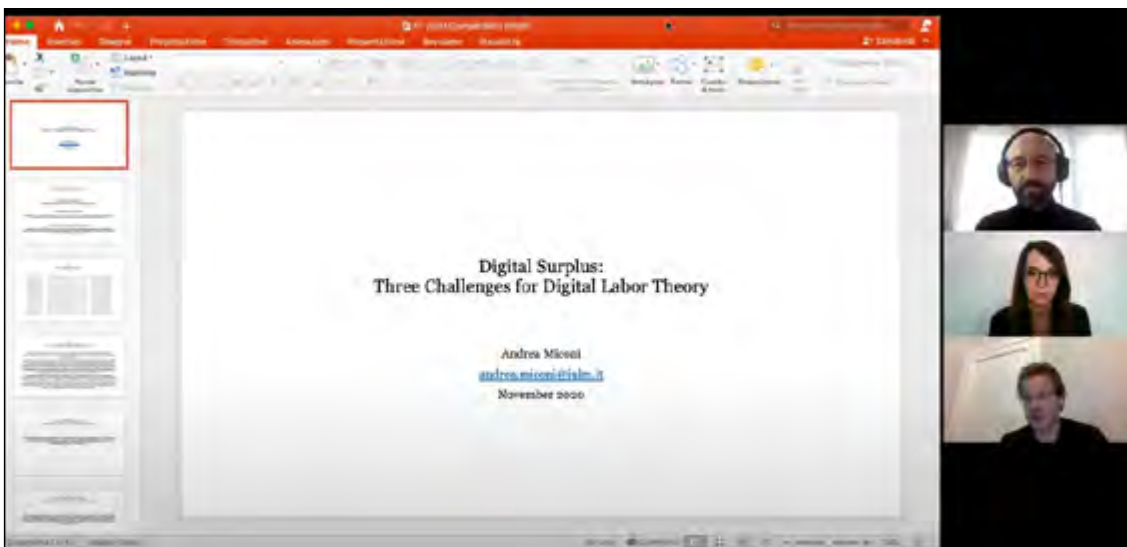
# Unboxing AI



# Chapter 5

## Digital Surplus: Three Challenges for Digital Labor Theory

*Andrea Miconi (IULM) and Marco Marrone  
(University of Bologna)*



Digital economy is often described as a revolution leading to an immaterial economy, radically different from industrial developments and based on something different rather than Capital's exploitation of human work. However, while on one hand there are no real evidences of automation replacing human labour, on the other, as addressed by critical studies on digital labour, with technological development we are increasingly witnessing an expansion of the ability of capitalism to exploit human activities. In this perspective, Marx's analysis is not only an essential tool to address this criticism, but also to investigate

the real implications of the transformations involving the global economic scenario.

Moving from his analysis, in this chapter we will try to focus on digital surplus, meant as the ability of Capital to extract value from the daily activities of human work and the role this has in addressing platforms development. By using this concept, we will argue not only that technology has not a proper life, as it is often argued by platforms in their narrative, but that digital economy is still very much embedded to labor value theory. Thus, behind user generated content, technology, algorithms, there is not an emerging post-capitalist society, but only new ways in which capitalism obtain its surplus from human work. In other words, Marx's analysis is still fundamental to see how Capital is increasingly using technologies to hide the huge amount of human work that is present in digital platforms, Foxconn factories, Coltan mines or any other activity that is part of the so-called digital economy (Casilli, 2019).

We will do this considering three main challenges digital labor theory moved by mainstream theories. They will regard the free nature of many of the services provided by digital platforms, the crucial role of data and the increasing platformization of the economy, which are often exposed as indicators of the emerging of a post-capitalist society. We will reply to such challenges by using Marx and highlighting not only how such developments are not going to such direction, but how labor exploitation and surplus extraction, two of the key characteristics of Marx's capitalism, are still two crucial aspects characterizing digital economy.

## **1. The rise of free labour**

Many of the most significant platforms such as Facebook, Google or Twitter provide free services which have become crucial in our



everyday life. The possibility to make use of a map service such as that provided by Google, which freely provide a service directly on individuals' smartphone, effectively brings a radical difference from the past. For this reason, many have stressed the impact of such a radical change in our economy, stressing the ability of digital platforms to undermine the pillar of traditional market logics by opening to a free services scenario. Especially those authors related to Californian ideology, such as Benkler (2006) or Anderson (2006), emphasize how technological development is opening to scenarios where both private property and traditional employments are not anymore necessary to get access to fundamental resources and services. In this sense, digitalization is establishing in western societies a gift economy similar to that investigated by anthropological studies in non-capitalist markets (Cheal, 2015). In other words, what they highlight is the tendency of digital economy to go beyond the traditional logics of the market. It is by doing that this is challenging the pillar upon which capitalism is based.

Thus, are we really going beyond capitalism? Why are companies accepting these tendencies and accepting to lowering the prices on the market? Is the free provision of service enough to claim that capitalism is over? Marx's analysis shows not only that such optimism may be excessive, but that capitalism has nothing to do with prices. Thus, even if the German philosopher has probably not even imagined the possibility of free exchange of commodities, he was aware of the tendency of capitalism "to cheapen commodities, and by such cheapening to cheapen the labourer himself" (1867). This because the value of goods is not simply the price this has in the market, but, as Marx argues in his labour theory of value, it is the result of the surplus that the Capital is able to extract from human work. In his words: "The value of a commodity is, in itself, of no interest to the capitalist. What

alone interests him, is the surplus-value that dwells in it, and is realizable by sale” (1867).

It is for this reason that Capital doesn't use machines to replace humans, but to increase the extraction of relative surplus, which for Marx (1867) means reducing the amount of human work to be paid. The role played by the market is not that of determining the value of goods, as this is related to the amount of work that this incorporates, but it is limited to address price variations. It is for this reason that Benkler and Anderson are wrong. Even if free services are a crucial innovation, not only this is not enough to address a post-capitalist scenario, but the dynamics leading to their realization are very much related to those investigated by Marx.

Nowadays, free labor has also been extensively criticized by authors such as Terranova (2000), highlighting the increasing ability of capitalism to make people work for free. In her perspective, free labor is intended both as a productive activity that individuals engage outside a traditional employment relationship, which means deprived of both the salary and the typical control characterizing labor in the Fordist era. Nonetheless, what Marx (1864) has already focused on is not only the ability of capitalism to create those necessary conditions to avoid paying workers for their real contributions, but also the crucial role that unpaid work has in making capitalist reproduction possible. In other words, even if platforms provide many of their services for free, not only this does not imply that we are moving beyond capitalism, but, on the contrary, it means that Capital has found ways to increase the amount of unpaid work. This, and not a post-capitalist horizon, is what emerges from free digital labor.

## 2. Big data at its hype

The second key argument exposed in mainstream theories of digitalization is the emerging of a global economic scenario that is no longer based on labour control and exploitation, but rather on data extraction and management. This is, for example, the key thesis of Mayer-Schönberger and Ramge (2018) in their “Reinventing capitalism in the age of big data”, in which they underline how digitalization is pushing towards a data-rich economy where money, market price and labor exploitation are no longer relevant. In their words: “With the market economy advancing with the help of data, we may no longer label the future capitalist in the sense of power concentrated by the holders of money. Ironically perhaps, as data-driven markets devalue the role for money, they prove Karl Marx wrong, not Adam Smith” (Mayer-Schönberger & Ramge, 2018). Similarly, another perspective that has focused the crucial role of data is that addressed by Couldry and Mejias (Couldry & Mejias, 2019), who look at data as a new raw material that capitalism has recently discovered in its potential. Thus, it is this need of accumulating raw materials that finally moves platform to increasingly extract data and to continuously re-articulate its profile in order of “appropriating more layers than human life itself”.

Both contributions provide a relevant description of the crucial role achieved by data in global economy, but their ambitious analysis misinterpret what capitalism is. More than adopting a Marx view of Capital, they intend something closer to the interpretation of Capital given by Piketty (2014), where Capital is simply considered as the result of private incomes, assets, patrimonies, and others. In Marx analysis, in fact, money is not naturally distributed in an unequal way, but it is the crystallization of the social condition originated by what he calls “primitive accumulation” (1867). During this process workers are separated by their means of production and, for this reason, lose control

over their working activities which are instead governed by those possessing means of productions. It is by doing this that Capital not only ensures the possibility to control human work, but also to get the benefits of its result, constantly reproducing the social asymmetries that are reflected in money distribution.

Thus, the shift from a money-based economy to a data-based economy, despite being a radical change in global economic scenario, does not imply a transformation of capitalist relationships which lies also behind data extraction. Differently from what has been argued by Couldry and Mejias (2019), data are not raw materials, but they are also a product of human work which benefits platform interests. Therefore, while on one hand the analogy between colonialism and digital economy may effectively address some crucial features of platform economy, on the other, this is not what motivates platform in constantly expanding data extraction. They, in fact, not only tends to capture an increasing number of individuals in their productive systems, but it also provides those conditions to motivates them to constantly interact with platform's app in order to produce data. Many among those who have studied platform capitalism have addressed the crucial role of data, but they also highlight how, in order to be valuable, these need to be produced by the spontaneous interactions that humans have with digital technologies. Once again, in this case we see how it is the social relationship lying behind data extraction that makes impossible for humans not only to get control over them, but also to get benefits of their activities. Finally, alongside the hype of data that digital economy is producing, what we are facing is not the emerging of a post-capitalism economy, but new and pervasive ways in which capitalism keeps dispossessing humans from the result of their work.

### 3. Will everything be platformized?

One of the most common assumptions we may find among both supporter and critical of digital economy is the increasing tendency towards a general platformization of the economy. Despite this idea is differently articulated in the critical literature (Srnicsek, 2016; Zuboff, 2019; Gillespie, 2018; van Dijck, Poell, & de Waal, 2018), they share a view where the hegemony of platforms' paradigm, nowadays indifferently used to describe companies like Amazon, Apple, Facebook or Airbnb, opens to a future a scenario that is radically different to that of industrial economy. For example, in the reading of van Dijk, Poell and de Waal (2018) platform society is the result of a general process of commodification that increasingly transforms "online and offline objects, activities, emotions and ideas into tradable commodities". However, while Marx (1867) would agree on the tendency of Capital to transform everything into a commodity, the view they express in their book looks rather similar to commoditization, which is the neutral term used to indicate such process. In their understanding, platforms are "multi-sided markets" where different players meet following traditional logics of demands and supply governed by platforms. In this view, those selling goods or services are like companies competing in a market where the role of platforms is limited to provide the necessary infrastructure where this happens. Therefore, platformization is seen as the result of market logics that are making emerge platforms as a business model destined to hegemonize the global economic scenario.

Despite this sounds as a realistic view, the problem is that once we assume that platforms' value is based on their appropriation of human life, this means that platformization does not place in the market, but "behind". As Marx states, in fact, the value of a commodity is expressed in its price before it goes into circulation, and is therefore

a precedent condition of circulation, not its result. Once goods and services enter in the market, their value has already been dispossessed from workers by platforms, which are not neutral infrastructures, but the actors of an accumulation process happening before commodities enter in the market.

It is for this reason that the future of platform economy does not solely depend on market competition, but a crucial role it is played by the ability of workers to defuse the power of platforms. In this perspective, the future of digital economy is unwritten and does not solely depends on platforms, but a crucial role is played by the struggles of digital workers which may fundamentally determine the direction of these transformations. Finally, it is for this reason that Marx's analysis remains a crucial tool not only to look beyond the veil of darkness posed by digital economy on human work exploitation, but also to understand how to challenge the unavoidable destiny of platformization.

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