



A Critique of AI and Capitalist Economic Development

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Description

In a recent paper, on “Rethinking of Marxist perspectives on big data, Artificial Intelligence (AI) and capitalist economic development”, we engaged with AI led social and economic transformations which are ideologically concomitant with requirements of capitalism and its future growth. The World Development Report (2019) focuses on the changing nature of work, skills and traditional production patterns due to the growth of technology and digital platforms. The international agencies established to facilitate capitalism and its market forces look at the opportunities offered by the rapid advancement of AI and data driven economic system. The ‘artificial intelligence’ is an ideological tool of capitalism that ensures precarity of labour beyond territorial boundaries. It limits the existing traditional and radical Marxist theories of labour to analyse and understand the constantly evolving information led data driven economic system. The growth of AI led automation is forcing new forms of production relations on working classes based on technological abilities and access to technology. The growth of AI accelerates existing digital divides.

A new industrial landscape is emerging due to the rise of AI. The data driven economy is an opportunity for the rise of platform-internet companies. These companies produce, collect, store, manage, monitor and use data and information as new forms of capital and new sources of power. The AI enables the inhuman power of data and creates systems to control everyday lives of labour. The detailed information and data on production, consumption, supply, demand, price and market which helps in the growth of platform capitalism that controls different processes and structures of economy. The increased availability of data and information has also increased the consciousness and abilities of labour to challenge inhuman powers of capitalism. Its social implications are unknown, unpredictable and irreversible. The AI led platform capitalism has developed around data and information. Its economic model is driven by database of wealth

extraction. Therefore, it is important to develop policies for the sustainable and egalitarian use of AI to protect labour and promote human welfare.

The theoretical implications of AI driven economic systems are huge. It has challenged liberal, conservative and radical social and economic paradigms. The classical, neoclassical and Marxist economic traditions and their theoretical outlooks are looking redundant in the face of AI and its technological singularity. The economic processes based on production, distribution, supply, demand, price and markets no longer decide the nature and function of economic systems. It is algorithms based on data that decides, shapes and controls the economic systems around the globe. Such an authoritarian and unitary control will have serious implications on our society, culture, politics and economic systems. In this context, it is imperative to develop policies to create an egalitarian and humanitarian approach to AI led economic development.

A key element of the paper is its analysis of the new “industrial landscape” that has emerged during the twenty first century due to the growth of platform-Internet companies and new technologies such as Big Data and Artificial Intelligence (AI). The platform business models of the large Internet companies have inverted two of Marx’s core philosophies which were the labour theory of value and the demarcation between the owners of the means of production (the bourgeoisie) and the workers who sold their labour (proletariat) to the owners [1].

During the industrial revolution, when Marx wrote his theories, workers were organised by factory owners producing physical products based on three factors of production: land, labour and capital. However, in the “new age” economy, a new form of “factory” has emerged called the Internet platform company. The platform company does not make products or services but creates connections between users. Instead of owning the means of production (Marx’s bourgeoisie), Internet firms own the means of connection to the Internet instead (the neo-bourgeoisie).

The relationship between the owners of means of connection to the Internet and its users is also different to the Marxian philosophy. In the sharing economy, Uber and Airbnb do not own the cars and the properties that are used to deliver services to customers. These are owned by private individuals. Therefore, the Marxian relationship between the owners of the means of production and the proletariat breaks down.

The factors of production have also changed. Instead of the bourgeoisie controlling land, labour and capital, the new owners of the means of connection own the data relating to their users instead. This has given rise to a new form of capital called 'data capital'. Meanwhile, the users of the social media platforms and search engines, such as Facebook and Google, are also responsible for producing and developing the content on the platform (user generated). This has transformed them into 'prosumers' – consumers who also produce the "product".

This inverts Marx's labour theory of value because products are being produced free of charge with no financial remuneration. Moreover, free "products" (services) are also provided by Google and subsidised from data monetisation through its "hidden value" advertising model.

The dematerialisation of physical products into digital formats and their non-rivalrous and non-excludable nature has also removed the need for labour since these digital products can be replicated indefinitely at near-zero marginal cost. The delivery of digital products and services online has also resulted in the disintermediation of supply chains, further eroding the relationship between the owners of the means of production and its workers as products are delivered directly to consumers therefore removing workers from the value creation process.

Meanwhile, during the industrial revolution of the 1800s as labour moved from the cottage industries into the factories, this

led to an aggregation of power in the form of organised resistance to the factory owners (trades unions). In the Internet age, the platform companies are able to reach dispersed individuals through their digital networks and aggregate the data relating to the relationships that take place. This increases the monopoly power of the platforms but not the users. This has become known as 'cognitive capitalism', where the power of capital is expressed through data and information.

The paper also provides a comparison between the Marxian bourgeoisie and proletariat and what the authors referred to as a neo-bourgeoisie and neo-proletariat that emerged as a result of the new "industrial landscape". The differences far outweighed the commonalities. Key differences included the ownership of the means of production vs. ownership of the means of connection (bourgeoisie and neo-bourgeoisie) and direct remuneration based on labour vs. no direct remuneration (proletariat vs. neo-proletariat).

Discussion and Conclusion

The paper ends with a discussion of how the development of Artificial Intelligence (AI) is likely to continue (the Internet-of-Things and robotics) as leading economic powers such as China and the USA battle for digital supremacy (a digital cold war). The policy implications were also discussed with the increasing of regulators over the neo-bourgeoisie with charges of exploitation of labour in the sharing economy, the exploitative monetisation of user data and privacy concerns. The chapter concludes with the proclamation that these accusations were not unlike the Marxist critique of the exploitation of the proletariat by the former bourgeoisie.

References

1. Walton N, Nayak BS (2021) Rethinking of marxist perspectives on big data, Artificial Intelligence (AI) and capitalist economic development. *Technol Forecast Soc Change* 166:120576.