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Does the digital sector produce surplus value? The case of Facebook*

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Abstract

This article shows that the digital economy can, as opposed to the opinion of many, be analysed on the basis of Marx's theory of surplus value and profit. What we have shown through a study of the political economy of Facebook is that the product produced by the company in question is a commodity just like others. Moreover, the surplus value produced by the productive workers of Facebook is the main source of the profits of the company and the wages of its unproductive workers.

Key words: Digital economy, Facebook, Surplus value, Immaterial labor, Labor theory of value.

1. Introduction

Facebook, founded in 2004, is – as is well-known – an on-line social media firm that is based in Menlo Park, California (USA). It is an iconic brand, which – along with Twitter – defines the social media landscape in most of the world. Importantly, China has its own social media platforms (WeChat, Sina Weibo). WeChat, which resembles Facebook, has over a billion users, about half of those use Facebook. When Facebook held its initial public offering in February 2012, it

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was valued at $104 billion (Raice, Das and Letzing, 2012) -- as of August 2020, roughly $720 billion (Trafis Team and Great Speculations, 2020). Controversies continue to plague Facebook – its collaboration with government surveillance, its tendency to be a platform for fake news and its serious psychological attack on the self-esteem of its users. Nonetheless, Facebook has come to define the digital landscape.

One of the great conundrums of a digital sector firm such as Facebook is how does it make profit? Facebook does not charge its users a fee. Facebook's two main sources of revenue are the advertisements it runs on its site and the sale of bulk data about its users to third party vendors who produce targeted advertainments. Is Facebook then merely like any media portal which is sustained by advertisements or is there more to it than that?

To ask the question from a Marxist perspective, where does the surplus value come from? Who are the workers here, who provides the living productive labour that wrests the surplus out of congealed labour and nature? Does a Marxist analysis provide any insight into the operations of Facebook, in particular, and the digital sector of the economy, in general? Where does surplus value come from in the digital economy?[2]

According to the International Labour Organisation (ILO), the size of the global working class is 3.3 billion (employed out of 5.7 billion working-age population) in 2019 (ILO, 2020). This is the largest size of the working-class in recorded history. There is no substantial evidence of a dramatically shrinking workforce by automation. Certain sectors key to the digital economy – such as mining and infrastructure construction as well as computer manufacturing – are mainly done with minimal automation. Copper miners in Zambia, for instance, work with very basic tools, while printed circuit board makers in Malaysia use hand-held solder irons. Without copper for wires and printed circuit boards for computers, the digital economy would not be able to function. There is, as yet, not sufficient data on the number of low-skilled workers who enable the digital economy to survive.

Workers whose labour power contributes towards the digital economy work can be productive and unproductive[3]. Despite these crucial differences, these workers – all these workers – are nonetheless members of the global working-class if they sell their labour power in exchange for wages and are exploited.

2 In the literature on the subject of Facebook, the answers provided to these questions are generally unsatisfactory. As a prime example of those failed attempts see the works of Fuchs (2015 and 2012). For a critique of Fuchs views, see Kangal (2016).

3 For a discussion of this important distinction between productive and unproductive labor, see Savran and Tonak (1999).

One of great mysteries of the digital economy is where in the process of digital labour does surplus value get extracted? To approach this question, one has to clarify the meaning of the term 'surplus value' – one of the key discoveries of Karl Marx. Many on the Left believe that the source of profit is surplus value. This is true, but it is worthwhile to emphasise that Marx pointed out that there are two sources of profit:

- Profit on Transfers. This is also known as trading profit or 'profit on alienation' (Marx, 1969). It was dominant in pre-capitalist times, but also makes its appearance in the capitalist system. A phrase that perfectly defines this term is 'buy cheap and sell dear', namely, to buy goods at a lower cost than they are sold, with the difference between the buying and selling price being the profit on transfers. This might take the form of the appropriation of wealth. That is to say, one traders' gain is another traders' loss. The other way in which this form of trading makes its appearance – one that returns in a capitalist system as well – is when the surplus value produced by the productive sectors of the economy are then transferred to the unproductive sectors such as finance.
- Profit from Surplus Value. This profit on the production of surplus value is the dominant form in the capitalist system. The extraction of surplus value takes place in the realm of production and not in the realm of circulation or trade. The prerequisite of this form of profit extraction is that there is a free exchange between the capitalist and the worker. The worker sells the capitalist 'labour power' – or the equivalent of an agreed number of hours of the workers' input. This is purchased at a market price, namely there is no *cheating* involved here. The capitalist pays the worker what is socially acceptable for that job. The amount is used to cover the cost of reproduction of the worker's labour power and the reproduction of those who depend on the worker. The capitalist workday is designed in such a way that there are more labour hours in that working day than required to compensate the workers for the reproduction of their labour power. The difference between the length of the total workday and the length of the workday that is necessary for the reproduction of the workers' labour power (the necessary labour time) is called surplus labour time – the basis of surplus value. The latter, surplus value, is the essence of profit in a capitalist system.

In modern capitalist conditions, however, there is a significant amount of profit earned in unproductive sectors – namely sectors that do not extract surplus value from labour in the process of production. These sectors, for example, include trade and finance. *No surplus value is produced in these unproductive sectors*. The basis of the profit obtained in these sectors, however, is in the productive sectors themselves. The surplus value harnessed from the productive sectors is transferred to those unproductive sectors through various mechanisms, including payments of interest, rent and all kinds of royalties.

The rate of exploitation of labour is the ratio of surplus labour time to necessary labour time. This can be calculated for any employed wage labour in the capitalist system, whether this labour is productive or unproductive[4]. The necessary labour time – as shown above – is simply the time taken for the worker to produce goods equivalent to the socially necessary monetary value needed for the workers to reproduce their labour power (and tend to the needs of their dependents). The surplus labour time is the excess working time over and above the necessary labour time. In the case of productive workers, their rate of exploitation is also the rate of surplus value since their surplus labour time results in the surplus value extracted in the production process. Unproductive workers are also exploited, but the basis of their exploitation is not identical to that of productive workers. They do not produce any surplus value, but they facilitate the transfer of surplus value produced by productive workers to unproductive enterprises.

We can now specifically answer the question, where and by whom (or by what activity) is surplus value produced in the digital economy. Based on the above discussion, any company in the digital economy that is active in finance (banks, brokerage firms, etc.) and trade does not produce any surplus value. Rather these firms or parts of firms appropriate other productive sectors' surplus value through various transfer mechanisms. For example, Goldman Sachs charges broker fees for the work it does for the funds of a client. The harvesting of such fees is merely the *transfer* of surplus value and not the *production* of surplus value.

On the other hand, most of the laborer's in other digital companies which create certain environments (Facebook) and/or provide some services (Google) for users are productive and produce surplus value. Both environments and services are sold as commodities after they are modified (enriched by users' utilisation of those environments and services) to the advertisers. This last act of selling by such digital companies is the realization of surplus value.

So, regarding the digital economy, the extent of surplus value production versus surplus value appropriation from productive sectors can only be answered empirically by identifying production and non-production activities in those companies

4 For an example of estimating the rate of exploitation for unproductive workers in the US, see Shaikh and Tonak (1994).

2. The political economy of Facebook

Facebook is a platform for social media. It is created by a corporation, which has servers, programmers, designers and advertising executives who produce the platform -- as of September 2020, there are about 56,653 employees (Noyes, 2020). Facebook, as a capitalist company, produces both a social interaction environment and people in a social interaction – marketable – environment. Both the environment for social interaction and the environment for advertisers are tangible commodities. Most of the Facebook's employees' labour used in producing these commodities is both productive and exploited (obviously some Facebook workers are supervisory and managerial hence they are unproductive as they would be in all firms in the productive sectors). Such productive labouring activity also produces surplus value. Surplus value is realised when the end product – a *social interaction environment* that is marketable – is sold to advertisers.

Meanwhile, as of October 2020, there are 2.74 billion monthly active users of the social media site. They are able to create an account and post whatever kinds of information Facebook deems to be acceptable. Users are petty commodity producers. Their product is their profile and content. They are not exploited, since they do not sell their labour power to Facebook. They produce value but no surplus value. A petty commodity producer is defined by production done by an individual rather than a capitalist firm and its workers. The individual owns his or her means of production and is capable of producing commodities for sale. The individual or groups of individuals, essentially, work for themselves.

How does Facebook make money? The bulk of its money comes from digital advertising, while some of it comes from the sale of data provided by the users. Advertisers are capitalist companies. They produce commercials and intend to reach potential consumers. Those employed to produce such commercials are productive wage labourers and produce surplus value. An advertising company buys access to a targeted audience (people in social interaction in a marketable environment) as a commodity from Facebook. The realisation of the use value of the latter commodity – the marketable environment – by the advertisers takes place when the user's attention leads to a decision to purchase a commodity that the advertiser markets through its commercial on Facebook.

The 56,653 employees obviously sell their labour power to Facebook, which exploits them to appropriate an amount of surplus value. Do the users donate their labour power to Facebook to provide content and user data? What is the role of the user – the digital labour of the users – in the case of Facebook?

Facebook buys commodities to enable it to produce its products. These commodities include hardware, software and infrastructure.

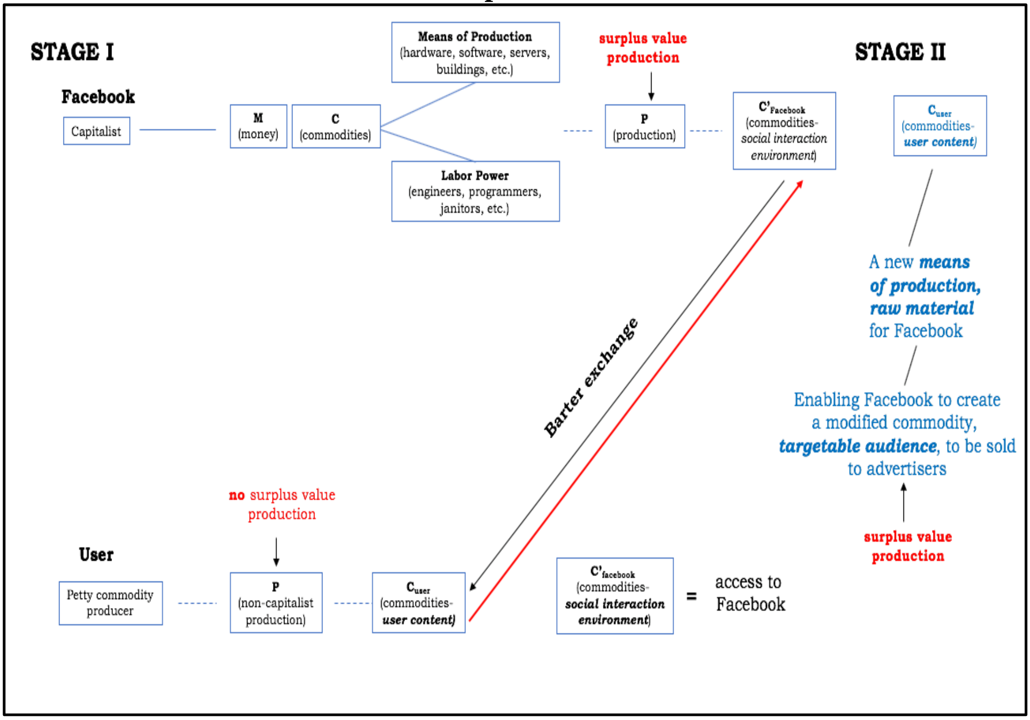
Facebook also takes advantage of non-commodities, such as free software and government produced infrastructure. Facebook also receives the data produced by the users – the petty commodity producers – who do not produce their content (user data) in a capitalist fashion.

Facebook, like every other company in the capitalist economy, begins each day with a certain amount of money – or what Marx calls money capital. With that money, Facebook buys computers, scanners, cables, monitors, software, buildings, desks, chairs, servers, etc. These things that Facebook buys are commodities themselves – and these are, in Marxist terms, the means of production (Marx calls these specific commodities 'constant capital'). Of course, Facebook – like most other private companies – has access to public goods provided by the government, such as government-installed cable networks. Such goods – since they are publicly owned – are not commodities, but they are nonetheless as essential to its operations as Facebook's purchased means of production.

Facebook uses part of its money capital to employ all its 56,653 workers. The amount of money allocated to hire workers corresponds to the exchange value of labour power (in other words, wages, or in Marx's terms – variable capital assuming that all are productive workers since wage payments to unproductive workers come from surplus value).

What is the process of production at Facebook? The best way to understand it is to break it up into stages as shown in the following figure:

Facebook and Surplus Value Production



Stage 1:

Facebook workers produce an environment for social interaction by combining their labour effort with the available means of production. Their various skills – server engineering, web design – are brought to bear to produce the pages that are visible to the consumer. The workers develop an end product – the pages for mutual interconnection – that are unquestionably material, since they have a tangible life and existence in the realm of electromagnetics and that allow anyone with a material interface (computers, mobile phones and the internet) to have access to this platform. This productive activity is as material as the making of an automobile.

Facebook produces a social interaction environment. Is this environment a commodity? Since no user makes a monetary payment and since Facebook accounts are 'free', it appears as if Facebook's social interaction environment is not a commodity. But this ignores one major point: the user is allowed access to the social interaction environment because the user produces content, which in turn enriches Facebook's initial product towards the end product of the production process.

From this point of view, it would be easy to see that there is an exchange relation between the user and Facebook. That money does not get exchanged should not hide the commodity-exchange character of the interaction. Facebook's commodity's (social interaction environment) 'price' is paid in kind by the user-supplied content. In this context, the user is a petty commodity producer.

The user-supplied content is a commodity. It in turn contributes to the production of a newer and modified Facebook product, namely a social interaction environment with content that is more valuable to other users, whose numbers draw in digital advertisers. The more sharply focused the content, the easier is it for Facebook's algorithms to target advertisements.

Stage 2:

Facebook owns the user's content. This content represents the production of a modified and newer product for Facebook. The user produced content – as a commodity – now becomes a part of Facebook's means of production, a 'valuable' input or raw material that is similar to the diamond on a gold ring, with the diamond now defining the ring itself. Facebook takes this modified product – the social interaction of environment and users' content – and groups it with other content and packages it as a targetable audience. Facebook's end product is precisely that targetable audience, namely *people in social interaction who produce a marketable environment*. These targetable audiences are sold to advertisers with specific access limitations regarding the timing of the availability and size of the audience.

3. Conclusion

The discussion in this article shows that the digital economy can, as opposed to the opinion of many, be analysed on the basis of Marx's theory of surplus value and profit. What we have shown through a study of the political economy of Facebook is

i) that the product produced by the company in question is a commodity just like others;
ii) that it has been produced through the use of what Marx terms constant capital and variable capital;
iii) that the distinction Marx makes between productive labour and unproductive labour, a distinction so highly valued by him, can also be made with regard to the labour employed by the company in question;

iv) and that the surplus value produced by the productive workers of Facebook is the main source of the profits of the company and the wages of its unproductive workers.

The essence of the discussion on whether the labour theory of value is or is not valid in the analysis of the digital economy lies in whether the end product produced by the economic activity of digital companies is or is not a commodity just like those produced by other sectors of the economy. We have shown in the case of Facebook that it is. Facebook's end product is a targetable audience, namely *people in social interaction who produce a marketable environment*. Produced through a production process, this is then marketed to advertisement companies, which pay for this commodity in order to use it to their own ends.

The whole discussion on whether so-called immaterial labour falls outside the domain of the labour theory of value is thus a misunderstanding. The workers of Facebook develop an end product – the pages for mutual interconnection – that serves as an input to a certain industry within the overall capitalist economy. These pages even have a tangible life and existence in the realm of electromagnetics and allow anyone with a material interface (computers, mobile phones and the internet) to have access to this platform. In fact, this end-product is more material than that produced by many a service industry worker. If a singer can produce an end-product that can be sold as a spectacle (a concert for instance) which also involves the production of surplus-value, then surely an environment in which living concrete individuals interconnect and interact can be considered an end-product that is a commodity, whose value also contains a part that is surplus-value. Thus, Facebook and, *mutatis mutandis,* all other digital companies are capitalist companies whose activity can be analysed in terms of Marx's labour theory of value.

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Özet

Dijital sektör artık değer üretir mi? Facebook örneği

Genellikle paylaşılan görüşün hilâfına, bu yazı dijital ekonominin Marx’ın artık değer ve kâr teorisi temelinde analiz edilebileceğini öneriyor. Facebook’un ekonomi politiği ele alınarak bu şirketin ürününün de diğer şirketlerin ürünleri gibi bir meta olduğunu gösteriliyor. Yazının bir başka sonucu Facebook’un üretken emekçilerinin ürettiği artık değerin hem kârın hem de şirketin üretken olmayan emekçilerinin ücretlerinin kaynağı olduğudur.

Anahtar kelimeler: Dijital ekonomi, Facebook, Artık değer, Gayri maddi emek, Emek değer teorisi.