

Surveillance Capitalism: a Marx-inspired account¹

Abstract

Some of the world's most powerful corporations practise what Shoshana Zuboff (2015; 2019) calls 'surveillance capitalism'. The core of their business is harvesting, analysing and selling data about the people who use their products. In Zuboff's view, the first corporation to engage in surveillance capitalism was Google, followed by Facebook; recently, firms such as Microsoft and Amazon have pivoted towards such a model. In this paper, I suggest that Karl Marx's analysis of the relations between industrial capitalists and workers is closely analogous to the relations between surveillance capitalists and users. Furthermore, three problematic aspects of industrial capitalism that Marx describes – alienation, exploitation and accumulation – are also aspects, in new forms, of surveillance capitalism. I draw heavily on Zuboff's work to make these parallels. However, my Marx-inspired account of surveillance capitalism differs from hers over the nature of the exchange between users and surveillance capitalists. For Zuboff, this is akin either to robbery or the gathering of raw materials; on the Marx-inspired account it is a voluntary sale. This difference has important implications for the question of how to resist surveillance capitalism.

1.

In the model of industrial capitalism described by Marx, two classes face each other: the capitalists, who own the means of production (capital); and the workers, who do not. Workers need things to survive – food, shelter, healthcare and so on. But they cannot produce these things themselves, since they do not have access to the means of production. Instead, they sell their labour-power to capitalists in return for a wage sufficient to buy the things they need. Combining labour-power with capital produces some product that the capitalist sells on the market. If the sale price of this product outstrips the wage paid to the worker, the capitalist profits.²

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² Marx's 'official' account is in *Capital, vol. I* (Marx, 1990; see especially – but not only – chaps. 6–9). For a more intuitive and somewhat simplified version see his earlier 'Wage Labour and Capital' (2000c).

This story involves three important Marxian concepts. Firstly, there is alienation. In Marx's classic text on the subject, workers are alienated – roughly, improperly separated (Leopold, 2018) – from (1) the product of their labour, (2) their labour itself, (3) their species-being, and (4) other humans (Marx, 2000a; see also Buchanan, 1979). Under capitalism, you must produce whatever that the market demands, things which are immediately taken away from you by your capitalist employer. Not only does the capitalist own the product of your labour, he owns your labour itself: for the length of the working day it is he, not you, who owns your productive capacities – for all that they remain embodied in your physique. Since, for Marx, your productive capacities are your 'human functions' (2000a, p. 89), the distinctive mark of the species, that they become a commodity, to be traded and owned by others – and that they become a mere means of subsistence rather than an expression of your essence – constitutes alienation from your species-being. Worse still, the owner of your products, your labour, your species-being – the capitalist – is someone whom you may never even meet and to whom you relate not as a fellow human but rather as an instrument of his.

Another aspect of alienation is brought out by comparison to Marx's comments on unalienated production (Marx, 2000b), recently the subject of an illuminating discussion by Kandiyali (2020). Unalienated production, Marx says, would mean that 'in the individual expression of my life I would have directly created your expression of your life, and therefore in my individual activity I would have directly confirmed and realized my true nature, my human nature, my communal nature.' (Marx, 2000b, p. 132) The alienation of 'man from man' under capitalism, then, is not only an alienation from the capitalist, and the alienation from our species-being not only alienation from our productive capacities. In producing according to market incentives, rather than directly for others, we are alienated from those who might consume our products, and thus from our being not only as productive but also as communal beings.

Secondly, there is *exploitation*. For Marx himself, 'exploitation' has a technical meaning which depends on the labour theory of value (see *Capital*, vol. I, ch. 9; see also Holmstrom, 1977). Later Marxists have developed Marx-inspired concepts of exploitation which do not depend on this theory, which has been out of favour in economics for over a century (Roemer, 1994; Cohen, 1979; Buchanan, 1979; Young, 1990, pp. 48–53). I do not intend to give a general definition of exploitation here, nor to claim an equivalence between my use of the term and Marx's.³ But present in Marx's account of industrial capitalism are two features which I think are closely associated with our ordinary concept of exploitation: (1) the worker's needs can

³ I also do not argue that exploitation is always or usually wrong or unjust. Some deny this, or at least believe that Marxists should deny it (for discussion, from opposing sides of the debate, see Wood 1999: 16; Geras 1984). I assume only that exploitation is ethically significant in some way.

only be relieved by making a deal with the capitalist; (2) this deal benefits the capitalist at some cost to the worker. (2) does not mean that the worker does not gain, all-things-considered and relative to the nearest possible world, from the exchange: (1) strongly suggests otherwise. But they pay a cost in some dimension: amongst other things, they lose control over their lives, and the satisfaction of non-alienated production (MacPherson, 1973). They also pay an all-things-considered cost relative to more remote, better possible worlds: if they had access to the means of production themselves, for example, they could earn material subsistence without these compromises.

The industrial capitalist pays no such cost. They receive the income necessary for their subsistence without selling their labour-power to another, so avoid alienation⁴ and lose no control over their lives (instead, they gain control over other people's lives). Beyond this, they can *accumulate*.⁵ Say that each worker produces, in a day, products that sell for \$10. The workers, desperate to meet their needs for subsistence, accept wages of \$6 a day. Overheads of the business, maintaining and replacing capital, come to \$2 a day. The capitalist then makes a profit of \$2 a day if they employ one worker. If they employ two workers, they make \$6, enough to subsist without working themselves. If they employ more, they will turn a profit. In the competitive environment of the market, they will use a good portion of this profit to buy more capital and employ more workers. This will lead to more profit, which is reinvested again. The original inequality in ownership is exacerbated, as the value of the capitalist's stock of capital goes up and up – and it does so in virtue of the worker's labour.

My proposal is that the Marxian story about industrial capitalists and workers is closely analogous to a story we can tell about surveillance capitalist firms and their users.⁶ Just as workers are driven to sell their labour-power to industrial capitalists by their need for material subsistence, which they cannot meet alone, users have a need for social participation that they cannot meet alone, which drives them to sell their data to surveillance capitalists. Just as industrial capitalists relieve the workers' needs with wages, surveillance capitalists relieve

⁴ Strictly speaking, we might say that they suffer from at least one aspect of alienation, that is, alienation from certain of their fellow humans, namely their workers, who appear to them as mere instruments.

⁵ For Marx's official account of accumulation, which like his account of exploitation is somewhat more technical than mine, see *Capital, vol. I*, pt. 7 (Marx, 1990).

⁶ The analogy here is not between *industrial capitalism* and surveillance capitalism, but between *Marx's account of industrial capitalism* and surveillance capitalism. It may be that Marx's ideas better illuminate surveillance capitalism than the industrial capitalism they were meant for; thus, one could accept my account whilst rejecting Marx's account of industrial capitalism. At the same time, this essay is not an exercise in Marx exegesis. I do not claim that Marx would have given this account of surveillance capitalism had he lived long enough to see it; nor does it undermine the analogy I draw if aspects of my interpretation of Marx are wanting (one could say the analogy is in fact between *my account of Marx's account of industrial capitalism* and surveillance capitalism). I also use terms – most notably, 'exploitation' in different ways to Marx, though in ways that express thoughts present in his account. Thus, my view is 'Marx-inspired' rather than Marxian.

users' needs with access to their platforms. Rather than producing by combining labour-power with capital, they combine users' data with their machine intelligence and the data of other users to create products that they sell (typically to advertisers). The sale price commanded by such products outstrips the cost to the firms of providing users with access to their platforms, so surveillance capitalists profit from the interaction. Moreover, more data makes the machine intelligence of surveillance capitalists ever smarter, and hence it accumulates value.

In section II I will expand and defend each claim made in the paragraph above, drawing heavily on Zuboff (2015; 2019). Then in section III I will describe the kinds of alienation, exploitation and accumulation that occur in the interaction between users and surveillance capitalists. In section IV I will describe where an account of surveillance capitalism inspired by this analogy differs from Zuboff's, and why this difference is important with respect to strategies for resisting surveillance capitalism. I will conclude, in section V, by briefly suggesting alternative strategies of resistance.

2.

In this section I will expand and defend the story given two paragraphs above, which drew a close analogy between the relations between surveillance capitalists and their users and those between capitalists and workers in Marx's account. I will also rebut an alternative analogy which depicts surveillance capitalists as monopolists and users as consumers.

A. Users have a need for social participation which they cannot meet alone. We all have a need for certain kinds of social interaction: sharing news and gossip; making friends; keeping in touch with family members; buying and selling; organising and being invited to social events; sharing what's going on in our lives and learning what's going on in the lives of others. Today, it is difficult to meet these needs without using Facebook, Google or Microsoft platforms. Surveillance capitalists control the most popular messaging and email services, the most popular platforms for sharing photographs, videos and personal news, the most popular internet browsers and phone and computer operating systems. Increasingly, if you don't use Facebook, you don't get invited to parties; if you don't use YouTube (owned by Google), you never saw the funny video everyone is talking about. Without these platforms, we cannot fulfil our need for social participation.

Certainly, many people think that they need the platforms of the surveillance capitalists. When Facebook crashed in some US cities for a few hours during the summer of 2014, many Americans called their local emergency services (Los Angeles Times Staff, 2014). In Zuboff's

2019 book, she cites an experiment in which teenagers had to survive for 24 hours without access to social media. Many found it torturous.⁷

It might be objected: we do not *need* this kind of interaction; not like we need the material subsistence the Marxian story begins with. I do not propose to give an account of what it is to need something, but I will say two things here. Firstly, lack of social participation can have serious adverse effects on health, just as lack of food and secure housing can (for discussion of empirical studies, see Marmot, 2015, pp. 163–68). Secondly, certain social interactions are necessary in order to access material subsistence in the contemporary world: if we need subsistence, we need these interactions. If you don't have a mobile phone (the vast majority of which use Google's Android operating system) or a computer (the vast majority of which use Microsoft's Windows operating system) or internet access (usually provided through Microsoft or Google browsers) it is difficult and often impossible to do the things necessary for subsistence, such as applying for jobs and benefits, or to do many of the jobs that are available.

It might be objected: there are people who survive without using such platforms. My grandmother, for example, proudly claims never to have as much as touched a computer or a mobile phone. She has friends, exchanges news and gossip, and so on; she has as much of a social life as she wants and a living standard higher than subsistence. However, she lived most of her life before surveillance capitalism, and it was then that she built the networks and capacities to fulfil social needs without engaging with it. For younger people, especially in the countries where surveillance capitalism is most developed, the story is quite different. It might then be objected: the fact that in the past people fulfilled their social needs without engaging with surveillance capitalists shows that it is possible – so how can it be true that young people today cannot meet their needs without them? My response is that what it takes to fulfil needs can change over time. The emergence of industrial capitalism is a good example. In feudal societies, it was possible to meet needs of subsistence without selling one's labour-power to a capitalist; one could simply farm one's plot (although one would also be forced to render goods and services to the feudal lord). When peasants lost their access to land, meeting needs of subsistence without selling labour-power became impossible. Similarly, it can be the case that it was in the past possible to meet social needs without engaging with surveillance capitalist platforms, but that it is not any longer. This is largely due to the strength, with respect to these

⁷ A sample of quotes from participants in the study (quoted in Zuboff, 2019, p. 445): “I felt so lonely... I could not sleep well without sharing or connecting to others”; “Emptiness overwhelms me”; “I felt like there was a problem with me”; “I went into absolute panic mode”. These participants were from China, Argentina, Uganda and the USA (for more information about the study see <https://theworldunplugged.wordpress.com/>.)

platforms, of what economists call ‘network effects’: as more people use them, their value to each of us increases; and, equivalently, so do the costs of not using them. (The needs surveillance capitalists fulfil, therefore, they also create.) Once our friends start arranging parties through Facebook, or prospective employers start requesting applications via email, we can no longer meet our needs without them.

B. Users sell their data to surveillance capitalists in return for the relief of this need. Facebook proudly proclaims that it is ‘free and always will be’, and most other social media sites, internet browsers, email clients and search engines are accessible without cash payment. Neither do surveillance capitalists pay users to use their services, which would seem to be the analogy of industrial capitalists paying workers a wage. But simply because cash payment is not involved does not mean that there is no transaction going on: users exchange their data for access.

Just as workers cannot get a wage without working for it, users cannot access the services and platforms they need without giving up significant rights over their data. Surveillance capitalists use users’ data to build up ‘user profile information’ (UPI). According to a patent filed by Google scientists,⁸ UPI ‘may include any information about an individual user or a group of users. Such information may be provided by the user, provided by a third-party authorized to release user information, and/or derived from user actions.’ Many platforms explicitly require that users provide information – for example, one cannot have a Facebook account without giving Facebook one’s email address. Many cannot be used to effectively meet one’s social needs without giving the firm more data – Google Maps works best when you tell Google your location; you can’t keep in touch with friends on Facebook without revealing to Facebook who your friends are. Surveillance capitalists receive data from all of your actions using their platforms. As Zuboff puts it: ‘Nothing is too trivial or ephemeral for this harvesting: Facebook “likes”, Google searches, emails, texts, photos, songs, and videos, location, communication patterns, networks, purchases, movements, every click, misspelled word, page view, and more.’ (2015, p. 79)

So data is transferred from users to surveillance capitalists. As I will describe in the next sub-section, surveillance capitalists then use the data to produce a product, and it is legally theirs, though the data originated with users: in Marx’s memorable phrase ‘The product of this process also belongs, therefore, to [the capitalist], just as much as does the wine which is the product of a process of fermentation completed in his cellar.’ (*Capital, vol. I*, p. 292) But there is value travelling in both directions. Just as the worker gets a wage, the user gets access to the

⁸ ‘Generating user information for use in targeted advertising’, patent US9235849. The patent was written by Google computer scientists Krishna Bharat, Stephen Lawrence and Mehran Sahami in 2003 and issued 2016. Quoted in Zuboff 2019, p. 78.

platforms necessary for social participation. So although no money changes hands between surveillance capitalists and their users, there is a sale going on. Surveillance capitalists offer the means of social participation, and users gain access to them by selling their data. This is analogous to capitalists offering the means of subsistence to workers (in the form of a wage), which they access by selling their labour-power. (I will defend this analogy against an objection in Section IV.)

C. Surveillance capitalists combine this data with their assets to create products for the market. Hal Varian, Google's chief economist, describes the core of their business as 'data extraction and analysis' (2014). Data is extracted in the way described above, through users providing it as they use Google's platforms. The analysis of data involves other assets, the labour-power of engineers, the data of other users, and machine intelligence. Data analysis is used to predict further things about the user: what they want, what they're likely to do – and also what groups they are part of (racial, socioeconomic, geographical, age and so on).

In the early days of Google, according to Zuboff, the data they harvested was analysed and reinvested to improve the service – in particular, by making search results more relevant to what the user was interested in, based on what they had clicked on before. But this did not make money. Under pressure from investors, Google changed its business model. 'Google would no longer mine behavioural data strictly to improve service for users but rather to read users' minds for the purposes of matching ads to their interests, as those interests are deduced from the collateral traces of their online behaviour.' (Zuboff, 2019, p. 78) Now, users' data, machine intelligence, and clever engineers would create a product to be sold to advertisers. Because 'With Google's unique access to behavioural data, it would now be possible to know what a particular individual in a particular time and place was thinking, feeling, doing' (Zuboff 2019: 78), Google could target adverts at the users most likely to click on them, and target users at the adverts they were most likely to click on. Better UPI no longer meant a better service for users, it meant more clicks on adverts, a prospect which could be sold to advertisers in the form of them paying more for ad space on Google.

In Zuboff's terms, the product that firms like Google, Microsoft and Facebook create with users' data is 'behavioural futures', reliable predictions of people's behaviour. Its use to advertisers is clear, but it is only incidental that they were the first customers for this product (Zuboff, 2019, p. 96). Demand for behavioural futures could well come from other firms, governments, researchers and even individuals. What is important for my account is that it is a product derived from users' data and produced for profit.⁹

⁹ This is also true if we conceive of the product in question, in the case of advertisers, as advertising space, rather than behavioural futures. The advertising space derives its value from the 'improvements'

D. The firms profit from the sale of these products. Marx believed that capitalists would profit because the wages they paid would tend to subsistence, whilst workers could produce things worth more than the cost of their subsistence each day, which they could sell and retain the proceeds from (see especially *Capital, vol. I, ch. 7*). Without the labour theory of value, it is not obvious that wages do tend to subsistence. However, workers certainly often produce things that capitalists can sell for more than the value of their wages, leading to profit.

According to my account, surveillance capitalists ‘pay’ their users not in wages but in services which help them meet their social needs. Whilst these firms do spend lots of money developing them, the marginal cost of many of these services is extremely low, especially for larger firms. What does it cost Google if one more email is sent from a gmail address? What does it cost Facebook if one more account is created? Very little. But with each new user, and each new bit of data, surveillance capitalists can improve the accuracy of their predictions, and therefore increase the sale value of their behavioural futures products. Moreover, as more users engage with a given platform, the network effect increases the attractiveness of that platform to others, which gives surveillance capitalists more users, more data, and more market power. The increase in value to surveillance capitalists due to an additional user will therefore tend to outstrip the costs of making platforms available to them, and so surveillance capitalist firms can be expected to profit – and profit they do.¹⁰

E. Consumption or production?

Marx distinguishes capitalist exploitation, which occurs ‘at the point of production’, from other forms of exploitation which can exist outside of capitalism; one example of the latter is the relationship between monopolists and consumers. If you own the only grocery in town, you are a monopolist, and can charge the townspeople more for their groceries than you paid for them and will make profit. The townspeople have a need, which you help them meet in a way that benefits you at their expense – so this seems like exploitation. But it differs from the exploitation Marx is primarily interested in: the use of workers’ labour-power to produce saleable goods. The grocer exploits the townspeople as consumers; the capitalist exploits workers as producers.

If surveillance capitalists exploit users as consumers, my use of Marxian concepts drawn from the relations between capitalists and workers seems misplaced. Perhaps a surveillance capitalist firm is simply a monopolist: one has little choice but to use their platform, but this

made by the use of UPI, it is *advertising space that will garner clicks* that is the distinctive product of surveillance capitalists, and this is derived from users’ data, even if the unimproved space would exist without them.

¹⁰ For recent surveillance capitalist profits, see Molla (2020). The fact that the profits of Google and Facebook have rapidly risen during a pandemic that restricts offline forms of social participation is grist to the mill of my argument.

use is more akin to consumption than to production. Standard economic theory suggests that consumers will be overcharged by monopolists, but in this case rather than being overcharged in cash terms, users are overcharged by being made to give up data of greater value than the cost of providing them access to the platform. (The grocer's exploitation need not be in cash terms either: they are in a position to demand other things from the townspeople, favours, deference and so on.) Why conceive of users as producers rather than consumers?¹¹

Firstly, a significant disanalogy between the use of surveillance capitalist platforms and most forms of consumption. A large part of our social lives is mediated through these platforms. We spend hours each day staring at them. Using Facebook is not like buying a loaf of bread, or even going to see a film, or going to a pub. These are more or less fleeting experiences, in which we satisfy some want by consuming something, until the thing and the want are gone. This is not how the use of surveillance capitalist platforms feels: it is ongoing rather than fleeting; the platform is never used up (in fact, it grows the more we use it); the desire we want to fulfil is not for a specific experience but for a whole aspect of our being – our social lives – to flourish.

The other thing that is similarly pervasive, in most people's lives, is work. But this does not establish that any production is going on in the use of surveillance capitalist platforms. The reason to think that is simply that users' use of the platforms does in fact produce something – behavioural futures – the sale of which is how surveillance capitalists realise value. Merely holding data about your users doesn't pay the bills, the dividends or the executive salaries. This distinguishes it from the monopolist's inflated prices, which furnish them with cash rather than something that can be sold for cash. (Even people doing favours for or showing deference to the grocer directly improves the grocer's life, like paying him money does: these actions don't produce a further good that has to be sold to realise its value to the grocer.) Data in this respect is more like labour-power. The capitalist does not make money through having lots of employees, but through putting them to work making things that can be sold.

Now, just that production is going on in surveillance capitalism may not mean that users are producers. That someone else produces something with something of ours does not mean that we ourselves are engaged in production. However, in this case, the thing that they are using – our data – is, typically, a manifestation of the self. This is consonant with Marx's description of productive activity:

'It is in the working over of the objective world that man first really affirms himself as a species-being. This production is his active species-life. Through it nature appears as his work and his reality. The object of work is therefore the objectification of the

¹¹ Thank you to Nicholas Vrousalis and an anonymous reviewer for pressing this objection to me.

species-life of man; for he duplicates himself not only intellectually, in his mind, but also actively in reality and thus can look at his image in a world he has created.’ (Marx, 2000a, p. 91)

For Marx, work is a distinctively human means of self-expression, hence the claim about species-being. However, the crucial part of this passage for my purposes is simply that work is a means of self-expression, a way in which one’s inner life becomes manifest to the world. This is a good description of much of our online activity: our hopes, desires and attachments – as well as more mundane but nonetheless highly individual facts about us – are put into the world. Our user profile information is a duplication of ourselves, and our use of online platforms creates a kind of self-portrait (both, arguably, in a more literal and obvious way than labour does). Users therefore are more akin to Marx’s category of producers than to consumers.

3.

Having established a *prima facie* analogy between the relations in which workers under industrial capitalism and users under surveillance capitalism stand, I will now argue that the same problematic aspects of these relations – exploitation, accumulation and alienation – occur in the latter case as in the former, albeit in different forms.

Alienation. Under industrial capitalism, for Marx, workers are alienated from their capacity to work, the products of their work, and their employers. Under surveillance capitalism, users are alienated from their behaviour, the products of this behaviour, and the surveillance capitalists on whom they rely. Just as workers have to sell their capacity to work as a commodity (labour-power), users transform their behaviour – every click, like, message, movement – into the commodity of data. As commodities, both labour-power and data have their value determined by the market rather than the subjective meanings they have to workers and users; yet both the capacity to work and one’s social behaviour are imbued with such meaning, and tightly bound up with the self. As much, if not more, of the self is constituted by what we like, who our friends are, what causes we follow, where we go, and so on, as by what we work on. These things are increasingly part of the data we sell to surveillance capitalists, but they have meanings to us that the market cannot appreciate. Instead, as Zuboff puts it, ‘These subjectivities travel a hidden path to aggregation and decontextualization, despite the fact that they are produced as intimate and immediate, tied to individual projects and contexts.’ (Zuboff, 2015, p. 79; see also Nissenbaum, 2011) Zuboff notes the irony that ‘it is the status of such data as signals of subjectivities that makes them most valuable for advertisers. For Google and other “big data” aggregators, however, the data are merely bits. Subjectivities are converted into objects that repurpose the subjective for commodification. Individual users’

meanings are of no interest to Google or other firms in this chain.’ (Zuboff, 2015, p. 79) We are what we do online, but what we do online under surveillance capitalism, like what we do at work under industrial capitalism, is also not us, because it is valued not as human and meaningful, but as a bloodless object with a market price.

Just as our data is both us and not, the product of our data, like the product of a worker’s labour, is both ours and not. Our data is put together with the data of others, and intelligent software, to create a product that is sold on the market. It is sold to other faceless corporations whom we may not even know exist, and we do not receive the proceeds of the sale. But it is, importantly, about us – even more so than a yard of linen is about the weaver who produced it. The product in this case is a prediction of *our* future behaviour, and can even be used to modify that behaviour (Zuboff, 2019, chap. 10). But it is not something we have any chance of owning or even understanding: so it comes to be, as Zuboff puts it (2015, p. 83), that ‘Google knows far more about its populations than they know about themselves.’

Lastly, industrial capitalism alienates ‘man from man’, for Marx (2000a, p. 91); most obviously it alienates workers from those who employ them. To the capitalist, the worker is a mere instrument; to the worker, the capitalist is someone they have the misfortune of having to transact with. In modern industrial capitalism, many workers do not know, or will never meet, those whom their work ultimately profits; often their employer is not a person but an association of shareholders, many of whom hold shares for a matter of hours and live thousands of miles away, precluding any human connection. The same is true of the relations between users and surveillance capitalists. The people who own Facebook, Google and Microsoft shares, and those who manage these firms, are inaccessible to almost all of their users. Zuboff characterises their attitude to their users as ‘radical indifference’ (2019, ch. 18, sec. III). They do not care whether what happens on their platforms is good or bad, whether messages are true or false, whether a status update announces a marriage or a death. They care only about the volume of data that can be harvested from it. Zuboff cites an internal memo written in 2016 by Facebook executive Andrew Bosworth. He writes:

‘We connect people. That can be good if they make it positive. Maybe someone finds love... That can be bad if they make it negative. Maybe it costs a life by exposing someone to bullies. Maybe someone dies in a terrorist attack coordinated on our tools. And we still connect people. The ugly truth is that... anything that allows us to connect more people more often is de facto good. It is perhaps the only area where metrics do tell the whole story as far as we are concerned.’ (quoted in Zuboff, 2019, pp. 505–6)

Users, to surveillance capitalists, are not people to be cared for but mere inputters of data – just as workers, for industrial capitalists, are mere inputters of labour-power. Thus,

surveillance capitalists such as Bosworth are alienated from their users. Following Kandiyali, we might say, they could directly fulfil the needs of others, but instead they respond only to the incentives of ‘metrics’ (ultimately, the market), and therefore in their work they do not express their communal nature. The users’ use of the platform is no more other-regarding. The data they create for the surveillance capitalist is not produced directly to help them; it is a necessary cost to the user of fulfilling their own social needs. Thus, as with work under industrial capitalism, the users’ production is not oriented towards others.¹²

Does the alienation of users from our behaviour, from the products of our behaviour, and from surveillance capitalists, constitute alienation from our species-being? This is something I will not take a stand on here. For Marx, the centrality of work and community to human nature meant that the alienation present in industrial capitalism had this effect. I do not want to commit to the centrality of online behaviour to human nature. However, I have already noted (a) its similarities with work, and (b) that surveillance capitalism causes a similar alienation from our communal nature, of ‘man from man’, as industrial capitalism. Therefore, whatever surveillance capitalism means for our relation to our species-being, the alienation involved with it should be taken seriously by those who share Marx’s concerns.

Exploitation. As I suggested above, the exploitation of workers is at least indicated by two facts: that the worker has little choice but to deal with the capitalist; that the capitalist benefits from the deal at a cost to the worker. That the user has little choice but to deal with surveillance capitalists was argued for above, in II.A and II.B. That this deal benefits surveillance capitalists, in the form of profit, was argued for in II.D. What still has to be shown is that the deal users make costs them.

‘Cost’ here does not mean that the worker would be better off, all things considered, in the nearest possible world in which the deal is not struck; this would undermine the first fact, that they have little choice but to strike it. Just as it is usually better to be employed than unemployed, even when employment is exploitative, it is better to use the platforms of surveillance capitalism than not. The claim is that there is a cost relative to the nearest possible alternative in some dimension, and a cost relative to some better but more remote possibility. The sale of their data to surveillance capitalists is costly to the user relative to the nearest possible alternative (i.e. not using their platforms) in at least one dimension: the user is

¹² It is less clear whether surveillance capitalism alienates users from one another, in the same way. Social media platforms, for instance, may facilitate direct exchange of data (and other things) to fulfil one another’s needs, and caring for geographically remote friends and family. However, in certain online interactions the dynamic Kandiyali describes: producing out of self-interest and only incidentally, rather than directly, for others, is present. We see this, for instance, in public social media conversations where responses are posted with in order to get traffic, or likes, or burnish a personal brand, rather than to properly engage in discussion. Thanks to an anonymous reviewer for raising this question.

alienated, as described above. Insofar as alienation is bad, this is a cost to the user. This cost may be outweighed by the benefits of their need for social participation being met, but it is nevertheless a cost, insofar as alienation is a harm. Users also pay an all-things-considered cost relative to a more remote, better world. If they had control of the platforms that facilitate social participation, they could meet their social needs in such an unalienated way. There would be no harvesting of data, or if there were it could be used to improve their lives; the platforms themselves would be designed not to maximise data harvesting but for their good; they would know the owners of the platforms, because they would be themselves. (This ‘more remote, better world’ is the aim of the digital socialist strategy I sketch in section V.)

Accumulation. The industrial capitalist who employs enough workers not only profits, but makes more money than they need to live. Needing to stay ahead of his competitors, he invests this money back into his firm, developing his capital (for example, by embracing new technologies) taking on more workers, producing more products and profit, reinvesting it and ever increasing the value of his capital.

The capital of the surveillance capitalist is machine intelligence – the software that uses personal data to predict future behaviour. Because it is intelligent (that is, it learns), the more data it receives, the more accurate its predictions become (Zuboff 2019: 95).¹³ Machine intelligence fed on more data, therefore, is more valuable. Thus, for surveillance capitalists, accumulation – the ever-increasing value of their capital – comes through having access to more data.

This is importantly different from the accumulation of the industrial capitalist. The industrial capitalist has to invest his profit into his capital to increase its value. Machine intelligence grows in value simply in virtue of having access to more data. There is therefore something more automatic about accumulation under surveillance capitalism: it is as if a machine in a factory grew in value simply because more workers had worked on it. This is not to deny that surveillance capitalists invest some of their profits into improving their machine intelligence (and the platforms that bring in the data). But the dynamics of accumulation have another element, which is growth in the value of capital simply through growth in its user-base.¹⁴

¹³ As an anonymous reviewer points out, it is not always true that feeding a given piece of software more data leads to greater accuracy, as there may be an efficient amount of data for the software to work with. However, the amount of data to which a company has access will always be a very important factor in the accuracy of its software – probably more important than the quality of their algorithms (see (Hindman 2018: 3; Banko and Brill 2001))

¹⁴ It is a further question whether the accumulation of data leads directly to an accumulation of power, rather than simply of profits and market value. It is often assumed that it does, but Greene and Gilbert (2020) have recently raised strong objections to this view.

4.

So far I have relied heavily on the research and insights of Shoshana Zuboff. Although I follow her analysis on many points, my Marx-inspired account differs from hers in a key aspect, which has important implications for strategizing resistance to surveillance capitalism.

Zuboff gives little time to Marx in her analysis of surveillance capitalism. She cites him only a few times in her book, solely as a critic of industrial capitalism, and somewhat surprisingly as a ‘utopianist’ (2019, p. 222). (Marx was in fact keen to distinguish himself from what he called ‘utopian socialists’; for discussion see Leopold, 2005.) She holds that ‘the unprecedented nature of surveillance capitalism... cannot be adequately grasped by our existing concepts’ (2019, p. 14), including, presumably, Marxian ones. Whilst ‘accumulation’ features heavily in her analysis, ‘alienation’ and ‘exploitation’ are barely used. However, as I argued above, the facts and framework she marshals can be used to defend an account in which users and their data are analogous to workers and their labour-power in Marx’s account of industrial capitalism.

The main difference between my Marx-inspired account of surveillance capitalism and Zuboff’s account is in the nature of the exchange between users and surveillance capitalists. We agree that users’ data is transferred to surveillance capitalists. But whilst I describe this as a sale analogous to the worker’s sale of their labour-power to the industrial capitalist, for Zuboff it is ‘a non-market interaction’ (2019, p. 93). In Zuboff’s account, users’ data is a ‘raw material’ for surveillance capitalism, which was initially ‘found’ by firms like Google, and then had to be ‘hunted’ (2019, p. 93–94). Users are something like seams of coal or victims of a robbery; they forcibly, unwittingly and without compensation deprived of what is theirs. In the Marx-inspired account, they are agents making a rational choice to sell their data in return for the fulfilment of social needs.

Before examining the divergent implications of the two accounts, I will offer a *prima facie* case for Zuboff’s account, and then respond to it.¹⁵ There seems to be a disanalogy between the Marxian worker and the user of online platforms. The worker has material needs that can be met by a wage; she then engages in another activity (say, working a loom) that has other ends (making cloth, making profit for shareholders), as a means to getting that wage. The user seems to be in a different situation. She has social needs that can be met by participating in online platforms, and it is by engaging with these platforms that she fulfils these needs *and* (coincidentally) produces UPI and profit for the surveillance capitalist. It is not as if she sets

¹⁵ Thanks to David Olbrich and an anonymous reviewer for pressing this case to me.

out to produce these things as a means to having a social life; she set out to have a social life and they are a by-product. Counterfactually, my social life and online activity could be the same even if there were no data transfer to the surveillance capitalist. Perhaps, therefore, I should row back on my claim that users alienate their online behaviour as workers alienate their capacity to work: workers put their capacity to work in the hands of others, as a means to meeting a need; users behave in the way that meets their needs and any benefits to others are coincidental. This distinction also suggests that Zuboff's picture of the transfer of data from users to surveillance capitalists as a non-market interaction is closer to the mark than the Marx-inspired claim that it is a voluntary sale. Users are not selling their data in return for their needs being met; they are meeting their needs in a way such that data is produced, which is then captured by surveillance capitalists without users exercising any agency over it.

This argument is not unreasonable, but it is resistible. It omits an important part of the surveillance capitalist-user relationship: the start. When I set up a Facebook account or buy an Android phone I do not *thereby* fulfil any of my social needs. I do these things as a means of fulfilling those needs – just as I might teach a class as a means of earning a wage. Doing these things can involve a transfer of data: one gives Facebook one's email address, name and phone number when one sets up an account. More importantly, though, doing these things opens one's subsequent behaviour to being rendered as data, analysed, aggregated and sold. Making such starts makes our behaviour *alienable*. Once I am a Facebook user, when I participate socially, such as by 'liking' a post, I simultaneously fulfil my social needs and produce data for the firm. But the latter is true because I have previously, in setting up my account, made it possible – and I did so because it was a condition of access to the platform. So even though it is true to say that users do not produce data in order to fulfil their social needs, in the way a weaver produces cloth in order to earn a wage, it is true that users put themselves into a position where they produce data, and they do this because otherwise their social needs would go unmet. The trade: 'I'll give you my data if you give me access to your platform' still goes on.

Now users might not represent it as such to themselves. But they can be increasingly expected to, as their understanding of surveillance capitalism grows – speaking autobiographically, since researching this topic I have started thinking about my use of such platforms in these terms. Moreover, even if users do not know quite what trade they are making with surveillance capitalists, most know that they are making some kind of trade. They might not know about UPI and targeted advertising or about exactly how much data surveillance capitalists collect on them, but they all know that these firms are not charities and are aiming to grow their user-base. These facts together imply that they are getting something out of their users. Most users, I think, believe that they are being squeezed for value, in some

way, by the surveillance capitalists.¹⁶ Some workers are in a closely analogous position. On a construction line, one might not know what larger assemblage the component you make fits into. In retail work, one might wonder whether one is there to help customers, to attract customers, to offer prestige to one's firm or status to one's immediate superior. But one knows that one produces something of value for the industrial capitalist employing you – and that's all one has to know to sell one's labour-power to them.

A further point: I do not dispute Zuboff's claim that personal data was originally merely 'found' by surveillance capitalists, rather than bought. It is telling that, as Zuboff notes, staff at Google used to refer to this data as 'exhaust' – a by-product of their core search engine service, that users generated unwittingly and Google found a way to recycle. In the early days of the Internet, users were very unaware of personal data and it was less clear that they were producing anything of value to Google and firms like it, or that such firms were profiting from them. However, in an age in which users are increasingly knowledgeable about such issues, theorising the exchange of their data as I did in II.B, as a voluntary (though exploitative) sale rather than a non-market interaction, seems reasonable.

This difference in description of the exchange between users and surveillance capitalists has two further implications. For Zuboff, surveillance capitalism is fundamentally more dangerous than industrial capitalism, because the latter 'market form intrinsically valued its populations of newly modernizing individuals as its source of employees and customers; it depended upon its populations in ways that led over time to institutionalized reciprocities' (2015, p. 80; see also 2019, chap. 18, sec. II). Because industrial capitalists needed the cooperation of workers and customers, they granted them better wages, working conditions and consumer goods. For surveillance capitalism, on the other hand, 'populations are no longer necessary as the source of customers or employees' (Zuboff, 2015, p. 80). The customers, for a surveillance capitalist, are advertisers, not individual consumers; surveillance capitalist firms employ very few people given their size, relying instead on machine intelligence. Users are the source of data, but since (for Zuboff) they are the unwitting source of it, their cooperation is no more needed than the cooperation of a victim of a robbery, or a seam of coal.

This analysis is at once too gloomy about surveillance capitalism and too rosy about industrial capitalism. According to my Marx-inspired account, surveillance capitalism involves similar reciprocities to industrial capitalism. Whilst users may not formally be either consumers or workers, they play a similar role. On the consumption side, although a

¹⁶ An anonymous review points out that it might be false to ascribe such knowledge and suspicion to a growing section of users, namely children. Notwithstanding the fact that many older children understand the online world better than many adults, some children will be troubling exceptions to my claims here. But the even more troubling phenomenon of child labour is a similar exception to the parallel claim about industrial capitalism.

surveillance capitalist's customers are advertisers, advertisers in turn depend on a population that has demand for goods. So just as in industrial capitalism, there is at least some incentive for capitalists not to impoverish the population and kill demand. And like workers, users are the source of the surplus on which capitalist profit rests. It is their participation, which generates the surplus (see II.C and II.D above). Furthermore, this participation is a voluntary trade. This means that surveillance capitalists must keep supplying products that fulfil users' needs if they are to gain their data.

But we should not overstate reciprocal relationships in either case. It is only under certain conditions that industrial capitalists' need for their populations leads to reciprocities. With a large reserve army of labour, or high demand from other members of the capitalist class, individual workers and consumers are less necessary. It is not obvious that the gains workers have made were due to capitalists recognising their interest in reciprocity rather than to workers fighting, through trade unions, street movements and social-democratic parties, and in the face of opposition from capitalists. Similarly, whilst surveillance capitalists have an interest in populations not being impoverished and being attracted to their platforms, there are many areas in which the interests of such firms and their users conflict; for example, surveillance capitalists will always want to squeeze more data from their users, just as industrial capitalists will always want to squeeze more hours from their workers. And more data can be squeezed from users by encouraging them to use platforms beyond what is necessary to fulfil their social needs, which can (like overwork) be extremely damaging. In both forms of capitalism, therefore, there are elements of reciprocity and of conflict. And so we should expect that in the era of surveillance capitalism, just as in industrial capitalism,¹⁷ class struggle and compromise will interact in complex ways.

The second difference between Zuboff's analysis and mine that stems from her describing as a non-market interaction what I consider a sale has to do with the prospects for privacy regulation as a form of resistance to surveillance capitalism. Zuboff argues that there has been 'a redistribution of privacy' (2015, p. 83) from users to surveillance capitalist firms, the 'vanishing of decision rights' (2019, p. 94) over our behaviour. Our behaviour is rendered as data, which surveillance capitalists have access to and the capacity to use, modify and sell – and we as users are powerless to prevent it. Her proposed solutions (which are merely suggestive, in keeping with Marx's proscription on writing recipe books for the cookshops of the future¹⁸), therefore centre around users taking the power to prevent the transfer of their data: by making it clear to them what is going on ('naming the unprecedented' (2019, p. 21))

¹⁷ See Marx's description of the struggle over the length of working day in Victorian Britain (*Capital*, vol. I, ch. 10)

¹⁸ This phrase is from Marx's afterword to the second German edition of *Capital*, vol. I.

and giving them ownership of their data and strong privacy rights (2015, p. 86; 2019, p. 105). This could be achieved by legal systems that treat users' data as their property (and thus make data harvesting without consent theft), or by regulations stating that users' data could be held and used only with their explicit, informed and ongoing consent. Whilst not prescribing specific policies, Zuboff suggests that such 'privacy-enhancing legislation... [would be an] existential threat to the frictionless flow of behavioural surplus' (2019, p. 105), and therefore to surveillance capitalism.

However, my Marx-inspired account suggests that users in such a regulatory environment would simply consent to data harvesting. As Zuboff recognises: 'we depend upon the new information and communication tools as necessary resources in the increasingly stressful, competitive, and stratified struggle for effective life. The new tools, networks, apps, platforms, and media [are] requirements for social participation.' (2015, p. 85) Given our need for their platforms, it is reasonable to suppose that even if users *did* understand that surveillance capitalists were taking their data in a way that exploited and alienated them, for their own accumulation, and *did* have the 'defensive barriers' (Zuboff 2015, p. 85) in terms of privacy rights to stop them, we would *still* sell our data to them, as we must meet our social needs.¹⁹ Similarly, the exploitation of industrial workers is not prevented by workers having ownership rights over their bodies, or knowing they are being exploited – they will continue to sell their bodies, and be knowingly exploited, as they need to earn a wage. The right to privacy and the right to bodily self-determination, in these circumstances, are merely formal rights.

Zuboff mentions examples of covert data harvesting, in which users' consent is never sought, or is violated, in order for surveillance capitalists to extract data from them (2015, p. 78; 2019, p. 80) In these cases, the transfer of data from user to firm *is* more like a robbery than a sale. I do not deny that this goes on. However, I think it is important to distinguish such cases from the normal operation of surveillance capitalism, which is akin to a sale, as I described in II.B. The point is not that covert data harvesting is rare, or even that most users sell their data willingly and wittingly. It is rather that even if covert data harvesting stopped, with surveillance capitalists bowing down before privacy law and taking data only by consent, the dynamics of surveillance capitalism described above, and with them alienation, exploitation and accumulation, would continue. It would do so because users would consent to it. A possible analogy is with slavery under capitalism. In the early days of industrial capitalism, slavery and bonded labour were not only present but widespread, and possibly necessary for capitalism's development (for this argument, see Robinson, 1983, chaps. 1–5).

¹⁹ Whilst researching for this paper, I became keenly aware of the ways in which my data is being used by surveillance capitalists. Have I deleted my social media accounts or stopped using my Android phone or Google and Microsoft email addresses? No; I could not fulfil my needs without them.

However, the abolition of slavery did not put an end to exploitation – but rather added to the ranks of the consensually exploited wage-labourers.²⁰

By emphasising that the transfer of data between users and surveillance capitalists is, in general, a voluntary sale rather than a robbery, I do not mean to downplay its normative significance. On the contrary, one of the most important insights provided by Marx's account of industrial capitalism is that a system of voluntary sales can nevertheless be problematic, because it exploits, alienates, and exacerbates inequalities. However, the strategies for resistance to such systems are importantly different from the strategies of resistance to robberies. Most importantly, regulations that make data transfer conditional on consent will be insufficient.

5.

If privacy laws will not save us from surveillance capitalism, how can we resist it? One alternative has been touched upon already: users could imitate the strategies of workers under industrial capitalism, organising as data unions along the lines of trade unions, collectively bargaining for better treatment and prepared to 'strike' from the use of platforms to secure it. The beginnings of such an approach can be found in the 'data as labour' movement, which demands something like wages for the data we produce online (*The Economist*, 2018; Arrieta Ibarra et al., 2017). There are limits to this strategy, however. The best it can achieve is a better deal for users within surveillance capitalism, a lower degree of exploitation, alienation and accumulation. Moreover, to view an individual's data as something they personally own, either as property or labour, obscures the social nature of the process by which it creates value, and could have perverse redistributive effects. It is largely when it is aggregated alongside data gathered from others that our data is interesting to surveillance capitalists and advertisers, and it is also valuable largely insofar as it can be used to affect purchases of commodities that are themselves produced by workers 'real economy'. Why should the value of the data users produce be returned, as data unions might demand, solely to users? In addition, when we recognise that the data of richer people, who consume more, will tend to be more valuable than the data of the poor, then demanding payment for the value of one's data may cause a regressive redistribution of income (Quentin 2018).

Another regulatory solution would be to force surveillance capitalists to allow users to opt out from their data being harvested, *without making any services conditional on opting in*.

²⁰ As this analogy shows, I do not mean that privacy laws are not a good thing: the abolition of slavery surely was. I mean that they are not sufficient to stop surveillance capitalism.

This would avoid the problem of users ‘voluntarily’ (though in reality with little choice if their needs are to be met) handing over their data; in fact, it seems that they would have no incentive whatsoever to do so. Such regulation would effectively end the exploitation I have described, and would reduce the alienation from their behaviour and its products of those who opted out. Surveillance capitalists may still be able to profit, through non-targeted advertising. They would still have near-monopoly positions with respect to advertisers wanting to reach users. Users would still be in the position of having to engage with these platforms in order to participate in society, platforms that cared about them primarily as subjects of advertising and had little interest in their welfare. If we think exploitation and alienation are problematic, then we might think this situation, in effect an attenuated form of them, is at best imperfect.²¹

Such regulation, then, may be coupled with a resistance to what might be called ‘social proletarianization’. Consider how industrial capitalism, for Marx, relies upon the formation of a class of people without access to the means of production of their own subsistence; these become workers for industrial capitalists who do have such access. Similarly, surveillance capitalism relies upon the formation of a class of people who do not have access to the means of social participation. It is perhaps no accident that surveillance capitalism has grown alongside a privatisation of outdoor public space, an increasing transience of people, a diminishment of interpersonal trust and a decline in civil, sporting, religious and political membership organisations. By giving people more opportunity for social participation outside of these platforms, one reduces our dependence on them, and with it the degree of exploitation, alienation and accumulation.

Alternatively, we might think of not preventing the mass gathering of data and the mass use of platforms, but putting them to better use. Marx did not want to turn the clock back on industrial capitalism; to make workers once again peasants, working for their own subsistence but powerless to enrich their lives. Rather, he wanted to harness for the benefit of all the opportunities that industrial capitalism had opened. Likewise, we should see that surveillance capitalism has opened opportunities that can be so harnessed.²² As Zuboff notes, the growth

²¹ The European Union’s General Data Protection Regulation (GDPR) lies somewhere in between this approach and the mere consent approach criticised in the previous section. Article 7(4) states that ‘when assessing whether consent is freely given, utmost account shall be taken of whether, *inter alia*, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract.’ How much account should be given and when data counts as necessary is vague. The UK’s Information Commissioner’s Office (ICO) interprets this article as meaning that ‘it may still be possible to incentivise consent to some extent. There will usually be some benefit to consenting to processing.’ (2020) Thus the legislation does not seem to have greatly disrupted surveillance capitalism, although under stronger legal interpretations it may do so.

²² Even if one is sceptical that the opportunities created by industrial capitalism can be harnessed by socialist planning, one might think that those created by surveillance capitalism can be. For all their similarities, these are different structures.

of the Internet permitted forms of social participation that had never been open to us, and seem in some ways freer than ever (2015, p. 79). The possibility of better connecting people with each other, and with things they want and need, is a good thing. Online platforms could facilitate more decommodified exchanges between individuals – think of file-sharing, the ‘freecycling’ of second-hand goods and the crowdsourcing of advice and material support on social media, the masses of free and voluntarily produced writing and art. Even data harvesting – when open, transparent and collectively managed – promises benefits to public policy and to our knowledge of one another. Another strategy for resisting surveillance capitalism, then, is to seize control of the platforms and data flows, and redirect them away from profit and towards the common good.²³ The challenge for this new kind of socialism will be, as it was for previous kinds, to find a form of democratic control that does not simply reproduce new kinds of exploitation and alienation.

²³ The polity that has taken greatest steps in this direction is Barcelona, which has pursued an ambitious programme of common data ownership to be used by both municipal bodies and cooperatives (Bria 2018). The strategy appears in a more piecemeal form in Transport for London (TfL), which makes suitably anonymised data about passenger journeys freely available. It has been calculated (Deloitte, ‘Assessing the Value of TfL’s Open Data and Digital Partnerships’, 2017 <<http://content.tfl.gov.uk/deloitte-report-tfl-open-data.pdf>>) that making this data free had contributed £130 million in economic value to London by 2017, by saving time for users, inspiring greater service efficiency and innovative products, and reducing harmful emissions. There are current proposals for similarly open data about household energy use (Public Interest Advisory Group 2019). Imagine what value could be gleaned if Google’s data were similarly open.

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