# Digital Workerism: Technology, Platforms, and the Circulation of Workers' Struggles

Sai Englert*, Jamie Woodcock** and Callum Cant***

*Leiden University, Leiden, Netherlands, s.p.englert@hum.leidenuniv.nl

**Open University, UK, jamie.woodcock@googlemail.com

*** Independent researcher, London, UK, callumcant@gmail.com

**Abstract:** The use of digital technology has become a key part of contemporary debates on how work is changing, the future of work/ers, resistance, and organising. Workerism took up many of these questions in the context of the factory – particularly through the Italian *Operaismo* – connecting the experience of the workplace with a broader struggle against capitalism. However, there are many differences between those factories and the new digital workplaces in which many workers find themselves today. The methods of workers' inquiry and the theories of class composition are a useful legacy from *Operaismo*, providing tools and a framework to make sense of and intervene within workers' struggles today. However, these require sharpening and updating in a digital context. In this article, we discuss the challenges and opportunities for a "digital workerism", understood as both a research and organising method. We use the case study of Uber to discuss how technology can be used against workers, as well as repurposed by them in various ways. By developing an analysis of the technical, social, and political re-composition taking place on the platform, we move beyond determinist readings of technology, to place different technologies within the social relations that are emerging. In particular, we draw attention to the new forms through which workers' struggles can be circulated. Through this, we argue for a "digital workerism" that develops a critical understanding of how the workplace can become a key site for the struggles of digital/communicative socialism.

**Keywords:** Workerism, operaismo, socialism from below, Deliveroo, digital economy, digital socialism

## 1. Introduction

Digital technologies – whether platforms, automation, artificial intelligence, or other novelties – are increasingly dominating the debate on work and how it is changing. In particular, the topic is increasingly referred to as "the future of work" something that either explicitly or implicitly sees little role for workers agency in this supposed future. In this article, we prefer thinking about the future of workers and the central role they play in struggling over and reshaping work. Instead of predicting how many workers' jobs may be "lost" to automation (Frey and Osborne 2013), considering whether their work is "decent" (Berg et al. 2018) and classifying workers according to whether they are "low" or "high" skilled, we want to draw attention to the new skills, tactics, and strategies that workers devise in their struggles against digital capitalism.

This article focuses on what we term "digital workerism", an approach that seeks to return to the premise of workerism that workers and their experiences matter to the critique of capitalism, while updating its methods into a digital context. This is ex-plicitly

an attempt to force workers agency back into the future of work, specifically while experimenting with what digital socialism could mean in practice.

In order to achieve this, we first return to workerism to consider what tools and frameworks can be salvaged for this project. Second, we consider how these could contribute to a "digital workerism" and would it would entail. Third, we apply this to the case study of Uber, both specifically in the UK and more widely in a global con-text. This involves thinking critically about class composition in light of new technolo-gy, platforms, and the circulation of workers' struggles. Then, finally, the article con-cludes by using this approach to discuss what a "digital socialism" could entail – par-ticularly when drawing on these struggles as a guide.

## 2.  Learning from Workerism

The use of digital technology has become a key part of contemporary debates on how work is changing, the future of work/ers, resistance, and organising. Workerism took up many of these questions in the context of the factory – particularly through the Italian *Operaismo* – connecting the experience of the workplace with a broader struggle against capitalism. The Italian workerists began from a fundamental perception that a gulf was emerging between the struggle of workers in the rapidly developing high tech production sectors of Italian capitalism (particularly automotive, technological and chemical manufacture) and the politics of working-class parties, such as the Italian Communist Party (PCI).

The first evidence of the developing gulf was a wave of near-insurrectionary struggle against the conference of the neo-fascist MSI party that broke out in Genoa in 1960. It was led by young factory workers who became known as the "striped T shirts" [*magliette a righe*]. Their militancy was not restricted to the streets, but also increasingly bled over into the workplace. It was in this context that the workerists began to publish their first cohesive journal, *Quaderni Rossi* [Red Notebooks], in which they attempted to theorise how this gulf had emerged, and what it meant for socialists (Wright 2017). It was in this context that operaismo developed its theory of empirical research into the workplace through the idea of workers' inquiry.

Workers' inquiry did not begin with *operaismo*. Its history can be traced back directly to Marx and then, depending on the genealogy employed, via Lenin, Mao, the Johnson-Forrest Tendency, and *Socialisme ou* Barbarie before it arrives in 1950/60s Italy. However, it is in its Italian context that workers' inquiry had perhaps its most influential 20th-century iteration. Turin-based dissident Marxist Danilo Montaldi was the first to connect the Italian movement to the work being carried out by other currents abroad through the translation of *The American Worker* (Romano and Stone 1946), one of the first inquiries to be produced by the American Johnson Forrest Tendency. In his introduction of the Italian translation, he stressed that the text "expresses with great force and profundity this idea, practically forgotten by the Marxist movement after the publication of the first volume of *Capital*, that the worker is first of all someone who lives at the point of production of the capitalist factory before being the member of a party […] and that it is the productive process that shapes his rejection of exploitation and his capacity to build a superior type of society […]" (Montaldi 2013)

In its operaist form, workers' inquiry became a mode of scientific investigation into the balance of class forces in the rapidly-developing sphere of production (rather than the narrative exploration of working-class life, as most earlier forms of labour studies had been). In a period of transformation, it would allow Marxists a way to connect with the reality of working-class struggle and develop their ideas accordingly.

The results of workers' inquiry were primarily comprehended through the framework of a theory that has (largely postfacto) been expressed as "class composition". This framework is built around a close attention to what Marx identified as the three "simple elements" that make up any labour process: the "(1) purposeful activity, that is work itself, (2) the object on which that work is performed, and (3) the instruments of that work" (Marx 1990, 284). These factors are understood as the technical composition of the working class: that is to say, the way that labour power is organised with capital to produce a productive process. This technical composition, which includes patterns of cooperation is then understood as creating the basis for a leap into resistance. This resistance, organized on a collective basis and utilising forms and tactics that emerge from the technical composition, is then understood as the political composition of the working class. Recent work has also extended this approach by considering factors beyond the labour process under the heading of "social composition" (Notes from Below 2018).

In the last ten years, there has been a renewed interest in workerism, particularly through the approach of workers' inquiry. The financial crisis of 2007-8 led to a wave of political contention that catalysed the development of a generation of Marxist intellectuals who acted as the *avant garde* of what Milburn (2019) has called "generation left" In the search for new theoretical and methodological tools with which to understand the re-emergence of overt class struggle, many of these intellectuals happened across Italian workerism – often through the lens of Steve Wright's history of the workerists, *Storming Heaven* (2017) and the work of German Workerists associated with the journal *Wildkat* and the Hotlines call centre inquiry project undertaken by Kolinko (2002).

This move was perhaps one of the first indications of a wider tendency towards a revitalised 21st-century workerism that has been expressed through an increase of workers' inquiry publishing. For example, the special issues of *Ephemera* (see Woodcock 2014), the launch of *Viewpoint* and *Notes from Below*. For the *Notes from Below* project this re-articulation of workerism in the contemporary context means using a practice of workers' inquiry to understand workplaces from the working class' point of view and then interpreting the results of that inquiry through a theory of class composition, understood as:

> a material relation with three parts: the first is the organisation of labour-power into a working class (technical composition); the second is the organisation of the working class into a class society (social composition); the third is the self-organisation of the working class into a force for class struggle (political composition) (*Notes from Below* 2018).

### 3. What is "Digital Workerism"?

The main aspects, as discussed above, that can be inherited from workerism provide a starting point for thinking about class composition and work today. However, class composition has shifted in profound and differing ways, meaning that many of the questions need to be taken up very differently today. If the tools and the frameworks of workerism provide the starting point, we also need to start charting a new path forward in the context of digitalisation.

This paper is not the first to propose thinking about what a "digital workerism" could involve. For example, Brown and Quan-Haase's (2012) call for a "Workers' Inquiry 2.0" examined digital labour, drawing on Bruns's (2008) portmanteau of "produsage" – pro-

duction and usage. They studied Flickr, a website that hosts a picture gallery with aspects of social media. The core of their argument is about how these are not "users", and this is a "complete misnomer", as they are "produsers […] willing to produce content at no cost to the owners of these domains at the same time as these sites generate massive profits" (Brown and Quan-Haase 2012, 488).

While this is an interesting endeavour, we seek instead to return the focus to the workplace specifically in our formulation of digital workerism. For example, their study does not interrogate the conditions or struggles of the workers paid to ensure the operation of the platform, upon which the produsage takes place. Brown and Quan-Haase (2012, 494) conclude that "the mode of produsage should be considered hyper-exploitative because it does not even offer its legions of workers a wage in exchange for their labour power and time." While they are right to identify new methods of exploitation, there is a risk that this loses focus on exploitation through the wage relation. For example, as Dyer-Witheford's (2015, 93) notes, it is right to:

> reject a direct equivalence between the experience of, say, the dagongmei and Facebook users. But vampire bites come in many ways. Facebook posting is a form of exploitation, which, without explicit violence, is nonetheless parasitic. It does not replace the "normal" structures of daily class exploitation at work and home, but is added to and superimposed upon them, to constitute a regime in which the user is habituated, on pain of exclusion from social worlds, to surrendering the elements of their personality – identity, creativity, sociality – to enhance the circulation of capital. This submission is not the same as the brutal bodily discipline inflicted on the dagongmei, but it is a form of subjectification that is both infiltrative and extroversive in the abject submission to the commodity form it elicits.

While some of those involved in Italian *Operaismo* went on to look for new social subjects everywhere, including within a boundless "multitude" (Hardt and Negri 2000), there is a risk here in forgetting about the continuing importance of exploitation at work. we risk falling into the post-workerist trap of looking for the new social subject everywhere but the workplace. While making sense of digital capitalism from this lens does offer some insights, it says nothing about the work, infrastructure, and capital required for the activity to take place. Our focus is not on the "free labour" (Terranova 2000) of Internet users, despite the the "nascent evidence that this hyper-exploitative relationship is causing produsers to organise struggles against it" (Brown and Quan-Haase 2012, 458). These have been focused around what they describe as the "frequent uproars occurring on social networking sites regarding the violation of one's privacy [which] have time and again resulted in controversy".

There are similar comparisons that could be made with the conflict in videogames over modifications (or mods). Valve and Bethesda decided to try and monetise mods on the digital distribution platform Steam. In response, as Daniel Joseph put it, the "mod community then collectively lost its shit", convincing the company to reverse its decision. This ties into a longer history of modding, resistance, and forms of "playbor" (Kücklich 2005) within the videogames industry – something which later formed the backdrop of worker organising in the industry (Woodcock 2019). However, it would not make sense to base an understanding of class struggle in the industry only from the free labour of modders. We see digital workerism as a return to a focus on workers, albeit integrating an understand of how different forms of labour feed into their struggles.

For a "digital workerism", there are a series of studies that have already begun to sketch what it could mean in practice – although none of these have yet used the term – which move away from either a focus on technology or users, and instead privilege the self-activity of workers. Arguably, one of the first in this vein was the Kolinko (2002) collective's inquiry that examined class composition in call centres, taking aim at how technology was being used by management to recompose precarious workers. This approach was taken up by Woodcock (2017) in his ethnographic inquiry into working conditions, technology, management, and resistance in a call centre in London. Call centres have proven to be an important testing ground for changing forms of digital work, experimenting with new technological methods of surveillance and control, which have then been applied more widely in other industries and sectors (Woodcock forth-coming). This means that the prelude to thinking about a digital workerism involved finding ways to understand digital technologies from the perspective of workers experience of the workplace.

The rapid growth of the gig economy and platform work has provided a focus for new forms of digital workerism. As discussed previously, platform work has become symbolic of many of the far reaching – and potential future – changes in work. Too often, the focus is not on new forms of class composition this entails, but becomes narrowly concerned with technologies and algorithms. However, the workers' inquiry method has increasingly been applied, both in Notes from Below and elsewhere, to begin understanding the new composition on gig work platforms in London. For example, Waters and Woodcock (2017) put forward a co-written inquiry into working for Deliveroo, drawing on the experience of Waters, as well as digital methods including self-tracking and multimedia representation. This approach of co-writing has been followed up with Aslam and Woodcock (forthcoming), covering the history of driving for Uber, the story of organising, and the struggles against both the company, the regulator, and in the courts.

Both Cant and Woodcock (as well as the other editors of Notes from Below) published a series of interviews and reports from the front lines of the gig economy, including worker bulletins and strike reports. The most recent piece includes a polemic against other reports that keep talking about the emergence of resistance in platform work, arguing instead that the key is now understanding in which ways it will develop (Cant and Woodcock 2019). Cant (2019) has recently published his workers' inquiry into Deliveroo, interrogating these changes within a framework of class composition. Similarly, albeit in a different industry, Woodcock (2019) has applied this framework to the videogames industry.

Across all of these, there are substantial challenges in thinking about, or even carrying out, these kinds of projects from an academic institution. This is particularly due to ethics review boards discouraging this kind of research process, as well as an emphasis on legal liability that disadvantages critical research (Badger and Woodcock 2019). This makes intervention from an academic context a challenge, something that is not an optional add on for workerism, but core to the practice. However, there is a powerful example of how HCI (Human Computer Interaction) can influence thinking about intervention. Irani and Silberman's (2013) Turkopticon project established a software plug in to support micro-workers on Amazon Mechanical Turk. It provides a way for workers to rate those giving out the tasks, reversing the panopticon like process that Mechanical Turk uses to organise and regulate this digital work. In addition, Turkopticon provides a way to bring workers together to discuss their work, focusing on a bottom up organising approach.

Across these examples, the possibilities of a digital workerism emerge. However, it is important to remember that workers' inquiry has two central concerns: first, the relationship between technical and political composition; and second, the synthesis of research with organising. For "digital workerism", this means following *Notes from Below* to introduce the third aspect of social composition, while in the latter part, drawing attention to the politics of technology when considering co-research. It is to the application of this framework that we now turn.

## 4. The Case Study of Uber

We use the case study of Uber to discuss how technology can be used against workers, as well as repurposed by them in various ways. By developing an analysis of the technical, social, and political re-composition taking place on the platform, we move beyond determinist readings of technology, to place different technologies within the social relations that are emerging.

Much of the research on Uber has focused on technology, a narrow aspect of the technical composition of Uber. For example, many studies have focused on the use of algorithms in general (Pasquale 2015; Lee et al. 2015), and at Uber in particular (Rosenblat and Stark 2016; Rosenblat 2018) as well as critiques of this new mode of work organisation (Slee 2015; Scholz 2017). In part, this is due to the highly visible example of technological change that Uber represents. While there have been other examples of significant management-led technological change, Uber is one that many people have direct experience of as customers or can access very easily through the smartphone app interface. There was a similar starting point for Ravenelle's (2019) study of gig work, having come into contact with these workers as a customer.

It is clear that aspects of algorithmic surveillance and control are key to understanding the shifting composition in platform work (Woodcock forthcoming), including the mediation of work via a platform, the use of data, ratings by customers, and so on. However, there is a risk with many accounts of Uber that these are seen as totalising methods of control that provide little ability for workers to contest or subvert these. Instead, through inquiry with workers it is possible to pick apart these aspects of the labour process to understand how they work in practice. In particular, this draws attention to the material parts of the work, including the kind of car used and the relationships through which it is owned. In London, the majority of cars are leased Toyota Prius hybrid cars, locking drivers into high weekly payments for a specific car, preventing cheaper options. In addition, Uber drivers have to hold a private hire license, issued by TfL (Transport for London). This means a large proportion of drivers work full time to cover their costs and attempt to make a living. This is different to parts of the US, where drivers are not licensed and can use a much wider variety of vehicles, meaning part time work is more common. This means that while there might not seem to be a workplace (at least analogous to those found by the original workerists), drivers share the roads and the city, often with common meeting points.

In London, the social composition of Uber drivers is shaped by the pre-existing relationships within the taxi industry – particularly the two-tiered distinction between Black Cabs and minicabs. While Black cab drivers have to pass "the knowledge" test of geography and routes, and drive the differentiated Black cab, minicab drivers have a much lower bar to entry. They do not need to pass additional tests, but are required to have a private hire license. Many of these minicab companies are based out of offices with radio controllers, recruiting from migrant groups. There is also a clear split in racial composition between the white British Black Cab drivers and (often migrant)

BME minicab drivers. When Uber was established, it targeted minicab drivers, recruiting these drivers and their licenses. This meant that there were many pre-existing relationships and networks that were imported into Uber, including friendship groups and migrant organisations. These form the basis of the "invisible organisation" (Alquati 2013) that preceded more formal organisation of Uber drivers.

As detailed by Aslam and Woodcock (forthcoming), there is already an on-going history of struggle in Uber in London. This first began in 2013 with WhatsApp groups of drivers that started to discuss problems with working for Uber and having initial meetings with the platform. By 2014, the drivers began having organising meetings and launched LPHADA (London Private Hire App Based Drivers Association), after which Uber stopped communicating with them. The following year, LPHADA was folded as the drivers joined the GMB union, which then supported the employment tribunal case against Uber in 2016. However, the drivers were dissatisfied with the approach of GMB, launching a network of drivers called UPHD (United Private Hire Drivers). After an election within GMB was cancelled, the drivers then left and affiliated to the IWGB. At each stage, there has been a moment of political recomposition as drivers have experimented with different forms of organisation - and different organisations - as well as moving targets from only Uber, to the courts, and most recently targeting the regulator (TfL) as well as the mayor of London. Throughout this process there have been different points of contestation, as well as moving from networks to strikes and protests. As Yaseen Aslam has explained: 'When we first started organising people said we would never succeed – included trade unionists, academics, and journalists that we thought would be on our side' (Aslam and Woodcock forthcoming). Instead, the drivers have had to learn their own approach to becoming organisers - leading to a complicated route as they begin to find ways to successfully resist. Most recently, drivers began coordinating internationally to strike and protest Uber's IPO. This latest moment of political recomposition is spreading across national borders.

What this analysis of Uber highlights is that the shifting technical composition of platform work is not only led by capital. Uber engages with previous forms of work, relationships, and organisations. As such, it is not just a "disruptive" business model and technological innovation, but instead is mediated through existing pressures within capitalism. This also returns a focus to the agency of workers – who after all the platform needs to actually driver the cars, despite the use of bogus self-employed status.

## 5. Forming a "Digital Socialism"?

In particular, we draw attention to the new forms through which workers' struggles can be circulated. Through this, we argue for a "digital workerism" that develops a critical understanding of how the workplace can become a key site for the struggles of digital/communicative socialism.

The focus of Italian workerists on the self-activity of workers and their political agency emerges out of a longer-term commitment at the heart of Marxism. Indeed, Engels (1888, 517) famously wrote in his introduction to the communist manifesto that "the emancipation of the working class must be the act of the working class itself". In doing so, he was rephrasing interventions by Marx (1875) in his *Critique of the Gotha Program* and their joint drafting of the International Workingmen's Association's *General Rules* (Marx 1871; see Hal Draper 1971 for an overview of the concept of self-emancipation in the Marxist tradition). This foundational idea served as the cornerstone of the work of both men and their vision for a transformation of the capitalist world-order through struggle from below and worker self-organisation.

Equally important was the fact that Marx and Engels theorised this approach in opposition to different strands of socialism that were developing in their lifetime. On the one hand, they polemicised against utopian socialists who believed that the unleashing of the productive and creative potential of capitalism, this time under workers' control, would liberate humanity from the material limitations of its natural environment. On the other hand, both men took on the growing influence of reformist ideas and their heavy reliance on a teleological reading of history that would inevitably lead from within the existing infrastructures of capitalism to workers' power (see the above-mentioned *Critique of the Gotha Program,* Marx 1875).

What both traditions had in common, despite their deep-seated opposition to each other, was a reliance on the development of technology, a lack of engagement with the realities of workers' struggles, and a confidence in an inevitable socialist future that would emerge from the entrails of capitalist society. Against this, Marx and Engels would argue for the need to rupture with the old order and identify the working classes' strategic position in production as the key to make this rupture possible. There was nothing pre-determined about socialism – it could only be achieved through a ruthless struggle against capital and its erstwhile representatives.

Unfortunately, while this tradition of self-emancipation remained important within Marxism, from Lenin and Rosa Luxemburg to C.L.R. James and Angela Davis (to name but a few, alongside the Workerists discussed above), the history of 20th-century socialist movements was marked by the twin dominance of Stalinism and social democracy. Both approaches succumbed to the siren call of technological determinism and historical teleology and abandoned the agency of working people as the driver of social transformation and the only potential route towards a classless socialist society. It is these traditions that Draper defined as "socialism from above", because of their belief that socialism could be imposed by "socialist governments" once they had captured the state, in opposition to "socialism from below", which were those traditions that continued to foreground workers' struggles and self-organisation contra capital and the state (Draper 1966).

Similar questions continue to confront social movements today. From the hopes surrounding the emergence of new self-proclaimed socialist electoral projects in Europe (see for example Watkins 2016) to the emergence of new utopian techno-centrist accounts of a socialist future (Bastani 2019), contemporary activists and theoreticians continue to propose routes out of capitalism that bypass workers' self-organisation, struggle, and ultimate collective democratic control over production. The debates surrounding digital platforms and their future, discussed above, run into comparable issues: stuck between technological determinism and the illusion of disappearing workers they imagine and theorise change while writing worker agency out of the picture.

So, what about digital socialism? What we have outlined in the first sections of this essay is the approach of "digital workerism" and its application to Uber. However, one of the challenges of workerism has always been the leap from the technical to the political. In this section, we want to consider how "the refusal" (see Tronti 2019) and other tendencies of struggle can connect to a political horizon. In the case of Uber, where the technological aspects of technical composition are particularly sharp, we consider how such composition can be considered on the political terrain. Before turning to discuss how struggles of Uber drivers can be connected to a digital socialism, it is first worth considering what other approaches are already underway when thinking of platform work specifically and how they inscribe themselves within the traditions of the workers' movement that fail to foreground worker agency.

The first example is one that attempts a synthesis between theory and practice: the Fairwork Foundation. Both Sai and Jamie have been involved in the early phase of this project – and the experiences inform our thinking about practice in various ways. The basic aim of the project is to improve working conditions of platform workers through a certification process (Graham and Woodcock 2018; Woodcock and Graham 2019). This is an attempt at impact-orientated research – albeit one more attuned to the idea of measurable impact that has become popular in British universities, which is a very different fusion of theory and practice to workerism. The core of the Fairwork project involves scoring platforms against five principles of fair work – pay, conditions, contracts, governance, and representation – out of a total of ten points (with two points available for each of the five principles). The project had some initial success in refusing to follow the platform operator logic that workers were self-employed – as well as encouraging one platform in South Africa to agree to recognise a union should one be established. The first is part of winning a wider argument about the platform economy being underpinned by bogus self-employment, while the latter is an example of how research can help to encourage worker self-organisation.

As neither of us continue to work for the project, we have now had the space to reflect on the tensions and contradictions of a certification project. These kinds of projects rely – at least to some extent – on the voluntary engagement of the company to be certified. This has reached limits with certification in other industries. For example, the Fairtrade certification – targeted at commodities like coffee and chocolate – continues to disintegrate (Subramanian 2019) – as well as never having rigorously engaged with workers' rights as a core concern anyway – as companies decide to opt out. Fairwork, like other certification approaches requires funding in order to continue, as well as maintaining relationships with the certified organisation for access to data and so on. This means that checks and balances are key to ensuring that workers' concerns are heard above the other pressures. For example, with Fairwork, each stakeholder is given a say over changes to awarding a score each year (for example raising the level of pay to receive a point), which means that while workers have a say, but so do platforms, academics, policy makers and so on. This means a necessary watering down of the thresholds to make the scoring palatable for a range of stakeholders, rather than giving primacy to workers.

The second approach is that of platform co-operatives or co-ops (Scholz 2016). At first glance, platform co-ops seem like an exciting shortcut to the challenges of contemporary class struggle. After all, socialism could be conceived of as a "free association of producers" in which the means of production are no longer privately held, but held communally and co-operatively. Many traditionally industries present substantial barriers to workers simply setting up their own co-operative alternatives, for example, factories require high levels of capital outlay. Platform co-ops, or so the argument goes, are an easy alternative. Instead of needing capital intensive infrastructure, a taxi co-op would just need a co-operative app as the drivers already own the capital (in the form of the car and smartphone and so on). This argument is presented as a technological solution and shortcut to fairer work – there is not even any need to have conflict with the existing capitalist enterprise.

Platform co-ops are clearly influenced by the FLOSS (Free, Libre and Open Source Software) movement, and inflected by the technological determinism and libertarian optimism that can be found amongst some of their proponents. Like open source, if workers can make something just as good (or even better) as those projects funded by capitalists, why would users not choose to switch over to the more ethical alternative? The problem with a platform co-op version of Uber is that the real cost of taxi

transportation in London is often much higher than the advertised price to users – and more often even higher than that paid to drivers. Given the strategic importance of London to Uber there has been heavy spending of venture capital as subsidies.

A platform co-op would have to compete with – and indeed out-compete – a capitalist platform like Uber. While an ethical platform might seem to be an easy sell versus a company like Uber, the latter has a vast marketing budget and already has the user base. The ability for venture capital platforms to run at a loss to ensure monopoly (or near monopoly) status, means that they have the resourcing to be vicious competitors. The only successful alternatives have been able to operate when regulators or legal changes have banned capitalist alternatives. However, a broader question about what a co-op involves can also be found here. For some proponents of platform co-ops, it is simple as having the digital platform infrastructure as no longer privately owned – or at least no longer profit seeking. This means it does not have to involve worker democracy or other aspects of more radical co-ops that we might associate with a "free association of producers".

Workers have neither called for platforms to be rated as fair, nor have Uber drivers in London campaigned for a platform co-op alternative. There was only one abortive attempt to set up a co-op between the GMB (a union that organises Black Cab drivers and at one point had Uber driver members, although they later left to join IWGB) and NEF (the New Economics Foundation – a progressive think tank).

What marks out both of these approaches is that they are, to adapt Draper's terminology, both approaches for fairer work that are devised and implemented "from above". They draw on expertise from academics, rather than from workers. Rather than wishing to engage in lengthy polemics, we use these as warning points that can help us make sense of what a digital socialism "from below" could look like. As Draper (2019, 10) explains, "socialism from above" is "*handed down* to the grateful masses in one form or another, by a ruling elite which is not subject to their control". Whereas, "socialism from below" starts from the "view that socialism can be realized only through the self-emancipation of activised masses in motion, reaching out for freedom with their own hands, mobilized 'from below' in a struggle to take charge of their own destiny, as actors (not merely subjects) on the stage of history" (Draper 2019, 10).

The risk with thinking about digital socialism is that it can tend towards "from above" given the technological solutionism that often accompanies discourse in this area, often imbued with the "Californian ideology" of neoliberal technological determinism (Barbrook and Cameron 1996; Sandoval 2019). However, rather than falling into the somewhat obvious trap of thinking that digital socialism could be built with an "Uber for X" - the now common refrain that the platform model can, and should, be applied to everything (Srnicek 2017) – we should instead identify where, how, and under what conditions digital socialism can be built from below.

Callum has argued that the strategy through which we could achieve a digital socialism from below is "platform expropriation". The hypothesis of this strategy is that a transferal of capital ownership from bosses to workers in the platform sector, achieved through an escalating cycle of political struggle (a cycle that has already been the subject of significant inquiry), would be the optimal way to prevent market competition from undermining different forms of worker-run platforms.

This transformation of ownership, however, is not enough in and of itself. Management of the platform has to be placed in the hands of both tech and delivery workers, in conditions of workers' control. But rather than commodity production under workers' control, which would remain just a strange form of distributed ownership capitalism, the real socialist possibility in such a reorganisation lies in the decommodification of

the platform through its integration into a programme of universal basic services. Rather than maintaining the current market niche of food delivery to relatively well-off urban white-collar workers, this people's Deliveroo would be actively re-designed to produce the greatest possible social use value. By taking control over their daily activity, exploited platform workers could increasingly become the co-producers of a de-commodified urban food system – one premised on the socialist transformation – and collectivisation – of the relations of social reproduction.

These far-reaching changes are only possible to win through a digital socialism from below. As the instances of workers struggle in platform work continue to rise – as well as increasingly connecting on a transnational level – the task ahead is to connect these struggles against platforms to the fight against digital capitalism much more broadly. The fight of Uber drivers in London, Bangalore, Sao Paolo, Cape Town, San Francisco are beginning to converge. The struggles of these workers, both locally and internationally, are key to understanding capitalism today. Like the struggles of factory workers for the Italian *Operaimso*, we can begin to see the germ of an alternative that emerges from the refusal of platform workers. However, if we propose forms of digital socialism from above, we risk not only missing these radical germs, but also encouraging the viral spread across the digital economy and beyond.

Digital workerism, therefore, goes beyond just theorising digital capitalism to engage in the theory and practice of workers' struggle. While we may start with a traditional method, like Marx's (1880) famous postal questionnaire, the intention is not just to collect data. Marx's survey was also intended to make contact with workers, seeking to use the research process as the starting point to organising. Digital workerism too can start with research, but it must involve the meetings, picket lines, WhatsApp groups, and Facebook pages. It requires supporting actual workers struggles, experimenting with new forms of co-research that give primacy of the workers viewpoint and action. It is from this base that digital socialism can be won.

## 6. Conclusion

Throughout this article, we have sought to chart out an approach of digital workerism. This is not to be able to say what a digital socialism would look like, but rather to begin plotting how resistance in digital capitalism can become central to its overcoming and shaping an alternative future. Our final thought here is about the limits of talking about socialism. Too often today, socialism is taken to mean "socialism from above", something to be achieved by voting for someone else to enact it. No doubt, a digital socialism from above would be markedly better than the current economic and social conditions. However, if we are to win a future in which the fruits of technological development are freed from the imperatives of capital and shared across society, the vibrant and chaotic forces of digital socialism from below will either be needed to help deliver on electoral policies, or force its own agenda onto the horizon. The starting point is still one taken from workerism, that understanding and supporting workers struggles is key to building an alternative – whether the work is digitally mediated or not.

## References

Alquati, Romano. 2013. The Struggle at FIAT (1964). *Viewpoint Magazine*. https://www.view-pointmag.com/2013/09/26/struggle-at-fiat-1964

Aslam, Yassin and Jamie Woodcock. Forthcoming. A History of Uber Organising in the UK. *South Atlantic Quarterly*.

Badger, Adam and Jamie Woodcock. 2019. Ethnographic Methods with Limited Access: Assessing Quality of Work in Hard to Reach Jobs. In *Handbook of Research Methods on the Quality of Working Lives*, edited by Daniel Wheatley, 135-146. Cheltenham: Edward Elgar.

Barbrook, Richard and Andy Cameron. 1996. The Californian Ideology. *Science as Culture* 6 (1): 44-72.

Bastani, Aaron. 2019. *Fully Automated Luxury Communism: A Manifesto*. London: Verso.

Berg, Janine, Marianne Furrer, Ellie Harmon, Uma Rani, and Six Silberman. 2018. *Digital Labour Platforms and the Future of Work: Towards Decent Work in the Online World International Labour Office*. Geneva: ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_645337.pdf

Brown, Brian A. and Anabel Quan-Haase. 2012. "A Workers' Inquiry 2.0": An Ethnographic Method for the Study of Produsage in Social Media Contexts. *tripleC* 10 (2): 488-508.

Bruns, Axel. 2008. *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.

Cant, Callum. 2019. *Riding for Deliveroo: Resistance in the New Economy*. Cambridge: Polity.

Cant, Callum and Jamie Woodcock. 2019. The End of the Beginning. *Notes from Below* 7. http://www.notesfrombelow.org/article/end-beginning

Draper, Hal. 2019. The Two Souls of Socialism. In Socialism from Below. 9-44, Chicago: Haymarket.

Draper, Hal. 1971. The Principle of Self-Emancipation in Marx and Engels. *Socialist Register* 8: 81-109, https://www.marxists.org/archive/draper/1971/xx/emancipation.html

Engels, Frederick. 1888. Preface to the 1888 English Edition of the Manifesto of the Communist Party. In *Marx and Engels Collected Works (MECW) Volume 26*, 512-518. London: Lawrence & Wishart.

Graham, Mark and Jamie Woodcock. 2018. Towards a Fairer Platform Economy: Introducing the Fairwork Foundation. *Alternate Routes* 29: 242-253.

Hardt, Michael and Antonio Negri. 2000. *Empire*. Cambridge, MA: Harvard University Press.

Irani, Lilly and Six Silberman. 2013. Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk. In *Proceedings of CHI 2013*, Apr 28-May 2, Paris, France.

Joseph, Daniel. 2017. Code of Conduct: Platforms Are Taking Over Capitalism, but Code Convenes Class Struggle as Well as Control. *Real Life*, 12 April 12 2017. http://reallifemag.com/code-of-conduct/

Kolinko. 2002. Hotlines – Call Centre, Inquiry, Communism. https://www.nadir.org/nadir/inititiv/kolinko/lebuk/e_lebuk.htm

Kücklich, Julian. 2005. Precarious Playbour: Modders and the Digital Games Industry. *Fibreculture* 5 (1). http://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry/

Lee, Min Kyung, Daniel Kusbit, Eva Metsk, and Laura Dabbish. 2015. Working with Machines: The Impact of Algorithmic, Data-Driven Management on Human Workers. In *Proceedings of the 33rd Annual ACM SIGCHI Conference* edited by Bo Begole, Jinwoo Kim, Kori Inkpen, and Woontack Woo, New York NY: ACM Press.

Marx, Karl. 1990 [1867] *Capital: A Critique of Political Economy – Volume 1*. London: Penguin.

Marx, Karl. 1880. Workers' Questionnaire. In *Marx and Engels Collected Works (MECW) Volume 24*, 328-334, London: Lawrence & Wishart.

Marx, Karl. 1875. Critique of the Gotha Programme. In *Marx and Engels Collected Works (MECW) Volume 24*, 75-76, London: Lawrence & Wishart.

Marx, Karl. 1871. General Rules and Administrative Regulations of the International Working Men's Association. In *Marx and Engels Collected Works (MECW) Volume 23*, 3-20, London: Lawrence & Wishart.

Milburn, Keir. 2019. *Generation Left (Radical Futures)*. Medford, MA: Polity Press.

Montaldi, Danilo. 2013 [1954]. Introduction to L'Operaio Americano. *Viewpoint Magazine*.
    https://www.viewpointmag.com/2013/09/27/introduction-to-loperaio-americano-1954/

Notes from Below Editors. 2018. The Workers' Inquiry and Social Composition. *Notes from
    Below* 1. http://www.notesfrombelow.org/article/workers-inquiry-and-social-composition

Pasquale, Frank. 2015. *The Black Box Society: The Secret Algorithms That Control Money
    and Information*. Cambridge, MA: Harvard University Press.

Ravenelle, Alexandrea. 2019. *Hustle and Gig: Struggling and Surviving in the Sharing Econ-
    omy*. Oakland: University of California Press.

Romano, Paul and Ria Stone. 1946. *The American Worker.* Detroit: Facing Reality Publish-
    ing Company.

Rosenblat, Alex. 2018. *Uberland: How Algorithms are Rewriting the Rules of Work*. Oakland:
    University of California Press.

Rosenblat, Alex and Luke Stark. 2016. Algorithmic Labor and Information Asymmetries: A
    Case Study of Uber's Drivers. *International Journal of Communication* 10: 3758-3784.

Sandoval, Marisol. 2019. Entrepreneurial Activism? Platform Cooperativism Between Sub-
    version and Co-optation. *Critical Sociology*,
    https://doi.org/10.1177%2F0896920519870577

Scholz, Trebor. 2017. *Uberworked and Underpaid: How Workers are Disrupting the Digital
    Economy*. Cambridge: Polity.

Scholz, Trebor. 2016. *Platform Cooperativism: Challenging the Sharing Economy*. New York:
    Rosa Luxemburg Stiftung.

Slee, Tom. 2015. *What's Yours Is Mine: Against the Sharing Economy*. London: OR Books.

Srnicek, Nick. 2017. *Platform Capitalism*. Cambridge: Polity.

Subramanian, Samanth. 2019. Is Fair Trade Finished? *The Guardian*, 23 July 2019.
    https://www.theguardian.com/business/2019/jul/23/fairtrade-ethical-certification-supermar-
    kets-sainsburys

Terranova, Tizianna. 2000. Free Labor: Producing Culture for the Digital Economy. *Social
    Text* 18 (2): 33-58.

Tronti, Mario. 2019. *Workers and Capital*. London: Verso.

Waters, Facility and Jamie Woodcock. 2017. Far From Seamless: A Workers' Inquiry at De-
    liveroo. *Viewpoint Magazine*, https://www.viewpointmag.com/2017/09/20/far-seamless-
    workers-inquiry-deliveroo/

Watkins, Susan. 2016. Oppositions. *New Left Review* 98: 5-30.

Wright, Steve. 2017. *Storming Heaven: Class Composition and Struggle in Italian Autonomist
    Marxism* [2nd edition]. London: Pluto Press.

Woodcock, Jamie. Forthcoming. The Algorithmic Panopticon at Deliveroo: Measurement,
    Precarity, and the Illusion of Control. *Ephemera*.

Woodcock, Jamie. 2019. *Marx at the Arcade: Consoles, Controllers, and Class Struggle*. Chi-
    cago: Haymarket.

Woodcock, Jamie. 2017. *Working the Phones: Control and Resistance in Call Centres*. Lon-
    don: Pluto.

Woodcock, Jamie. 2014. The Workers' Inquiry from Trotskyism to Operaismo: A Political
    Methodology for Investigating the Workplace. *Ephemera* 14 (3): 493-513.

Woodcock, Jamie and Mark Graham. 2019. *The Gig Economy: A Critical Introduction*. Cam-
    bridge: Polity.

## About the Authors

*Sai Englert*
Sai Englert is a lecturer at Leiden University. He works on the Political Economy, Labour Move-
ments, Zionism, and Settler Colonialism.

*Jamie Woodcock*
Jamie Woodcock is a researcher based in London. He is the author of *The Gig Economy* (Polity, Forthcoming), *Marx at the Arcade* (Haymarket, 2019), and *Working The Phones* (Pluto, 2017).

*Callum Cant*
Callum Cant is the author of *Working for Deliveroo* and a PhD student at the University of West London.