CHAPTER 2

Digital Workerism, a Framework

I met Facility Waters shortly after getting involved with Deliveroo riders in London. Facility Waters, it may not surprise you to discover, was not his real name. When we discussed writing together about working at Deliveroo, I suggested he chose a pseudonym. Facility (who found the name particularly amusing) was a recent graduate who, like Tim, had found that working for Deliveroo provided the opportunity to make money while cycling. He greatly preferred this to the other service jobs that he had had previously, particularly because it meant dealing with a smartphone app rather than a manager. The first thing that we did together was an interview. We then visited Deliveroo zone centres together. We met again on the picket lines of the Deliveroo strike in London. In our second interview it became clear that Facility had many, many things to say about his work. He already understood the work far better than I did – or any of the people writing about the so-called gig economy at the time. Of course, this is hardly surprising. Facility spent his lunchtimes and evenings cycling for Deliveroo. He joined WhatsApp groups with other workers, chatted with them at meeting points, and spent time in between deliveries thinking about work.

This thinking about work was not based on an abstract set of research questions or in preparation for writing something. Instead, it began from the needs of the work processes: How can I get these deliveries completed? How can I make enough money to make this worthwhile? What are the parts I can change? These sorts of questions emerge as people try to get by at work, particularly in platform work, which often limits training and support to a bare minimum to avoid giving the appearance of being an employer. The strike also brought to the surface questions about how they could fight their employer: What did they want changed? How were they going to get it? What did it mean to organise? These kinds of questions are being discussed by platform workers across the world. Mostly they are of the former type, but often they spill over into the latter.

This chapter starts with Facility Waters as an important reminder that researchers should not engage with work like explorers venturing into uncharted territory. Work is not unexplored, much like the places that explorers claim to have discovered. There are already detailed understandings of work that have been developed and redeveloped by workers. This knowledge serves a practical purpose. It is needed for workers to engage in their work, to get through it, and to struggle against it. This book draws on a range of attempts to engage in co-research with platform workers. While this book has a single author, it also tries to draw out the experiences of platform workers, not only because they shed light on platform work, but because the experience of platform workers matters.

Workers' Inquiry

Workers' inquiry is a militant process of trying to understand work in order to fight against it. It taps into a process that workers go through whenever they enter work: trying to understand how it is organised through their own daily experience, searching for the rules and norms that govern it, figuring out the problems with it, and how they can (or could) respond. In this sense, workers' inquiry is already implicitly happening when workers complain about the tasks they are given or how they are being managed. It is also there when workers find some moment of resistance that works. Therefore, workers' inquiry is not just another method in the academic toolbox. It is not a novel form of participant observation or a clever interview technique. Instead, it is a search for how organising and research can be used together. The aim is not to produce abstract research, but something that can be useful for the struggle. The idea is to discover how research can be part of, and contribute to, a movement against work.

In terms of this project, of which this book is one part, this has meant thinking through what workers' inquiry involves in the context of platform work. I am developing an argument here that I have made previously with Sai Englert and Callum Cant (see Englert et al. 2020), who I also collaborate with on the workers' inquiry project *Notes from Below*.[3] This project is focused around an online publication:

> that is committed to socialism, by which we mean the self-emancipation of the working class from capitalism and the state. To this end we use the method of workers' inquiry. We draw our methods and theory from the class composition tradition, which seeks to understand and change the world from the worker's point of view. We want to ground revolutionary politics in the perspective of the working class, help circulate and develop struggles, and build workers' confidence to take action by and for themselves.

> We argue that an understanding of 'class composition', that is to say, how the classes within society are formed and operate, is an essential task for contemporary socialist militants if we are to develop strategies adequate to our moment without relying solely upon the past for guidance. [*Notes from Below* n.d]

The approach of *Notes from Below* is inspired by Marx's (1880) call for a 'workers' inquiry'. For Marx, this was an attempt to connect the critical analysis of *Capital* to the lived experience of workers. Published in *La Revue Socialiste*, a French newspaper, Marx introduced the project and provided a list of 101 questions. Marx explains that:

> We hope to meet in this work with the support of all workers in town and country who understand that they alone can describe with full knowledge the misfortunes from which they suffer, and that only they, and not saviors sent by Providence, can energetically apply the healing remedies for the social ills to which they are a prey. (Marx 1880)

He notes that the questions do not all need to be responded to – which is good, considering that there are over a hundred – but asks for contacts with workers. As the editors of the *New International* (Marx 1938) noted on the republishing of the call, it provides another version of Marx: not the 'metaphysician spinning out a deductive picture of society from the depths of an Hegelian imagination'; instead 'we see from this series of questions how Marx's decisive point of reference was not a set of abstract categories but the concrete incidents in the daily lives of the workers'. (379)

There is also a clear statement, repeating that of the International Workingmen's Association (1864), 'that the emancipation of the working classes must be conquered by the working classes themselves'. This is a well-known aspect of Marxism, but is too often forgotten – or at least sidelined. It is at the core of workers' inquiry. Marx was attempting to connect theory to practice. However, Marx was by no means an isolated academic writing from afar. He was a militant, ending up in London after being expelled from Germany, France, and Belgium. As a journalist he found ways to support emerging labour movements, as well as later becoming the leader of the International Workingmen's Association – the 'first transnational organization of the working class' – and defending the Paris Commune (Musto 2018). As Immanuel Wallerstein notes, 'he had an extraordinary role in the International, an organization of people who were physically distant from each other, at a time when mechanisms of easy communication did not exist' (quoted in Musto 2018). Therefore, Marx's call for workers' inquiry should be placed within not only his theory but also his practice. It was an attempt to connect research to organising. After all, before workers start organising they need to know what they are organising for and against. As Haider and Mohandesi (2013) argue, Marx 'granted a

strategic role to research'. After receiving a letter in 1881 from a young socialist discussing calls to refound the International Workingmen's Association, Marx responded that the '"critical juncture" had not arrived, and attempting to form one would be "not merely useless but harmful"' (Haider and Mohandesi 2013). Therefore, as Haider and Mohandesi (2013) conclude, 'in this specific conjuncture, inquiry was a more appropriate measure than launching an organization, and was perhaps even its precondition'.

From this initiation by Marx, workers' inquiry was not developed until much later. The ideas were rediscovered by the Johnson-Forest Tendency in the USA and Socialisme ou Barbarie in France. This involved experiments with worker writing, and the longer history has been covered effectively elsewhere (cf. Haider and Mohandesi 2013; Woodcock 2014a). These experiments fed into the development of Italian workerism or *operaismo*. Many of the American and French inquiries probably had a wider reading through the Italian workerists than in their original language. For example, Danilo Montaldi translated *The American Worker* (Romano and Stone 1946). This connection with earlier attempts at inquiry was introduced by Montaldi (2013) as a text that:

> 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.

The workerist 'reading of Marx wasn't only against Marxism, but in a certain sense critical of the limits and the blind alleys in Marx himself, stretching and forcing his words to make their ambivalences explode, looking for weapons with which to attack the factory-society of contemporary capitalism' (Roggero 2020, 3).

In the context of Italy at the time, this meant trying to understand the experience of young workers, many from the south of Italy, entering the factories in the north. These were high-tech factories, involved in automotive, chemical, and other industries. The struggles of these workers were increasingly removed from the existing unions and political parties such as the Italian Communist Party (PCI). A key flashpoint was a revolt of young factory workers – 'who became known as the "striped T shirts" [*magliette a righe*]' (Englert et al. 2020, 133)– outside the conference of the neo-fascist MSI party in Genoa in 1960. These struggles entered the workplace too, leading to a series of wildcat strikes. In 1962 one of these strikes was ended by the UIL union (which was close to the Italian Socialist Party) at the FIAT factory in Turin. The union negotiated a return to work without consulting the workers. In response, workers gathered outside the union's offices, leading to three days of strikes that became known

as the Piazza Statuto revolt [*La Rivolta di Piazza Statuto*]. The rift between these workers and the established/establishment left became a focus for workerists now gathering around a journal called *Quaderni Rossi* (Red Notebooks). Rather than condemning these young workers, they sought to understand the process taking place from the perspective of the workers themselves (Wright 2017). It is from this context that their workers' inquiries began.

Workerism and Class Composition

Workers' inquiry provided a way to understand, relate to, and organise with this emerging group of workers. Through this process, the workerists identified a shift in class formation and relations. Instead of discounting these workers as lacking traditions, experience, or organisation (something that still happens with groups of workers today), they attempted to understand how work was being organised in these factories. Unlike older workers in more skilled positions, the application of scientific management was deskilling factory work, with new technology being used to control it. This work differed from that of those more likely to hold union positions – both within the factory and beyond it. This new composition of work was creating the conditions for what the workerists termed the mass worker. It was these mass workers who took wildcat strike action in the factories, and protested against political parties and trade unions. Instead of seeing this as something to be controlled, it was identified as a rupture that could challenge capital in new ways. Potere Operaio, a workerist party active after 1967, would later claim that 'Piazza Statuto was our founding congress' (quoted in Milburn 2019, 27).

This discussion about striking young workers in Italy formed the basis of the analysis of class composition. While these struggles were no doubt exciting:

> Italian operaismo didn't glorify workers and proletarians: it wagered on the possibility that there was a force in them that they could mobilize against themselves, not to extend but to destroy their own condition. It was therefore a workerism against work, refusing a naturalized subjectivity imposed by the capital relation. It was a workerism based on the irreducible partiality of the point of view, on an autonomous partisan autonomy that needed to be built. (Roggero 2020, 3)

Here, workers' inquiry developed from accounts of workers' experience – like the narratives of the Johnson-Forest Tendency – into an investigation of the balance of class forces. In periods of transition, like that of 1960s Italy or the current moment of platform work, it provided a way for Marxists to connect theory to the realities of working-class struggle that were already underway.

Although not used in this way at the time, we can therefore think of class composition as the framework through which workers' inquiries can be

understood. If an inquiry is a spotlight on a particular set of experiences and struggles, class composition is the analysis that places this within a broader context. For the workerists this was a 'question of subjectivity, or rather – as Alquati called it – counter-subjectivity. This was a subjectivity that wasn't only against capital, but also against the capital within us' (Roggero 2020, 3). Rather than the traditional Marxist understanding of false consciousness – that workers have had the wool pulled over their eyes in some way – this was about finding new subjectivities against capital. This meant that the new ways workers were finding to resist and organise were important – there was not already a plan held by party members that just needed to be brought to the workers.

The theoretical core of workerism is an inversion of orthodox Marxism. As Mario Tronti argued, there was a need to 'invert the problem', rather than starting from capital, and to 'change direction, and start from the beginning – and the beginning is working-class struggle' (Tronti 1971, 89 quoted in Negri and Hardt 2009, 291). This was a 'Copernican revolution' against the existing orthodoxy of the time (Turchetto 2008, 287). Roggero further argues that this:

> inversion must be understood in light of the irreducible partiality of the viewpoint: first the class, then capital. Capital is not the subject of History, it is not that which does and undoes, that which determines development and the conditions for its own overcoming. Rather, history is non-teleological, and at its center is class struggle, its power of refusal and its autonomy. (2020, 3)

There is one word of warning to add here: while workerism involves searching for and developing new subjectivities against capital, it is not the search for a new vanguard 'subject'. The composition of the mass worker was specific to the period. Many workerists who became part of the so-called post-*operaismo* became obsessed with searching for a new revolutionary subject. For some, this meant an obsession with digital technology – in which the immaterial worker (Hardt and Negri 2004), cognitive capitalism (Boutang 2012), or the cognitariat (Berardi 2005) would play a central role. However, this attempted reading of class composition misses the process of inquiry with workers, connected to the actual shifting composition at the workplace and beyond. This reminder is particularly important when talking about platform workers: this is not an argument that platform workers are the new vanguard, or indeed that other forms of work no longer matter. Instead, it is an examination of new potential subjectivities.

To avoid falling into this kind of trap, it is therefore important to be clear about what class composition involves. As Roggero argues, 'subjectivity – the base and the stakes of class composition – is not consciousness. Subjectivity isn't revealed, it is produced. Capital produces it, and so can struggles' (2020, 6). This means that inquiry must involve understanding struggles, not just changes

in capital and technology. For the workerists, class composition involved two elements. The first is the technical composition of the working class. This involves the way in which labour power is organised by capital at work, including the labour process, conditions of work, use of technology, management techniques, the degree of cooperation between workers, the relationship to other kinds of work, and so on. This covers the experience of work, something that workers go through on daily basis. However, this should not be read as just a sociology of work, but rather 'as sanction of the relations of force between classes'. For example, the introduction of Fordism and Taylorism into factory work was an attempt to eliminate worker and union resistance, not just a matter of stopwatches, white coats, and assembly lines. Therefore, as Matheron (1999) continues, 'it makes sense then, to analyse the labour process and its modifications in detail in order to understand what "class struggle" means: there has never been more Marxist "evidence"'. Technical composition creates the basis for a leap into resistance and organisation, termed political composition. Workers struggle against capital, capital responds, workers struggle again in a new context. Political composition is therefore 'the self-organisation of the working class into a force for class struggle' (*Notes from Below* 2018). It entails a continual process of political recomposition, with capital responding via new technical compositions to overcome worker resistance. Workers' struggle drives capitalist development, but also poses the possibility of a rupture from capital.

Like the gap between Marx's original call and the Johnson-Forest Tendency, Socialisme ou Barbarie, and then Italian workerists, there was another lull in the practice of workers' inquiry. In the last two decades, however, there has been a resurgence of interest in workers' inquiry. German workerists around the journal *Wildkat* undertook inquiries, as did the Kolinko (2002) project with call centres. The Italian history reached a wider audience with Steve Wright's (2017) *Storming Heaven*, which published much of this material in English for the first time. Keir Milburn (2019) has argued that the wave of struggles following the financial crisis of 2008 was formative for a new core of Marxists who were searching for ways to read the shifting class composition, many becoming influenced by workerism. These became a key part of what Milburn has called 'generation left'. Radicalised students from this movement then entered the workplace, becoming involved in waves of worker struggles (Woodcock 2019a).

The theoretical resurgence of workerism can also be found in the range of new groups and publications, including a special issue of *Ephemera* (see Woodcock 2014a), *Viewpoint* magazine in the US, *Notes from Below* and AngryWorkers World in the UK, *Ankermag* in Belgium, Plateforme d'enquêtes militantes and Acta in France, *Into the Black Box* and *Officina Primo Maggio* in Italy, Invisíveis Goiâna in Brazil – many of which are active in the Workers' Inquiry Network, as well as others including AngryWorkers and Fever, a joint project on class

struggle under the pandemic. Despite this interest in workers' inquiry, it is worth heeding Roggero's warning that 'in recent years workers' inquiry and coresearch have been much talked about, perhaps even too much, in the sense that it would be better to talk about them less and do them more' (2020, 5). However, many of these groups are now experimenting with workers' inquiry, finding ways to update both the theory and practice.

In particular, I want to draw attention to the recent contributions of *Notes from Below*. The project has been running since 2018, including inquiries on manufacturing, education, videogames, supermarkets, healthcare, outsourced workers, higher education, housing, the tech industry, recycling, and transport, both in the UK and internationally – as well as focusing on platform capitalism. Much of this has involved encouraging workers to write about their experiences and struggles, as well as publishing co-writing and analysis. The website also features workplace bulletins that have been used to intervene in struggles. In the first issue, the editor of *Notes from Below* (2018) argued that 'we do not just want to apply the concepts of Italian workerism again today. It provides an important inspiration and a powerful set of tools, but to use these effectively they also need to be updated. We believe, like Alberto Battaggia, that "the best way to defend workerism today is to supersede it."' The updating of workers' inquiry has involved testing the method in practice, as well as developing the class composition framework. This introduced an understanding of class composition 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).

The addition of social composition came about through the concrete engagement with workers' struggle in the run-up to the launch of *Notes from Below*. We found that the way that workers are socially composed, including 'where workers live and in what kind of housing, the gendered division of labour, patterns of migration, racism, community infrastructure, and so on' had an important impact on class composition (*Notes from Below* 2018). This is, of course, not to argue that technical composition is not important, but rather that 'in all three parts, class composition is both product and producer of struggle over the social relations of the capitalist mode of production. The transition between technical/social and political composition occurs as a leap that defines the working class political viewpoint' (*Notes from Below* 2018). This framework provides the backdrop to the analysis that follows in this book, while workers' inquiry is the method.

For a Digital Workerism

In the context of this book, 'digital workerism' means thinking through and experimenting with the methods and analysis of workerism in the context of work organised via digital technology. It is not intended as a replacement for some sort of 'analogue workerism', but rather to think through the challenges and opportunities of work that involves digital technology. This is also not to say that these workers are some new kind of vanguard, with other workers being asked to fall in behind their struggles. It does not involve staking a claim in the 'digital labour' debates, during which the term has, as Gandini (2020) comments, become an empty signifier. Instead, the 'digital' is intended as part of the critique of this book: returning to the experience of workers, the workers' perspective, and analysing platforms and other digitised parts of capitalism from this viewpoint. Instead of calling for an acceleration or rolling back of changes, this is about reading the struggles of workers on platforms and building an analysis from this point.

As the workerists studied the changing composition of factory work in Italy in the 1950–60s, this book is an attempt to make sense of what is happening with a new composition of workers on platforms. However, as Roggero reminds us, what the workerists found was different to the established left, who were abandoning these workers:

> On the contrary, they were a potential force, bringing with them new behaviors and cultures of conflict foreign to the traditions of the workers' movement institutions, which now comanaged exploitation in the factory. Enough with the tears, with talking about the needs of the victim, with the culture of the left: the revolutionary militant searches for strength, not weakness. (2020, 6)

The focus on platform workers here is an attempt to search for new moments of strength – potential or otherwise. Digital technology is not foregrounded here, but instead tied into the framework of class composition.

This follows on from Marx's understanding of technology at work, an understanding that is too often missed today. No matter how complex digital technologies are – including computers, software, algorithms, fibre optic networks, and so on – they are part of the material world and shaped by it. They are not neutral, but instead designed, made, used, and reused by people within particular social relations. Marx argued that 'it would be possible to write a whole history of the inventions made since 1830 for the sole purpose of providing capital with weapons against working-class revolt' (1867, 563). Here we think of the introduction of technology as the response of capital to working-class struggle. Platforms and the different technologies involved in their use can therefore be understood as a response to working-class activity, rather than

the usual narrative about innovative start-ups as the agent of change. As Marx argues elsewhere:

> In England, strikes have regularly given rise to the invention and application of new machines. Machines were, it may be said, the weapon employed by the capitalist to quell the revolt of specialized labour. The self-acting mule, the greatest invention of modern industry, put out of action the spinners who were in revolt. If combinations and strikes had no other effect than that of making the efforts of mechanical genius react against them, they would still exercise an immense influence on the development of industry … Of all the instruments of production, the greatest productive power is the revolutionary class itself. (1847, 38)

Digital workerism is therefore an argument about the role of technology within platform work. Rather than seeing the worker as an atomised figure who is unfortunate enough to end up working in this way (or indeed, no longer even a worker, if the bogus claims of self-employment are to be believed), workers are an active force that plays a driving role in the changing composition of class. Platform work is a response from capital to workers.

This involves emphasising the class nature of technology. Information is not just data, and algorithms are not just mathematics. Panzieri (2005), a founding editor of *Quaderni Rossi*, argued that the 'development of technology takes place wholly within this capitalist process'. From his analysis of the factory, he critiqued 'objectivist ideologies' of technology, particularly those that could be found in discussions of automation. Automation, whether in the factory or that purported to be on the horizon for transport workers, is not just another step in the development of technology. As Noble (1978) demonstrated in a factory context, it was not the forms of automation that were the most technically superior that became widespread. The forms of automation that better suited the imperatives of capital, such as numerical control, became dominant, as they took control away from the factory floor. Other approaches were cast aside. In the process, the different possibilities of technological progress become hidden, while those that align with capital's interest are followed. As Panzieri (2005) argued, this process involves an attempt to expand capitalist planning 'from the factory to the market', and then 'to the external social sphere'. This is a process that we can see intensifying with digital technology, as capitalist rationality through digital technology is pushed into more and more of our lives.

The framework of digital workerism builds upon Nick Dyer-Witheford's arguments about the 'cyber-proletariat'. His work covers rare mineral miners, factory workers, call centre operators, and software developers, deliberately choosing 'proletariat' as a recognition that 'now, as in Marx's era, proletariat

denotes the incessant phasing in and out of work and workless-ness, the inherent precarity, of the class that must live by labour, a condition raised to a new peak by global cybernetics' (Dyer-Witheford 2015, 13). This is not to say that there is a new precarious class – or 'precariat' to use Standing's (2011) formulation – but that there continues to be a class of people who live by selling their labour power. Instead, drawing on workerism, Dyer-Witheford argues that 'the class struggle, the struggle that continues, always, is the friction and fluctuation at the border of these bands between factions of the proletariat' (2015, 29). The motion of the capital vortex also, however, incessantly alters the strata of which it is composed. That not only capital but its human workforce has a changing 'composition' was the insight of *operaismo*.

Class composition, discussed above, is an important innovation of workerism. This is the first of three concepts that Dyer-Witheford develops from workerism. The second is the understanding of different 'cycles of struggles', or the response of capital to workers' struggles. In the case of industrial workers, this resulted in a decomposition of workers. However, as Dyer-Witheford notes, 'such changes could become the basis for working class "re-composition"' (2015, 30). The third concept is the 'circulation of struggles', which 'entailed the connection of resistances against the extraction of surplus value, which, either by inadvertent knock-on effects of strikes and other actions or by intentional solidarity builds an ever greater mass of opposition to capitalist accumulation' (Dyer-Witheford 2015, 30). While these provided a basis for Dyer-Witheford's development of a 'post-post-*operaismo*' (2015, 12), particularly in conversation with communisation theory, digital workerism takes inspiration from these three concepts of workerism, updating and refreshing them in a new context.

Digital workerism is an attempt to understand how technology is part of class struggle, as well as the cycle and circulation of struggles. Rather than believing the claims of platforms, it starts from a reading that Mario Tronti put forward: that the 'political history of capital' is one of a 'history of the successive attempts of the capitalist class to emancipate itself from the working class' (Tronti 1965). When Uber talks of self-driving cars, this is a new fraction of capital attempting this once again. It is therefore necessary, as Panzieri (2005) argued, to 'comprehend' capitalist technology. The task is not just for us to trace out how digital technology is being used. Instead, the task is to 'subject it to a new use: to the socialist use of machines'. However, before getting to this, technology needs to be understood within current class composition, identifying the strengths and weakness of its capitalist use.

From the discussion above, the introduction of digital technology – whether in the factory, the call centre, or on platforms (Woodcock 2020a) – is understood as a response to working-class struggle. This new composition of work did not emerge by accident or from the clever thinking of a start-up founder. Roggero points out how:

For example, capital responded to the struggles against salaried work and workers' and proletarians' flexible autonomy with increased precariousness. Starting from the 1980s and 1990s, in the height of neoliberal development, there was, on the one hand, those who called for the return to the shackles of a permanent job, forgetting that these shackles were something which workers and proletarians had previously refused and fought against, and that the new situation bore the marks of this conflict; and on the other hand, those who mistook innovation for revolution, fantasizing that social cooperation had become fully free and autonomous, leaving capital as nothing but a parasitic shell. Neither saw the continuity of and the possibility for antagonism, and thus both assumed the separation between the two classes had already happened: for the former this meant the impossibility of liberation, for the latter that liberation had already taken place. Both are ideological positions, both are impotent, forgetting the problem of revolutionary rupture. And neither see the central issue of class composition as a process that is continuously crossed with conflict. (2020, 7)

The rise of platform work follows on from this recomposition of precarious work. As many workers struggled against the constraints of rigid employment, capital was able to shift the balance of flexibility in its own favour. New forms of work emerged that allowed workers to engage in work in less rigid ways, but only by taking on increased risk. As will be discussed later, platform work is pitched as a new way of working – often even pitched as self-employment – with flexibility at its core. As Roggero warns, responses to precarious work (such as platform work) can be caught between two ideological positions: either the clock has to be somehow turned back and workers returned to forms of work they fought against, or these new forms of work represent some sort of revolutionary change in capitalism. Digital workerism involves developing an understanding that pays attention to the actual changes in the work and workers' struggles.

This means starting from an analysis of the labour process on different platforms. Digital technology is part of the changing technical composition of this kind of work. This means the platform, the software, the smartphone, data collection, the algorithms and so on. Rather than making this the focus of the analysis, instead these are understood in relation to the labour process and the worker. All kinds of technology have to be used in practice and there is often a significant gap between how they are advertised and how they are actually used. Understanding technology within the technical composition of work means situating it within social relations, drawing out the different interests of capital and labour. Digital technology does not have its own agency but is wielded by capital against workers. It is this struggle that the analysis of platforms must focus on.

The Practice of Digital Workerism

A wide range of traditional – and much less traditional – academic research has gone into writing this book. In particular, it draws on three long-running research projects. The first is a project with Deliveroo and Uber drivers in the UK, which has been ongoing since 2016. In a sense this has been an ethnographic project, engaging with workers in their own context, in the back of cars, outside restaurants, on the street, in meetings, at protests and strikes. It draws on four years of accumulated conversations, chats, opinions, perspectives, and so on. At points, it has also meant formal interviews, surveys, and other elements that might be found in more traditional academic research – as well as co-writing (see Waters and Woodcock 2017).

The second is a more traditional academic project. While based at the Oxford Internet Institute, I worked on a series of research projects that focused on comparing working conditions on platforms in South Africa (mainly in Johannesburg and Cape Town) and India (Bangalore). This involved extended periods of fieldwork with platform workers in those three cities, carrying out structured formal interviews that were closer to surveys, as well as semi-structured interviews. Part of this also involved interviews with platform operators and managers. This fieldwork also provided the opportunity to engage in less formal academic practices, providing the opportunity to speak with workers and worker organisations in both South Africa and India. The projects also involved international travel to a range of other countries, which provided the opportunity to do this research elsewhere, including in the US, Canada, Germany, Argentina, Brazil, Belgium, Switzerland, Greece, Italy, and France.

The third is a collaborative project with the IWGB (Independent Workers Union of Great Britain), building upon the previous two. In conjunction with the union, we successfully secured funding for a project on 'Transnational Organising Strategies for App-Based Drivers'. Starting in September 2019 and running until February 2020, this involved developing a two-day international conference for app-based drivers. This provided an opportunity to connect the drivers and organisations from the other research projects through a face-to-face meeting. I contributed to the project in two ways: supporting outreach with drivers and assisting with the design and organisation of the conference, held in January 2020 in the UK.

All of this research is in the background of the book, whether drawn on explicitly or not. However, the research also involved looking across each of these projects, trying to identify the dynamics, contradictions, tensions, and tendencies emerging in platform work. It takes in the findings of these conventional projects, but also looks for other moments of research and co-research with platform workers. This has taken the form of joint writing at some points, but also many conversations with platform workers. It is these experiences of work that provide the foundation for this book. The argument that builds in

this book is not just a matter of reflecting a patchwork of different stories and experiences. It is an argument about how platform work is – and will continue to be – transformed by platform workers themselves.

There is, of course, a paradox in writing this down in the format of a book. This is that platform work is continuously mutating and developing – particularly under the pressure of new forms of worker power, the counter-offensives of capital, and new regulation. The dynamics outlined in this book are subject to continual change. There is no doubt that things will have shifted by the time this book is published. The main argument in this book, however, relates to digital workerism – how and why workers' struggle matters. Some of this matters for academic debates (some of which are directly addressed and criticised in the book), but most of it is significant beyond these limited and often self-referential debates. After all, the debates that platform workers are having across the world are much more useful and interesting.

This builds on the longer tradition of workers' inquiry: that workers' experience matters, not only for understanding capitalism, but also for how we fight against it. As Marx (1845) reminds us, this is not about interpretations, but about trying to change the world. The practice of digital workerism is also about what research can do, in and against the university, to support platform worker struggles. This means thinking about what research means in the contemporary university. A large part of this involves fighting against the current way of thinking about research: that it must produce a certain number of journal articles and a measurable 'impact'. It means challenging the university ethics review boards that actively discourage this kind of research process (while simultaneously allowing all kinds of corporate consultancy) by emphasising legal liability or the need to separate the researcher and the 'subject' that emerges from the reams of forms needed to do research (Badger and Woodcock 2019). Instead we need to ask: what is the point of doing research about work? And if the answer is not to support workers in struggles to change their own conditions, then we have already picked the wrong side. This does not mean that academics should become some species of ivory tower Leninists, but it does mean thinking about how the resources and materials of the university can be put into the service of workers' movement – with, of course, academic workers as part of those movements themselves. There are powerful examples of how academic interventions can do this, for example Lilly Irani and Six Silberman's Turkopticon project (2013) with Amazon Mechanical Turk workers, which will be discussed later. Digital workerism begins from the intervention, working backwards in the case of this book, rather than starting from research. This is also why this book is published in a format that is free to read.

Digital workerism is therefore intended as a correction to other ways of approaching platform work. For example, as Englert et al. argue:

> 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. (2020, 136)

Instead, this book builds on a growing set of militant practices. These include Callum Cant's project with Deliveroo (2019), my own project with videogame workers (Woodcock 2019b), as well as an increasing number of workers' inquiries from *Notes from Below* and other publications. These are experiments about the possibilities of digital workerism. They start from the detailed analysis of class composition, in which digital technology plays a role, shaping and being shaped by class struggle.

Digital workerism provides a basis for the analysis that follows. This book starts from the stories and experiences of platform workers. It is inspired by the workerism of the past, of contemporary practices of workers' inquiry, as well as Roggero's powerful arguments for what this means:

> Those who choose the individual path will die alone. That which distinguishes the militant is the hatred for that which they study. The militant needs hatred to produce knowledge. A lot of hatred, studying the core of that which they hate most. Militant creativity is above all the science of destruction. So political practice is either pregnant with theory, or it isn't political practice. We need to study in order to act, we need to act in order to study. And to do the two things together. Now more than ever, this is our political task. (2020, 19)

The hatred here is driven by hearing platform operators who claim that they are not employers. From those enriching themselves on the labour of others, exploiting legal loopholes, forcing workers to take on the risks of the business, immiserating them with false promises of something better. It is about finding moments of strength about how the current state of things can be destroyed. As Nick Dyer-Witheford reminds us: 'Cybernetics was from its start the creation of war' and 'future proletarian struggles should adequate themselves to wartime' (2015, 204). It is to this that we now turn.