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Technology, Labor, and the Gig Economy

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Abstract and Keywords

This chapter examines the interconnections between technology, labor, and the gig economy. It starts by analyzing the changing context of work, connecting contemporary changes to a historical context. This draws out the ongoing undermining of the employment relationship alongside neoliberal reforms and policies. The chapter then examines the organizational form of platforms, the specific preconditions that shape their implementation, and the overlaps this has with the gig economy. In particular, it focuses on the emergence of two new models of platform work: geographically tethered work like transport and online forms of cloudwork. The chapter concludes by reflecting on the implications of platforms for understanding the changes to work, as well as charting potential new areas for research.

Keywords: technology, labor process, gig economy, platform, future of work

The “gig economy” has become a popular term, often involving a debate about how technology is changing labor and what work is like today. This chapter takes a broader view of the way that work has changed since 1980. This history provides an important backdrop to contemporary discussions about digital technology (which is often what is being referred to in these debates) and work, as well as defining the terms involved in the debates on the future of work.

Once these basic terms and backdrop have been established, the chapter examines the key digital trends that are reshaping work. The most important of these are digital platforms—a new form of hosting and distributing media, and increasingly organizing work. While the gig economy is broader than platform work, companies such as Uber have come to symbolize the changes introduced by the gig economy. Drawing on existing research with platform-based workers, the different experiences of work are explored, providing an outline of the gig economy. The last part of the chapter explores the sociological significance of the changing relationship between technology, labor, and the gig economy. This provides a series of different analytical angles on the problem, as well as drawing out important sociological concerns. It concludes with some predictions about how work may change in the future, as well as putting forward possible research questions.

Understanding the Changes in Work and Labor

The emergence of the gig economy is rooted in longer-term changes to work. In the context of the Global North, the work relation is often normalized in terms of the “standard employment relationship.” Broadly speaking, this refers to the arrangements following the Second World War, in which workers could expect a “stable, socially protected, dependent, full-time job ... the basic conditions of which (working time, pay, social transfers) are regulated to a minimum level by collective agreement or by labour and/or social security law” (Bosch, 2004, 618–619). This experience is limited mainly to workers in the Global North—and more often than not to white male citizens. In much of the Global South, there has not been this experience of work (Webster, Lambert, and Bezuidenhout 2008). Furthermore, within the Global North, it is worth noting that many people were not able to access or were excluded from these forms of stable work, including many women, migrants, and otherwise marginalized workers. Therefore, “for most people, most of the time, work has been a precarious relationship” (Woodcock and Graham 2019, 16). Despite this, the existence of some form of stable employment relationship had implications for many. For example, this work entailed a “link” between the work relationship and the “wider risk-sharing role of the welfare or social state,” which developed in the same postwar period (Fudge 2017, 379).

The collapse—or at least undermining—of this relationship is often attributed to the success of neoliberalism from the 1970s onward. However, as Jamie Peck (2013, 133) notes, neoliberalism is a kind of “rascal concept” that is often deployed with “pejorative intent” to critique changes. However, as Peck (2013, 153) continues, using neoliberalism as a term “must not be a substitute for explanation; it should be an occasion for explanation.” David Harvey (2007, 2) argues that neoliberalism is “in the first instance a theory of political economic practices that propose that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade.” This has had concrete effects on the experience of work, often implemented through “shock doctrine” reforms quickly introduced after crises (Klein 2008). There are three important dynamics that this has introduced: first, undermining and attacking the terms and conditions of work, often resulting in shifts away from the standard employment contract; second, cutting back on the welfare state, seeking to break the link between work and welfare discussed before; and third, privatization programs and introduction of market forces and competition (Harvey 2007, 12).

The outcome has been a series of detrimental changes to the work relationship for workers. For example, in the United Kingdom there has been a significant increase in temporary work across the public sector, including health, public administration, and education (McDowell, Batnitzky, and Dyer 2009, 9). This has involved “a general move away from the full employment goal towards activation policies” (MacGregor 2005, 144). There has been a polarization of job types (Kaplanis 2007), with a growth of what have been called “lousy jobs” (Goos and Manning 2007) that are stigmatized and considered low quality—as well as being low paid. Many of these shifts accelerated after the 2008 financial crisis—which provided another opportunity for neoliberal “shock” changes. For example, across the European Union recommendations argued that “EU member states should develop measures within a policy framework informed by the principles of ‘flexicurity’ ” (Heyes 2011, 643). However, as Heyes (2011, 643) argues, the “dominant trend has been towards less security.” This is differentiated: less security for workers, alongside less obligation for employers.

Although keeping in mind Peck's warning about neoliberalism, much of this has been captured by the idea of precarious work. Mitropoulos (2005, 13) notes this, arguing that using the term "precarious" for work can be "both unwieldy and indeterminate. If it is possible to say anything for certain about precariousness, it is that it teeters." As the International Labour Organization (2011, 5) definition states:

In the most general sense, precarious work is a means for employers to shift risks and responsibilities on to workers. It is work performed in the formal and informal economy and is characterized by variable levels and degrees of objective (legal status) and subjective (feeling) characteristics of uncertainty and insecurity. Although a precarious job can have many faces, it is usually defined by uncertainty as to the duration of employment, multiple possible employers or a disguised or ambiguous employment relationship, a lack of access to social protection and benefits usually associated with employment, low pay, and substantial legal and practical obstacles to joining a trade union and bargaining collectively.

This is an attempt to capture the shift from "lifelong full-time work"—whether experienced, expected, or demanded—toward a "risk-fraught system of flexible, pluralized, decentralized underemployment, which, however, will possibly no longer raise the problem of unemployment in the sense of being completely without a paid job" (Beck 1992, 144). These changes are the result of "social, economic, and political forces" that "have aligned to make work more precarious" (Kalleberg 2009, 2). For Bourdieu (1998, 95) this precariousness is a "new mode of domination in public life ... based on the creation of a generalized and permanent state of insecurity aimed at forcing workers into submission, into the acceptance of exploitation."

The precariousness of work is also experienced differently across sectors of the economy and kinds of work. For example, the same kinds of marginalized workers who were excluded from the standard employment relationship also experience precarity in sharper ways. For example, lack of legal migration status places many workers at risk (Ryan 2005), meaning many are "often forced to accept the most precarious contracts, in jobs incommensurate with their skill levels" (McDowell, Batnitzky, and Dyer 2009, 4). Migrant cleaners in London, for example, are often not covered by existing regulator regimes (Woodcock 2014). This kind of reproductive work, like cleaning or domestic work, is often "invisible," lacking either employment protection or collective bargaining (Pollert and Charwood 2009). This stands in contrast to some forms of creative work considered highly skilled that can also be precarious.

There are disagreements about the scope and implications of precarious work. For example, Kevin Doogan (2009, 91) has argued that there is a "broad public perception of the end of jobs for life and the decline of stable employment" which operates alongside "the rise in long-term employment." While Doogan uses this to argue that not much has really changed—a point that will be returned in the two sections on platform work (see "Key Sociological Dimensions of the Gig Economy and Platform Work")—this misses the importance of the experience of work. Likewise, Kalleberg (2009, 8) notes that the "growth in perceived job insecurity" is an important component. As Seymour (2012, quoted in Woodcock 2017, 136) notes, the feeling that work is more precarious can change

how people act within the work relationship. For example, even if a worker has not actually lost their job, the fear of losing it may make someone less likely to engage in collective action to change their conditions. Increasingly precarious work is a specter—both real and experienced—that hangs behind the debates on the gig economy.

Key Sociological Dimensions of the Gig Economy and Platform Work

The growth of the platforms and the gig economy is deeply entwined in a longer history of changes to the nature of work. Platforms, as Nick Srnicek (2017, 48) has argued, are

a new type of firm; they are characterized by providing the infrastructure to intermediate between different user groups, by displaying monopoly tendencies driven by network effects, by employing cross-subsidization to draw in different user groups, and by having designed a core architecture that governs the interaction possibilities.

This organizational innovation builds upon technology, but as Woodcock and Graham (2019, 19) have argued, “there is “a complex and interconnected set of preconditions that shape how the gig economy emerges in practice.” Although there is a temptation to place much of the emphasis on the role of technology, the growth of the gig economy is driven by “underlying factors of technology, society, political economy, or a combination”—each indicated in parentheses after the preconditions in the following quotation. The nine preconditions identified by Woodcock and Graham (2019, 20) are as follows:

platform infrastructure (technology), digital legibility of work (technology), mass connectivity and cheap technology (technology and social), consumer attitudes and preferences (social), gendered and racialized relationships of work (social), desire for flexibility for/from workers (social and political economy), state regulation (political economy), worker power (political economy), and globalization and outsourcing (political economy and technology).

It is worth noting here that although platforms are at the sharp edge of the gig economy, there remain many areas of the gig economy that are not platformized. A key requirement for introducing the platform as an intermediary is digital legibility. There are therefore some kinds of work that are particularly suitable for “routinization, reorganization, and rebundling” (Peck 2017, 207), while others are more resistant to this. However, understanding platforms is necessary for tracing the latest developments of this model of organizing work—both platformized and not—as well as the potential implications for other kinds of work.

While there are many kinds of platforms reshaping society at present, in the context of the gig economy the focus needs to be on work platforms. These involve platforms which provide “tools to

bring together the supply of, and demand for, labour” (Graham and Woodcock 2018, 242), most commonly involving an application (whether on a smartphone or browser), the digital infrastructure underpinning the interactions, and algorithms for managing the work. Algorithmic management has become a key area of research (Lee et al. 2015; Rosenblat and Stark 2016; Rosenblat 2018), as well as considering how ranking and reputation systems increasingly regulate interactions at work (Gandini 2016) and aspects of gamification at work (Woodcock and Johnson 2018).

The application of platform technology to the gig economy has scaled up the organization of this kind of work. However, one of the empirical challenges is effectively gauging how many people are now involved in this kind of work. At the high end, it has been predicted that by 2025 one-third of all labor transactions will take place on digital platforms (Standing 2016) or that “540 million people could benefit from online talent platforms by 2025” (Manyika et al. 2016). In the Global North exact figures can be difficult to come by, with significant differences between estimates (Organisation for Economic Co-operation and Development 2019). In one study, 1.5% of respondents in France, Germany, Spain, Sweden, the United Kingdom, and the United States reported earning income from working on a platform (Manyika et al. 2016), while another study estimated that 11% of UK workers had (Huws and Joyce 2016) and that 8% of Americans worked on an online platform—an estimate that rises to 16% for those under the age of 29 (Smith 2016). In the broader gig economy, it has been estimated there are 1.1 million UK workers, a similar number to those working in the National Health Service (Balaram, Warden, and Wallace-Stephens 2017). Beyond this, Heeks (2017) estimated that 70 million had found work via platforms across the world. A study of seven African countries—Ghana, Kenya, Nigeria, Rwanda, South Africa, Tanzania, Uganda—found that 1.3% of people had worked on platforms.

Despite the lack of clarity on the absolute numbers involved, there has been a range of recent empirical studies that have shown much needed insights into the operation of platforms and the gig economy. In a review of empirical research, Vallas and Schor (2020, 273) identified four types of employment and labor market conditions involved in the gig economy. The first involves those who design platforms. This kind of digital labor is often hidden from view in discussions of platforms, although there have been studies that have sought to unpack this (Irani 2015; Cockayne 2016; Kelkar 2018). The second involves gig workers who provide services in-person (see “Geographically Tethered Work” below). The third is freelance cloud workers who “offer professional services via platforms,” while the fourth are microworkers, completing short tasks online (Vallas and Schor 2020, 273) (these latter two are discussed in the section “Cloudwork” below). By distinguishing between the work completed in these two main ways, we can unpack the relationships between technology and labor in the gig economy.

Geographically Tethered Work

It is worth pointing out here that there are two different forms of platform work. The first is “geographically tethered work” that “takes existing forms of work that happen in particular places and reorganizes them through a digital platform” (Woodcock and Graham 2019, 51). This involves tasks like driving and delivery, as well as in-person activities like cleaning and care. Most work has

historically been connected to a place because “labour-power has to go home every night” (Harvey 1989, 19). Place has therefore played a key role in the organization of work (Massey 1984, 8).

The most visible example of this kind of work can be found with Uber. The platform positions itself as a technology company, using a strategy of “regulatory entrepreneurship,” that involves “changing the law” as “a significant part of the business plan” (Pollman and Barry 2016). The former chief executive officer of Uber, Travis Kalanick, compared the company to a political campaign in which they competed with an “incumbent ... an asshole called ‘taxi’ ” (Kalanick and Swisher 2014). Often, these companies emphasize the newness of what they are doing—found in the regular use of the term “disruption.” The lack of platform regulation, again as Kalanick (2013) explained, has resulted in “massive regulatory ambiguity leading to one-sided competition which Uber has not engaged in to its own disadvantage.” This ambiguity has been identified by Scholz (2017a, 44), who argues that “Uber is a labor company, not simply a tech startup, which means that it is reliant on the availability of an abundance of cheap labor and a permissive regulatory environment.” This remains, as the chapter will return to, a point of disagreement in the courts and in practice. There has also been a significant growth of platforms providing services like food delivery. Similar to Uber, these platforms have become a site of research on algorithmic management and new conditions of work (Waters and Woodcock 2017; Woodcock 2020), as well as the dangers of working in this way while navigating city streets (Christie and Ward 2018). In Callum Cant’s (2019) ethnography of working for Deliveroo, he argues that these platforms have also become a laboratory in which new management techniques are being tested.

While there has been significant focus on these kinds of platform work, it is important to remember that there are other kinds of work that can be much less visible. As Ticona and Mateescu (2018) have argued, the focus on “Uberization” misses what is happening with domestic work platforms. They suggest a gendered bias in the literature. This develops from a longer-standing marginalization of domestic work, as Dalla Costa and James (1971, 10) argue, “where women are concerned, their labor appears to be a personal service outside of capital.” This can either be as a “second shift” of work for women (Hochschild 1989) or involve systematically undervalued emotional labor (Hochschild 1983). In the context of platform work, Hunt and Samman (2019) have argued, “on the whole it represents the continuation (and in some cases deepening) of long-standing structural, and gendered, inequalities.” While Uber is often mentioned in debates about platforms, Care.com rarely is, despite having 12.7 million “caregivers” registered on the website (Care.com 2018). The development of domestic work platforms is creating new positives and negatives for workers who sign up. For example, they may have more flexibility and options for work, but the evidence so far points to low incomes and lack of employment protections (Hunt and Machingura 2016, 5). Additionally, this kind of work is “among the fastest growing and perhaps the most resistant to automation” (Ticona and Mateescu 2018) as “the machine doesn’t exist that makes and minds children” (Dalla Costa and James 1971, 11).

Cloudwork

The second kind of platform work is “cloudwork.” This differs from geographically tethered work because as “markets for digital work are created, ties between service work and particular places can be severed” (Woodcock and Graham 2019, 54). Cloudwork can involve microwork, comprising tasks like “image identification, transcription and annotation; content moderation; data collection and processing; audio and video transcription; and translation” (Berg et al. 2018, xv). Platforms like Amazon Mechanical Turk allow clients to “post bulk tasks” that are split into smaller parts of a crowd of workers to complete (Berg et al. 2018, xv). This builds on longer relationships of outsourcing—shifting work to other locations that might be cheaper—and crowdsourcing (Kaganer et al. 2013, 23), involving “taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call” (Howe 2006). What is interesting about Mechanical Turk is that it is presented as though it already uses automation. As Scholz (2015) argues, Amazon’s “crowd sorcerers work with coolness and the spectacle of innovation to conceal the worker.” It is therefore a kind of “artificial artificial intelligence,” in which humans are treated as software. For many applications, it can be cheaper and quicker to utilize human labor in this way, rather than developing an artificial intelligence alternative (Solon 2018). As Lanier (2014, 178) notes, this involves “a sense of magic, as if you can just pluck results out of the cloud at an incredibly low cost.” Unsurprisingly, this means the work receives very low pay (Hara et al. 2018), with much work going unpaid (Irani and Silberman 2013). There is also an important relationship between this kind of work and the promise (or threat, depending on the perspective) of automation that is present with transport platform work. The tasks completed on microwork platforms are crucial for the development of machine learning and algorithms that will automate these tasks (Gray and Suri 2019).

Cloudwork can also involve longer freelance tasks like writing, website creation, or software development. This is often project-based work (Christin 2018; Osnowitz 2011). One debate is whether these kinds of platforms are replacing temporary employment agencies (Corporaal and Lehdonvirta 2017) or encouraging outsourcing from the traditional economy (Drahokoupil and Piasna 2019). Either way, the technology allows for this kind of work to be coordinated across “planetary labour markets” (Graham and Anwar 2019). The platforms that organize this kind of freelance work have also grown rapidly in scale. For example, Upwork claims to have 12 million registered workers and Freelancer 25 million (Graham and Anwar 2019). As noted, it can be difficult to estimate how many of those are actually able to work. The numbers signing up are often not the same as the levels of work available. However, in this kind of work, like microwork, it is important to remember that place still matters. Even if these workers can be engaged over the internet, the work is still requested and still happens in particular places. As Graham and Anwar (2018) argue, it does not take place in some digital space, instead building upon previous economic, social, and political relationships. Similarly, Ettlinger (2017) has found geographic clustering of work relationships on platforms. For example, much of the work is requested by companies in the Global North, with increasing numbers of workers located in the Global South, mirroring prior relationships of colonial exploitation.

Implications of Platform Work

When platforms were being introduced to organize work, many commentators saw this as a positive development. For example, the term “sharing economy” (Sundararajan 2017) was often used, implying a collaborative and optimistic sense of what these developments would involve. Similarly, as Kessler (2018, x) explained, a startup founder at the time claimed the gig economy meant “we could work for our neighbours, connect with as many projects as we needed to get by, and fit those gigs between band rehearsals, gardening, and other passion” projects. However, as these platforms have grown in scope and public awareness, there have been increasing criticisms of the model for work (Slee 2015; Schor 2020). Hill (2017, 4) summarizes the outcome as a “raw deal” for workers in the United States. Instead of seeing sharing at the core of the relationship, van Doorn (2017, 901) notes that these are “platform labour intermediaries that, despite their self-presentation as tech companies, operate as new players in a dynamic temporary staffing industry.” Similarly, Ravenelle (2019, 6) argues that “despite its focus on emerging technology,” the resulting gig economy “is truly a movement forward to the past” for employment protections.

There has been considerable debate on the employment status of workers in the gig economy (Cherry 2016; Rogers 2016; Dubal 2017a; Aloisi 2018; De Stefano 2018). This has included academic debates as well as legal challenges, with only some recently proving successful (Collier, Dubal, and Carter 2017; Dubal 2017b). For gig workers, as Woodcock and Graham (2019, 32) argue,

Constructing the relationship in this way has involved the widespread use of a different kind of relationship, far removed from the ‘standard employment relationship’. Instead of an employment relationship, many kinds of gig work instead use versions of self-employment and independent contractor status. This goes further than the removal of stable employment that we have traced since the 1970s, representing a breaking of the employment relationship and the freeing of platforms from many of the responsibilities and requirements that used to be involved.

In many cases, this means not being covered by regulations for minimum wages, holiday pay, sick pay, parental leave, trade union rights, protections against dismissal, and so on. The use of self-employment status can be seen as an extension of the wider shifts in the context of employment discussed at the beginning of the chapter. There have been some cases of reclassification of gig economy workers, mainly in transportation, although in general there has been “relative quiet at a national policy level” (Countouris and De Stefano 2019, 57).

In most of the world this involves a debate between employment and self-employment, posing two different ways of organizing the work. However, in the United Kingdom, as Jason Moyer-Lee (2018), the general secretary of the Independent Workers’ Union of Great Britain, has argued, platforms have argued that,

the problem is confusion in the law, or the inability of the law to keep up with the times, which can result in workers being inadvertently deprived of rights to which they’re entitled. On the other side of the debate, you have those of us who have been submitting and

repeatedly winning tribunal cases establishing the ‘gig economy’s’ labourers as limb (b) workers, in particular the Independent Workers’ Union of Great Britain ... and of course the judges who are writing these decisions. We say the law is pretty clear and the companies are clearly on the wrong side of it.

This status of “worker”—or to use the legal term “limb (b) worker”¹—is an intermediate status, between employment and self-employment, involving some aspects of employment law protection, while retaining the flexibility that many workers are looking for in the gig economy. Vallas and Schor (2020, 285) warn that “if platforms are forced to convert workers to employees, it will result in major changes and may be a threat to profitability.” Even without legal victories, there have been some instances of stricter regulation, including the introduction of a minimum wage for drivers in New York City (Schor 2020).

These courtroom battles over employment status have not been the only indication of resistance to platforms in the gig economy. There have been challenges to the operation of the platform model. For example, Trebor Scholz (2017b, 47) has argued for “platform cooperatives” as democratic and cooperatively owned alternatives to the current organization of platforms. He asks us to “just for one moment imagine that the algorithmic heart of any of these citadels of anti-unionism could be cloned and brought back to life under a different ownership model, with fair working conditions, as a humane alternative to the free market model.”

From another angle, there has also been a marked increase in worker resistance on platforms. As has been well documented, there have been waves of strikes on food delivery platforms, starting in London in 2016 (Waters and Woodcock 2017) and spreading across Europe (Cant 2018). There have now been globally coordinated strikes of food and transport platform workers (Woodcock 2020). Workers have successfully found new and innovative ways to organize on these platforms, starting from the tensions already present in the work (Woodcock 2018). Often, this has involved mobilizing and organizing through WhatsApp and other “mass self-communication networks” (Wood 2015). As Kurt Vandaele (2018, 16) has argued, these “networks are serving as a ‘breeding ground’ for self-organized courier associations boosting their associational power.” While these networks can be most obviously found with geographically tethered work and the meeting points around the city, there is increasing evidence of widespread networks in cloudwork too. Online communication and forums are an important part of this work (Gupta et al. 2014; Gray et al. 2016; Yin et al. 2016; Wood et al. 2018).

One of the remaining debates about the implications of platform work hinges on what they represent. For some theorists, platforms are understood as marking a break from previous forms of employment and organization—a future of work that is rapidly becoming a present. This can be seen in the use of the term “Uberization” to capture how these changes have swept beyond the taxi industry (see Davis 2016a, 2016b; Kornberger, Pflueger, and Mouritsen 2017). For example, Vallas and Schor (2020, 282) argue that “platforms represent a distinctively new form of economic activity. In advancing this argument, we caution that platforms represent a nascent and highly dynamic economic form characterized by high levels of instability whose future is difficult to foresee.”

However, there are many aspects of platforms and the gig economy that hark back to previous ways of organizing work. For example, precarious and on-call work has a long history in the dock industry (Woodcock and Graham 2019). Similarly, Vallas and Schor (2020, 282) argue that the “extraction of value rests on a new structural form in which platforms remain powerful even as they cede control over aspects of the labor process.” However, piecework is not a new phenomenon, nor is drawing upon alternative methods of supervision and surveillance at work. In order to address these questions, further empirical research is necessary.

The Next Steps for Sociological Research on Technology, Labor, and the Gig Economy

Platforms and the gig economy are often presented as a clear break from the past. This chapter has outlined the longer history and preconditions of how technology, labor, and the gig economy combine to produce different outcomes for workers in these kinds of work. However, the effects of the gig economy extend far beyond just delivery drivers and online cloudworkers. New models of organizing work are rarely isolated to one sector. As Kim Moody (2017, 69) has noted, there is a risk of only focusing on this kind of work because it is new. This can “trivialize the deeper reality of capitalism, its dynamics, and the altered state of working-class life.” One way to protect against this is to try and understand the broader implications of platforms. More empirical research is, of course, to be welcomed here. After all, the methods and techniques that become successful in the platform-driven gig economy will increasingly be applied more widely—both to other kinds of work and to social life more generally.

As Vallas and Schor (2020, 285) point out, “although research on platform work has grown rapidly, much remains unknown. To some extent, such uncertainty reflects the inchoate nature of the phenomenon itself.” Work is undergoing changes in which different actors are fighting for their own interests and the changes are far from complete. However, through this survey of existing research, it is possible to point toward some key areas that further research can unpack. First, little is known about the relationships of work involved in the creation and maintenance of platforms. When we talk of “platform work” we focus on those workers providing the services for the platform, rather than the workers who are analyzing the data, writing code, or designing systems. In a sense, this labor has become hidden, despite the clear importance it has for making sense of the labor process of workers on the platform. In a similar vein, there has been little research connecting the traditional parts of the economy with platforms other than cyclical changes between the two (Farrell and Greig 2016; Farrell, Greig, and Hamoudi 2018; Huang et al. 2019), and this is something likely to further transform, particularly following the COVID-19 pandemic.

A second important area for future research involves unpacking the roles of algorithms and data at work. There is a growing body of literature emerging (Pasquale 2015; O’Neil 2017; Eubanks 2019; Noble 2018; Benjamin 2019) that has drawn attention to the ways in which algorithms are reproducing existing biases, including gender, race, and class. The use of ratings in platform work has already been widely critiqued (Gandini 2016; Hannák et al. 2017; Cansoy 2018; Ajunwa and Greene 2019), but these metrics are increasingly being applied beyond platforms to other forms of work (Moore 2018).

Following on from this, the final area that demands urgent sociological attention is the ability for the current state of the gig economy to be reshaped. While there is emerging evidence of resistance and collective organizing across a range of sectors in the gig economy, there is still little agreement about the implications for this. The early commentators who argued that collective organizing had been defeated by algorithmic management are increasingly being disproven in practice. For example, Vallas and Schor (2020, 287) suggest that “early views about the potential for collective action have been too negative.” Sociological inquiry would benefit from connecting the wider literatures on resistance and organizing at work to the current research on the gig economy, understanding how the dynamics differ and converge.

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Notes

(1) For more information on the differences between employment statuses and the definition of "limb (b) worker", see Section 230(3) of the Employment Rights Act 1996. Available here: <https://www.legislation.gov.uk/ukpga/1996/18>.