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# Labor and the Platform Economy

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#### 6.1 INTRODUCTION

A defining feature of twenty-first century capitalism has been the rapid growth of platform work, which allows firms to use digital technology (websites or apps) to mediate economic transactions between service providers and customers. Though platform work as yet accounts for a small proportion of the labor force - estimates typically lie in the low single digits (Collins et al. 2019) - many scholars are convinced that the ranks of the platform labor force will grow significantly in coming years (Sundararajan 2016), exercising potentially far-reaching effects on the nature of work and employment, perhaps even reconfiguring what is conventionally meant by a "job." Mindful of the stakes, academic researchers have generated a flood of studies of platform work (Calo and Rosenblat 2017; Ravenelle 2019; Schor et al. 2020b; Wood et al. 2019). Yet this research has provided little clarity or consensus on any number of important questions. How does "algorithmic management" reshape the exercise of power and authority over labor? How will firms in the conventional economy be affected by the rise of platform work? What adjustments are needed in regulatory policy and welfarestate provisions, given the disruptive power that platform firms have shown? Will the availability of crowd-working sites such as Upwork and Mechanical Turk encourage firms to outsource their staffing systems? Or will platforms instead foster a more inclusive economy, enabling workers in marginalized regions or those with disabilities to gain greater access to income earning opportunities? Finally, how are legal and political struggles over platform workers' rights likely to evolve? Which groups will succeed in shaping the narrative that defines platform work in the years to come?

In this chapter we can hardly aim to resolve these questions. Our goals are more modest, aiming to outline the main lines of contention in the literature, to identify major gaps in our knowledge, and to suggest some of the most important areas for future research as nations struggle with the structural upheavals unfolding across the contemporary capitalist landscape.

The chapter begins by sketching three dominant lines of analysis that have opened up in recent years: First, a hopeful view, in which platforms help to expand the range of freedom and autonomy that income earners enjoy; second, a technology-centered approach, in which algorithms and systems of digital surveillance and evaluation are used to establish greater company control over labor; and third, a view in which platforms accelerate a trend toward more precarious forms of work, with workers classified as independent contractors who are ineligible for statutory protections and welfare-state benefits. The chapter then points to one source of complexity in the field, which helps account for the continuing contention: Heterogeneity in the platform workforce itself, with varying segments of labor differentially positioned with respect to the platforms themselves. We end by briefly alluding to the regulatory struggles and forms of worker mobilization that platforms have provoked and then speculate about possible paths that might lead toward more humane yet innovative uses of the platform paradigm.

### 6.2 DOMINANT APPROACHES IN THE LITERATURE

The rise of digitally mediated economic transactions has generated tremendous interest from scholars in a wide range of fields – from economics, sociology, and geography to law, management, engineering, and computer science. In part as a result of this range, as well as differences within disciplines, the literature on labor and the sharing sector is quite diverse. Indeed, even the terms scholars use to capture this phenomenon differ, with such terms as the sharing, on-demand, or platform economy competing for attention.<sup>1</sup> Here we focus on three of the main approaches that have dominated the literature – those emphasizing how the digital technologies of the sharing economy yield efficiencies and enhanced opportunities for entrepreneurship for workers; those that focus on how these technologies are used to surveil and control workers; and the third, largest group, which emphasizes the precarity of sharing labor as a result of platform policies and workers' employment status. We discuss them in turn.

The first approach is mainly found in economics, management, engineering, and related fields, as well as some sociological accounts. It centers on the ways in which the major technological affordances of the sharing sector enable new efficiencies and economic relationships. These come from two major innovations – the use of matching and search algorithms to pair buyers and sellers and the crowdsourcing of reputational information and ratings from users. These technologies are at the heart of most platforms, or what economists have termed "two-sided markets," (Rochet and Tirole 2003), as they facilitate transactions among unknown users by reducing search costs and providing some reputational security. As a result the sharing

<sup>&</sup>lt;sup>1</sup> For the sake of simplicity, this chapter uses the terms "platform" and "sharing" economy interchangeably, referring to firms operating in two-sided markets, using apps or websites to govern transactions between peers, that is, buyers and sellers. We make no assumptions that "sharing" is a valid descriptor of platform goals (Ravenelle 2017; Schor and Attwood-Charles 2017).

economy is thought to reduce transaction costs and make self-employment more feasible for individuals (Einav, Farronato, and Levin 2016). Some scholars also emphasize the freedom to set schedules and working hours that is typical of platform work (Sundararajan 2016). Equally important are claims that digitally mediated work (especially crowd-working sites) can include members of the workforce who might otherwise be excluded, owing to geographic barriers, caregiving obligations, or ethno-racial bias (Bennhold 2017; Mays 2018; Zanoni 2019). This perspective focuses on the new opportunities created by the sector and the benefits it can provide. In contrast to the two other approaches, it does not recognize issues of power between labor and sharing companies, nor does it acknowledge the possibility of negative outcomes for platform workers, especially as firms initially devoted to peer-to-peer sharing among users evolve into giant firms with operations across the globe.

The second perspective also views digital technologies as the central and unique feature of sharing platforms, but emphasizes their dark side, in particular their ability to control workers using digital means such as algorithms. While the particulars vary across services, nearly all for-profit sharing apps include certain core elements that these scholars argue expand corporate control over the performance of service providers. One such element is the use of surveillance technologies, whether they are locational, as in driving and delivery, or visual observation and accounting in the case of digital tasks. In addition, the use of customers to rate worker performance – a phenomenon Maffie (2020) describes as the "laundering of managerial control" provides another type of surveillance, and one that may create what has been termed "algorithmic insecurity" (Curchod et al. 2019; Wood and Lehdonvirta 2021). In this view, ratings metrics that are visible to all customers and are used to shape workers' job prospects impose a disciplinary effect on workers that far transcends what predigital forms of supervision are able to achieve. Moreover, because they typically individualize the workforce, foregoing socially shared workplaces, platforms reduce the opportunity for labor to informally negotiate the terms and conditions of employment, as was long true of traditional work organizations. Hence, "algorithmic control" scholars see a digital panopticon in which workers cannot escape the discipline and punishment of the app. In contrast to the efficiencies approach, scholars in this tradition emphasize the superior informational position of the platform and its ability to exercise power over workers (Calo and Rosenblat 2017; Rosenblat and Stark 2016). Examples of information asymmetry include withholding destination information or the prices paid by customers from drivers or delivery couriers. Another theme in this literature is gamification – the ability of the platform to offer bonuses and incentives in order to keep earners on the app, and to seamlessly change those conditions in order to achieve the objectives of the platform, rather than satisfy the desires of the worker – a power that is established in legally binding terms of service that all users must accept (Bearson, Kenney, and Zysman 2020; van Doorn and Chen 2021). Another theme is the use of algorithms to dispense discipline and punishment, including "deactivation," that is, worker termination. While it is important to recognize the control dimensions of these technologies as well as the power imbalance between platforms and their workers, this approach can at times display a similar, albeit inverse, weakness to the efficiency approach, which is that it can overstate the ability of the technology to control labor. There is growing evidence of the ability of workers to evade, outsmart, and resist algorithmic control (Chen 2018; Cameron 2018; Shapiro 2018; Wood et al. 2019). Strategies are commonly shared on social forums uniting platform workers on Uber, Lyft, and many delivery apps, which may help foster collective actions aimed at pressuring firms to alter the workings of the app. The algorithmic control perspective can also exaggerate the novelty of this type of control, given that technology, and even algorithms have been used to structure the labor process long before the advent of the current platform model.

The third perspective emphasizes the precarity of this type of work. Virtually all platforms engage their workers as independent contractors, rather than employees. However, while independent contractors do nominally retain control over many aspects of their work, some precarity scholars argue that financial need obviates de facto control as these workers are either forced into very long hours or to work whenever there is customer demand (Ravenelle 2019). The precarity approach also calls attention to the risk shift associated with platform work. These earners are responsible for providing the capital goods necessary to do the work, and responsible when customers engage in malfeasance or nonpayment. Furthermore, they are denied the standard protections and benefits of employment such as a minimum hourly wage, unemployment benefits, and compensation for workplace injuries (Dubal 2017; Vallas 2019). Legal scholars have argued that most platform workers are misclassified as independent contractors, since key decisions concerning prices, work rules, and other practices are set unilaterally by the platform. As a result, there are ongoing judicial, regulatory, and legislative challenges to these platform policies. The precarity perspective departs from the previous two in that it sees precarious platform labor as part of a trend that predates the sharing economy by decades (Kalleberg 2011; Kalleberg and Vallas 2018), and which is propelled by policy choices of employers rather than the exigencies of technology. In addition, because precarity is a larger trend throughout the economy, these scholars tend not to focus on the novelty or uniqueness of the sharing economy, in contrast to the previous two approaches. The major weakness of the precarity approach, in our view, is that it pays insufficient attention to the technological innovations of the sharing sector, while also ignoring the heterogeneous composition of the platform workforce, (significant portions of which may view platform work as a solution to precarity rather than a source of it). As we discuss in the next section, the platform workforce is uniquely diverse in ways that do not always support the precarity narrative.

This overview raises a number of issues that warrant discussion. First, although we have emphasized the differences among the three approaches, there are important instances in which scholars have combined elements from each approach. For example, Davis (2016) suggests that platforms use digital technology to control labor algorithmically while also transforming the employment relationship in farreaching ways. In this view, platforms enable for-profit companies to reconfigure employment, completing a trajectory that leads work from the career, to the job, to the "task." This view essentially combines the second and third approaches sketched earlier. A second example is that of Schor et al (2020b), who argues that the "sharing" feature of the platform economy has largely been coopted ("hijacked") by large corporations, but that social movements and progressive policies make it possible to reclaim the logic of reciprocity that informed the sharing economy at its birth.

A second point concerns recent efforts to transcend the three approaches we have sketched earlier, developing frameworks that better capture the distinctive features of labor platforms. One example is that of Vallas and Schor (2020), who see platforms as heralding a new organizational form, in addition to that of markets, hierarchies, and networks. The argument here is that platforms combine elements of these prior economic structures but do so in ways that achieve an institutional form that is qualitatively distinct. In this view, two key features that platforms exhibit are their reduced barriers to entry (which generates greater heterogeneity in their workforces) and a general "retreat from control" (which delegates practical decisions and the labor of evaluation to platform participants). In this view, platforms achieve their power precisely by relaxing elements that had figured prominently during industrial capitalism. A similar formulation is that of Watkins and Stark (2018, see also Stark and Pais 2021), who also see platforms as a distinct organizational form that operates by coopting the resources and assets of the entities that surround them. Both these views emphasize the instability of the platform economy, whose reproduction rests on political and regulatory inputs to manage the tensions and conflicts that platforms themselves create. We discuss these tensions in our concluding section.

#### 6.3 RECENT TRENDS IN PLATFORM LABOR

An important issue that has emerged in research on labor platforms concerns the heterogeneity that characterizes the platform work experience. Though the tendency in early studies was to generalize about the work situations that platform activity fosters, scholars have acknowledged important variations in the experience of platform working conditions. While many workers do appreciate the scheduling flexibility and relative autonomy from supervision that much app-based work provides, other workers bemoan the job's inability to provide a living wage or other sources of security. We contend that this difference issue is not merely a matter of contrasting orientations toward platform work but is instead a structural attribute, rooted in both labor market institutions and the platforms, the consequence of which is to stratify the platform workforce in socially and politically significant ways. This phenomenon holds obvious importance for any effort to support worker mobilization or platform regulation, but it remains poorly understood.

One question that has bedeviled researchers is how best to categorize the differing positions that platform workers occupy. The most common approach is to distinguish platform workers on the basis of their temporal engagement with the work – a simple approach that typically distinguishes between part-time and full-time platform workers (Robinson 2017; Rosenblat 2018). Though virtually all studies report that part-timers constitute the majority of platform workers on apps such as Uber, they also indicate that longer hour workers perform a disproportionate amount of the work (Parrott and Reich 2018, 2020). To better understand this division, researchers have begun to characterize workers in more differentiated ways, hoping to better understand the context in which platform work is done. In her multiplatform study, for example, Ravenelle (2019) develops a threefold typology that distinguishes between "strugglers," who try to make a living entirely from their platform earnings; "strivers," who use their platform earnings to supplement income from their primary jobs; and "success stories," who use their app-based experience to accumulate wealth, forming small businesses in catering or real estate management. The thrust of Ravenelle's argument – platforms have multiplied the precarity of platform workers - is based only on the first of these types, overlooking the complexity she herself reports.

One effort to capture the stratified nature of the platform workforce emerges in the multiplatform study conducted by Schor and her colleagues (2020a), which emphasizes the degree to which workers depend on their platform earnings to pay their basic expenses. At one end of this continuum are "dependent earners," who primarily or fully rely on the platform for their livelihoods. At the other end are "supplemental earners," who can rely on their primary jobs for income, and whose platform work is largely discretionary. In between are "partially dependent" earners, who either work on multiple platforms or who have several jobs. Because the most dependent earners are compelled to accept whatever tasks that are thrown their way, they face a harsher and more coercive work situation. By contrast, supplemental earners can afford to be more selective, accepting only tasks that offer relatively generous returns. Such disparities become all the more pronounced in light of the income inequalities evident across different platforms, in which some platforms (those requiring higher levels of capital goods or skill) provide higher earnings and greater autonomy than do others. Lower income individuals are more likely to participate in labor or gig platforms, while those with higher income are increasingly able to participate on more lucrative capital platforms, such as shortterm accommodation sites. The implication, supported by survey research recently conducted in Denmark (Ilsøe, Larsen, and Bach 2021) is that the platform economy reproduces preexisting tendencies toward segmentation rooted in the conventional economy. Moreover, the emergence of platform work may help privileged workers claim income-earning opportunities previously accessed by working-class earners, in effect crowding out the most vulnerable members of the workforce (Schor 2017). Overlapping these sources of inequality are racial and ethnic dynamics, which scholars are only beginning to explore. Dubal (2021) has argued that the disproportionate presence of Black and Latinx earners in the platform economy amounts to a new racial wage code, as platforms have attempted to create a third, implicitly racialized employment status between independent contractor and employee, with lower wages, fewer benefits, and substandard protections. Her analysis shows that platform firms have invoked racial justice language (i.e., the inclusion of ethnic and racial minorities), but have acted in ways that reduce these workers' access to equal employment opportunity. Whether, where, and how gig work becomes racialized is an important matter that labor market analysts must address.

Two issues emerge at this juncture, both centering on the relations that exist among the disparate strata of platform workers. The first concerns the ability of platforms to evade the provision of benefits and other job rewards that conventional firms must offer. The notion here, emphasized by Schor et al. (2020a), is that labor platforms function as "free riders" - that is, when they grow, they do so partly by operating parasitically, avoiding the employer contributions to unemployment insurance, social security, and health insurance that conventional firms must pay. This issue has become more visible in the United States during the COVID pandemic. Because platform workers were not covered by unemployment insurance, providing them with income support during COVID required the federal government to subsidize costs that would normally have been paid by employers. Here the costs of operation were socialized, but the profits (where firms were profitable) remained in private hands. Pressure on the companies to treat their workers better has also led the companies to respond with the creation of a "third category" of worker, between independent contractor and employee. This category offers some workers small monetary benefits for healthcare, and the illusion of a statutory minimum wage, but also permanently bars them from employee status (Dubal 2021). Such a category was created in California in 2020 via the passage of Proposition 22 and Uber, Lyft, and Doordash are currently trying to expand this model throughout the United States.

A second issue that has emerged again concerns relations among the various strata making up the platform workforce. The argument here, as developed by Rosenblat 2018 (see also Robinson 2017; Robinson and Vallas 2020), is that the stratification of the platform workforce is a vital element in the labor control systems on which labor platforms rely. In this view, the ready availability of occasional workers – those who have alternative sources of income – "reduces pressure on employers to create more sustainable earning opportunities" (Rosenblat 2018: 52–53). In other words, part time or supplemental earners serve as an industrial reserve army in modern dress, providing platforms with a workforce that is "tolerant of working conditions that are anathema to occupational drivers trying to support their families" (Rosenblat 2018: 54). Supporting this view is Robinson's study of Uber drivers in Boston (Robinson 2017), which found that occasional drivers were significantly less aware of their actual costs of operation than longer hour or full-time drivers, and thus were more easily exploited by the platform. However, this view stands at odds with the logic

of Schor et al.'s argument (2020a), in which occasional or supplemental earners are able to enjoy higher wages than their fully dependent counterparts. If this were true, it would be hard to see how supplemental earners could undermine the labor market position of more dependent workers. Clearly, much more research is needed on the origins and consequences of labor market stratification among the platform workforce, especially as platform companies face investor demands for profitability, or at least smaller quarterly losses. The latter pressures have seemed to generate a downward trajectory in platform working conditions, though it remains unclear which sectors exhibit this trend, and whether regional or institutional influences mediate its effects.

Beyond the question of stratification among platform workers, a host of broader questions have emerged regarding the relation between the platform economy and the work structures it seems to disrupt. A key question here concerns the relation between platform work and the professions. Research has suggested that the "golden age" of the professions has long since passed (Gorman and Sandefur 2011), as autonomous professional occupations have tended to splinter into more specialized forms of "knowledge work," supplying expertise via arrangements that are shaped more powerfully by the demands of markets and firms than by professional norms. Though this pattern unfolds in varving ways across the different sectors of professional work, the question is how the platform economy will affect the work and employment situations that professionals face in such fields as health care, journalism, legal services, and other traditionally autonomous occupations. In many of these fields, task-based, independent contracting arrangements have grown, ratings metrics have assumed a newfound importance, and an emphasis on commercialism increasingly conflicts with professional autonomy. A kindred issue here concerns the relation between crowd-working sites such as Upwork and Fiverr and the conventional bureaucratic contexts in which professionals have often been employed. Does the availability of crowd working encourage organizations to outsource professional work through digital means, as seems to have unfolded in journalism, legal services, and computer science (Christin 2020; Osnowitz 2010)? In her study of crowd-working sites, Berg (2016) notes that the single largest user of Amazon mTurk is an editing and publishing firm that relies on Turkers for its entire workforce. Though some have envisioned the growth of such a trend (Scholz 2016), little systematic research on these substitution dynamics has yet been conducted. Arguably, the pandemic, which has fostered much wider acceptance of "working from home" arrangements, may encourage firms to explore new forms of work organization, not only reversing the historical trend toward spatial agglomeration but also fostering a greater reliance on the crowdsourcing of projects and task-based compensation. This raises the prospect of the degradation of pay and conditions, long-recognized attributes of piece-rate systems (Dubal 2020), for middle-class work.

One of the characteristic features of many platforms has been their strategic emphasis on growth, rather than profitability. In effect, platforms have sought to use first-mover advantages and/or network effects – in which the value of the firm's services grows in proportion to its adoption – as a glide path to monopoly status, capturing markets that will only later support profits. The best example of such a strategy is of course that of Uber, which has incurred massive losses in its effort to establish market dominance. As Srnicek (2016) has noted, such a strategy presupposes the ready availability of patient capital from investors. Yet as firms go public, pressures to turn a profit are likely to rise, leading unprofitable firms to tighten their labor and compensation practices, generating a downward trajectory in working conditions (Vallas 2019; Schor et al 2020b). We have already seen this from a number of platforms, particularly in ride-hail and delivery. Without embracing a mechanistic approach linking austerity to resistance, it seems that this downward trajectory has exacerbated the labor relations tensions that platforms often provoke, prompting regulatory agencies, legislators, and courts to reexamine the practices in which platform firms engage, potentially reconfiguring their treatment of workers as independent contractors (Dubal and Schor 2021).

## 6.4 CONCLUSION: THE FUTURE FOR PLATFORM LABOR?

Not surprisingly, then, tensions between platforms and their workers have intensified in the past few years. The deterioration of earnings in ride-hail and food delivery (Farrell, Greig, and Hamoudi 2018) has led to increased union organizing and periodic flash strikes. Contestation continued through the 2020-2021 lockdown, spurred by questions of protective personal equipment, exposure to the virus, and over-hiring on some platforms. The pandemic itself scrambled demand across platforms, with ride-hail collapsing and package, food, and grocery delivery all growing dramatically. At the same time, regulatory activity has accelerated, raising many questions about the future of labor in the platform economy. Beginning in 2018, municipalities began more serious attempts to control the platforms (Schor et al. 2020b). In San Francisco, new regulations to reduce Airbnb activity began. New York City instituted a minimum wage for ride-hail drivers. Seattle began a process to do something similar. The State of California passed AB5, which made gig workers employees, in a dramatic departure from the independent contractor model that dominates. While Uber, Lyft, and Doordash were able to carve out their workers from that statute in a bitter electoral fight in 2020, the viability of this arrangement has come under increasing scrutiny. In London, Uber was forced to transform its workers into employees. In the European Union, tolerance for platforms' attempts to evade labor laws is likely to end soon.

These developments suggest that the future of platform labor remains uncertain. One possibility is that in North America and Europe, pressures to convert workers to employees will mount, especially where progressive governments are in power (though even conservative governments have begun to consider applying antitrust statutes to digital behemoths, potentially widening their vulnerability to industrial and economic reform). The other possibility is that the gig model will entrench itself and expand, providing a powerful model for the organization of work, leading conventional firms to convert their expensive workforces into independent contractors. Another option is one in which employment law and regulations institute a "third category" of gig workers, giving them some of the benefits typically associated with employment, but not many of its privileges and conditions. While we cannot foresee which of these pathways the sector will take, what we can predict is that, like its first decade of its existence, the second is likely to be characterized by heterogeneity, conflict, and continuous change, as the platform and conventional economies grow ever more intertwined.

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