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Platform labor: on the gendered and racialized exploitation of low-income service work in the ‘on-demand’ economy

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ABSTRACT

How does one value something one cannot *and often does not want* to see? How do contemporary digital platforms and their infrastructures of connectivity, evaluation, and surveillance affect this relationship between value and visibility, when it is mediated through the problem of labor as at once a commodity and a lived experience? And how can these infrastructures be mobilized in projects that aim to build different kinds of platforms – the kinds that support the revaluation low-income service work? This essay addresses these questions by examining the gendered, racialized, and classed distribution of opportunities and vulnerabilities associated with digitally mediated service work, or what I call *platform labor*. The argument will unfold in four parts. First, I briefly situate the ‘on-demand’ economy within the context of neoliberal socio-economic reforms that have, over the past four decades, shaped our present circumstances. Second, I argue that labor platforms should be understood as new players in the temporary staffing industry, whose devices and practices exacerbate the already precarious conditions of contingent workers in today’s low-income service economy. They do so by (1) bolstering the *immunity* of platform intermediaries and clients, (2) by expanding managerial *control* over workers, and (3) by orchestrating a pervasive sense of *fungibility* and *superfluity* with respect to this workforce. Third, after a short overview of the gendered and racialized history of service work, I analyze how this history extends into the networked present of our platform economy. Finally, I address the potential of ethnography, on the one hand, and platform cooperativism, on the other, to critically empower low-income service workers operating through platforms.

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The cost of living

Standing unassumingly near a plain white wall, as if left unattended by one of the museum’s cleaners, Josh Kline’s *Cost of Living (Aleyda)* consists of a purple-grayish janitor’s cart loaded with various 3-D printed body parts and cleaning supplies that belong to a housekeeper named Aleyda. The artist interviewed Aleyda as well as other janitorial and

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delivery workers, after which he produced 3-D scans of their bodies and the objects they use to do their job. As Ben Lerner (2016) has noted, Kline's work – which was part of the 'America Is Hard to See' exhibition that inaugurated the Whitney Museum's new downtown NYC location – 'stages a confrontation between the culture of museum conservation and the culture of the disposable prototype', to the extent that the printed objects on the cart are not intended to last. There is what Kline has called a 'resolution gap' between the digital files and current 3-D printing technologies: the latter have yet to match the resolution of the former and when printing technology improves a new set of objects with more visual detail will be printed. Indeed, Kline has pointed out this planned obsolescence, stating that the digital files contain the still unrealized and unrealizable scans. In this way, according to Lerner, 'Kline is reversing the traditional temporality of the "original" art work: what comes first are copies; the real work will arrive in the future' (2016).

This is an inventive take on Kline's work, which, as Lerner also points out, offers a play on the exhibition's title by suggesting that this sculptural assemblage is indeed hard to see due to the resolution gap that defers any 'accurate' view of the physical objects displayed on the cart. But *Cost of Living (Aleyda)* embodies another kind of opacity, or obfuscation, one that attends us to a different type of resolution gap which nevertheless also emerges from the discrepancy between digital information and its physical conditions of possibility and constraint. In a subtle yet somewhat macabre manner, it stages the material reality of the labor that has been rendered invisible by discourses on our ostensibly dematerialized information economy. Lerner himself briefly touches on this dimension of Kline's sculpture when he writes:

To confront the severed head and fragmented body of a janitor in a museum space is a discomfiting reminder of the undocumented (in more than one sense) material labor from which such discourses can help distract us. Somebody is still making the hardware from which you upload data to the cloud; somebody is still scrubbing the toilets at the museum that hosts your symposium on Internet art. (2016)

It is this kind of low-income service labor that is truly hard to see in America, which in turn makes it difficult to truly *see* America. In the U.S., a large share of today's low-income and supposedly 'low-skill' workforce consists of people of color, many of them immigrant men and women like Aleyda, whose body Kline has digitally reproduced, disassembled, and then recomposed in a way that highlights both its fragmentation and its identification with the cleaning products she uses daily. A gloved hand grips one bottle, while another has the image of Aleyda's hair printed on its entire surface. Cleaner and cleaning product have merged and the resulting hybrid objects, meticulously placed on the cart, form an understated testament to the commodification, fungibility, and perceived disposability of the service worker's body. Like the 3-D printed prototypes, this body is subjected to the logic of planned obsolescence, redundant as soon as the next batch of better – i.e., cheaper, younger, or more docile – units of labor becomes available.

How does one value something one cannot *and often does not want to see*? How do contemporary digital platforms and their infrastructures of connectivity, evaluation, and surveillance affect this relationship between value and visibility, when it is mediated through the problem of labor as at once a commodity and a lived experience? And how can these infrastructures be mobilized in projects that aim to build different kinds of platforms – the kinds that support the revaluation of low-income service work? This essay addresses these questions by examining the gendered, racialized, and classed distribution

of opportunities and vulnerabilities associated with digitally mediated service work, or what I call *platform labor*. It investigates how the ascendant ‘on-demand’ or ‘gig’ economies are shoring up a particular order of worth whose political and moral economy leverages inequality and severs the link between labor and livelihood for those at the bottom of its entrepreneurial supply chain – now reimagined as a value-adding ‘ecosystem’ (Ben Letaifa, 2014; Van Alstyne, Parker, & Choudary, 2016). For these workers, the cost of living regularly exceeds the volatile earnings from what Susie Cagle (2015) has termed ‘platform-captured self-employment’, resulting in daily struggles to make ends meet (DePillis, 2014; Singer, 2014). The essay should be read as a position paper and a call to action: its primary intention is to advocate an intersectional approach (Crenshaw, 1991; Gray, 2012) to the study of ‘on-demand’ and ‘gig’ economies, highlighting the ways in which these economies are historically constituted by class, racial, and gender inequalities, and to argue for the necessity of ethnographic research that not only analyzes platform labor but also aims to cultivate alternative imaginations of platform-mediated work. While I focus on the U.S., with its distinct socio-economic climate and racial history, many of the issues and insights discussed below will also – increasingly – pertain to other Western countries.

The argument will unfold in four parts. First, I briefly situate the ‘on-demand’ economy within the context of neoliberal socio-economic reforms that have, over the past four decades, shaped our present circumstances. Second, I argue that labor platforms should be understood as new players in the temporary staffing industry, whose software-driven management techniques exacerbate the already precarious conditions of contingent workers in today’s low-income service economy. Third, after a short overview of the gendered and racialized history of service work I analyze how this history of inequality and subordination extends into the networked present of the on-demand economy, whose success depends on the algorithmic intensification of established modes of exploitation and control. Finally, I address the potential of ethnography, on the one hand, and platform cooperativism, on the other, to critically empower low-income service workers operating through platforms. These workers have thus far had little leverage when it comes to deciding on the future of labor, despite the populist appeal of flat and frictionless digital labor markets.

Situating the ‘on-demand’ economy

While many commentators have tended to focus on the novelty of what has come to be known as the ‘on-demand’ or ‘gig’ economy, this phenomenon forms both a continuation and an intensification of developments that have been underway for nearly four decades. A common critical reading suggests that the recent Great Recession (2007–2011) provided the conditions of possibility for the on-demand business model that has been most frequently associated with Uber: under the combined pressures of mass un- and underemployment, fiscal austerity policies, and rising inequality, an increasingly precarious and shrinking middle-class workforce has welcomed new ways to market its assets – even if the only asset available is embodied as labor power (Booth, 2015; Hill, 2015; Mirani, 2014). While I broadly concur with this reading, I do not think that the social insecurity precipitating the rise of the on-demand and sharing economies can be solely attributed to the latest economic recession. Contemporary trends usually have a more complex origin story, which in this case, I would argue, starts in 1979. In that year, Paul Volcker, then

Chairman of the Federal Reserve, enacted a radical tight-money policy and raised interest rates to hitherto unseen levels. As is well documented, this induced an inflow of capital – in the form of foreign investments in U.S. government securities – as well as a deep recession that repressed wages and exacerbated already dismal unemployment rates, thereby breaking the power of organized labor and inaugurating an era of ‘rollback neoliberalism’ marked by fiscal austerity, labor market restructuring, and the growing dominance of finance capital (Harvey, 2007; Mahmud, 2012; Peck & Tickell, 2002). As Peck and Theodore (2012, p. 746) have noted, the logic driving this era

was crystallized in the Reagan administration’s economic program, which not only authorized wide ranging welfare retrenchments, while taking the fight to organized labor in the form of antiunion stances and policies, but also articulated a normatively positive discourse of labor market ‘flexibility,’ while (directly and indirectly) sanctioning the expansion of contingent labor practices.

These practices took shape in tandem with – and were made possible by – the liberalization of international trade relations and capital circulation, which spurred labor market globalization and the massive ‘offshoring’ of manufacturing plants to countries with low labor costs, putting further downward pressure on national wages and weakening international labor solidarity.

Temporary staffing agencies have also played a key role in this structural expansion and segmentation of contingent labor over the past three decades, both in manufacturing and in the rapidly growing service sector where the gradual normalization of just-in-time employment practices has had a particularly debilitating effect on the lives of low-income workers. Describing the low-income labor market as ‘a site of intensive regulatory experimentation and reinvention’ rather than straightforward deregulation, Peck and Theodore argue that in

restructuring workforce systems and rewriting the social contract governing employment, employers have sought both to download the risks inherent in a volatile economy and to offload the responsibilities that, historically, have been associated with the standard employment relationship, many turning to various labor market intermediaries to assist them in mobilizing and managing flows of contingently employed workers for precarious jobs. (2012, p. 742)

On a macroeconomic level, temporary staffing has grown into an industry in its own right since the 1980s and is now an important structural actor in the U.S. labor market, or one that should rather be understood as ‘infrastructural’ to the extent that it has achieved ‘a scale of operations that institutionalises this form of mediated contingent work as a permanent characteristic of the job market’ (Peck & Theodore, 2013, p. 27). Following Peck and Theodore, businesses like Uber and Handy should be conceived of as *platform labor intermediaries* that, despite their self-presentation as tech companies, operate as new players in a dynamic temporary staffing industry whose traditional business-oriented approach is being augmented by a more austere and zero-liability peer-to-peer model that leverages software to optimize labor’s flexibility, scalability, tractability, and its fragmentation. These businesses do not only offer their software as a service to participants in the multi-sided markets they orchestrate, but also use it to manage and conceal a contingent workforce through historically gendered and racialized techniques that articulate a ‘workforce-as-a-service’ model (Starner, 2015).

Workforce-as-a-service

Like conventional temporary staffing agencies, platform labor intermediaries are active ‘infrastructural’ agents in the reconstitution of labor relations and the nature of work, further institutionalizing the tenuous post-Fordist social contract that forces workers to shoulder the risks and responsibilities of social reproduction. They perform this role in three distinct yet interrelated ways, all of which – as will be argued in the next section – evoke the gendered and racialized history of exploited reproductive labor.

Immunity

First, on-demand platforms share a number of strategies that enforce the *immunity* of both the buyer of a service – usually referred to as a customer, a client, or a requester – and the company that owns the platform, protecting these parties from the obligations that commonly pertain to an employment relationship. Most conspicuously, this is accomplished through the increasingly contested practice of worker misclassification, in which on-demand companies mobilize their Terms of Service (ToS) agreement to designate workers as independent contractors rather than employees. Here, the platform and the contractor are stipulated to be in a commercial relationship where the former provides a service to the latter in the form of a software-generated market lead to a potential client for the service offered by the contractor – a service that is categorically distinguished from the one provided by the platform. As commentators have pointed out, this arrangement prevents on-demand companies from having to pay employee benefits, compensations, and insurances, which can save up to 30% in labor costs (Cherry, 2015; Rogers, 2015). Yet it severely downplays the level of control these companies exert over the workers they ‘serve’ via their platform and it obfuscates the mutual dependency that marks their relationship, both of which would indicate an employment situation (Rogers, 2016). I turn to the issue of control below, but here I want to briefly mention three related platform strategies for maintaining immunity. One is the high level of unilateral discretion afforded to the platform owner as well as the service requester through the ToS agreement. For example, platform owners reserve the right to modify this agreement at any time, which renders the contractual relation that governs workers’ conduct highly insecure and detracts from their ability to appeal particular regulations or decisions. Moreover, many ToS agreements also give platform owners the right to terminate workers’ user accounts when they decide that these workers have somehow breached the agreement, which, to reiterate, can be modified at will (Aloisi, 2016).

Beyond the discretion afforded by ToS agreements, another immunitary strategy mobilized by on-demand platforms is the orchestration of information asymmetries that skew power relations to the advantage of requesters rather than workers. The provider interface usually offers very minimal information about service requesters and frequently even the most basic information becomes available only after the provider has accepted the request and thus commits to taking on the gig. As Rosenblat and Stark note about Uber: ‘When Uber drivers accept a ride request, they take on the risk that the ride’s fare will not be profitable; yet drivers are not shown destination or fare information before they accept a ride’ (2016, p. 3762). Such techniques boost the immunity of platform labor intermediaries as well as requesters, to the extent that they make it difficult for service providers to act on

information in a way that could enhance their position on the platform. A third immunitary strategy further hinders worker empowerment by mobilizing outsourced ‘customer service representatives’ (CSRs) and algorithmic management systems to shield platform owners from having to deal directly with service providers. On a practical level, such subcontracted CSRs form a buffer between the on-demand company and its independent workforce, which seldom finds access to an actual employee and is kept at bay through standardized responses (Bhuiyan, 2016). On a rhetorical level, these companies try to exonerate themselves from any responsibility or culpability with respect to managing this workforce, by appealing to algorithms ‘to dissolve their authority into the disinterested medium of a software program’ (Tomassetti, 2016, p. 46). In sum, then, these immunitary strategies are geared toward keeping independent contractors at arm’s length and shedding as much liability as possible, thereby extracting maximum value from minimal work security and stability.

Control

But even if workers would be massively reclassified as employees in the wake of future judicial decisions, the issue of expansive control by platform labor intermediaries would persist and may even be aggravated. The means through which on-demand platforms exercise control over their workforce are many and varied, but here I will mention some of the most prevalent techniques. For instance, Uber extensively monitors its drivers in order to produce various kinds of performance metrics that are included in driver feedback notifications. This feedback also contains comparisons to other drivers as well as overall rankings, creating a hierarchical space in which ‘all participants relate to one another continuously and competitively’ (Guyer, 2010, p. 126). This is in fact the only kind of worker relationality that is supported by the platform, which otherwise prohibits contact between drivers whom Uber rather sees working in isolation. Next to the disciplinary and incentivizing effects of these performance metrics, customer ratings serve as another crucial metric with which to control service providers. Such ratings have become a major decentralized and scalable management technique that outsources quality control to customers of on-demand platforms, creating a generalized audit culture in which service providers are continually pushed to self-optimize and cater to the customer’s every whim (Rosenblat & Stark, 2016; Van Doorn, 2014).

Uber has also pioneered other data-driven techniques of remote worker control, such as behavioral nudges and scheduling prompts based on volatile real-time and predictive analytics that produce economic incentives intended to allocate drivers to particular high-demand areas at certain times. Termed ‘surge pricing’, this controversial practice ‘is billed by Uber as a means to ensure positive customer experience by enticing new supply to an area of high demand’ (Rosenblat & Stark, 2016, p. 3766), but given that these ‘surges’ are notoriously fickle and the attendant rates are likewise erratic and unreliable, they evoke a great deal of uncertainty and frustration among drivers who constantly have to negotiate whether or not it makes economic sense to respond to such prompts. It should be noted here that this kind of real-time algorithmic control, which governs labor as just another datafied asset (Rossiter, 2015), does not only drive Uber’s business model. It is turning into a pervasive technique of logistical management at a time when the ability to guarantee instant provider response to service requests is becoming a major competitive advantage

for platforms like TaskRabbit, which has recently updated its app to offer ‘immediate task gratification’ (Yeung, 2016). This development intensifies the operational logic of the workforce-as-a-service model by protracting the timeframe of an independent contractor’s work-readiness and thereby increasing the contingency of on-demand labor, which bears the entrepreneurial responsibility for its accelerated performance and absorbs the risks attached to its failure.

Superfluity/fungibility

Naturally, the accelerating pace of the on-demand economy takes its toll and companies that make use of independent contractors are experiencing substantial ‘platform churn’, or the desertion of workers for whom this kind of labor has proven to be unsustainable or simply intolerable. In anticipation of such churn, these companies are constantly recruiting new workers through public advertising campaigns and internal enrollment strategies that offer economic incentives to sign up new hires, thereby maximizing their labor stock so that incoming requests can always be handled promptly. If this strategy of planned obsolescence has thus far been successful (Hathaway & Muro, 2016), it is because the on-demand economy thrives off a ‘surplus population’ of underemployed gig workers whose *fungibility* and *superfluity* is orchestrated through digital platform architectures (Tyner, 2013). The data-driven techniques of immunity and control turn labor into a captive revenue stream that secures shareholder value while rendering workers largely invisible to customers, to each other, and even to themselves. This sociotechnical obfuscation is in fact crucial to the orchestration of a fungible and superfluous workforce, to the extent that it degrades service work as an abundant, calculable, and easily substitutable commodity whose value is depreciated beyond the market sphere. Similarly, it should be stressed here that the structural degradation of on-demand service work is a central strategy for valorizing the tension between its indispensability and expendability, as it allows companies to keep hiring rates high and labor prices low, thus optimizing the exploitation of precarious workers looking to supplement their wages in order to make ends meet.

Obviously, however, some service workers are more fungible than others. For instance, services that center on home care, offered by platforms such as Honor, require a significant degree of trust and need to achieve a high level of consistent quality in order to be successful, which not only necessitates a personal relationship between the customer and the worker but also involves the ability to train and supervise service providers. This is to say that it requires a workforce transition from independent contractors to workers with employee status – a shift that Honor, like a number of other on-demand companies, announced at the start of 2016 (Kamdar, 2016). Yet as a Bloomberg report recently noted,

[o]ffering the support that full-time jobs have traditionally provided is expensive, particularly for app-based platforms pushing for massive growth. The startups that favor W-2 workers [i.e., workers with employee status] tend to be smaller and focus on high-end products. Going W-2 drives up the cost of managing and hiring new workers. (Chayka, 2015)

In other words, if you intend to build your platform for maximum scalability and eventual profitability, which remain the two primary criteria for receiving venture capital, investing in equitable labor conditions will likely not be an integral part of your business model.

Moreover, although the techniques that ensure immunity and control do not occur on all platforms in the same way or to the same degree,

[t]here remains a gulf between on-demand startups' most publicly prized employees – developers, UX [i.e., user experience] designers, and product managers – and those doing the labor that makes the apps worth billions. This is as true for an Uber driver as it is for an office cleaner or domestic assistant. (Chayka, 2015)

In the next section, I will examine the gendered and racialized dimensions of this 'gulf'.

Value, visibility, and violence

Alfred is an on-demand butler service that encourages prospected clients to 'experience life without chores' and promises to alleviate their time pressures. In a way, it provides a meta-service by sending an 'Alfred' to a subscriber's home to manage not just all the chores that need to be taken care of but also any other on-demand services that the subscriber may use, thereby positioning Alfred as the top layer of a household's on-demand 'service stack'. This consequently enables all these services to be performed in the background, as it were, during times when subscribers are at work or enjoying their newly procured time off outside of the home. Instead of having to deal with delivery workers, cleaners, or handymen, Alfred is there to function as a buffer – one that subscribers only have to virtually encounter once when they approve their designated servant based on a picture and a background check. As Atanasoski and Vora (2015) have argued, Alfred's real innovation may thus be its erasure of contact between subscribers and service workers, who are made invisible and interchangeable through Alfred's platform infrastructure. They write:

Emergent technologies and platforms propose a future free from degraded work, yet the infrastructures of the sharing economy retain the degraded categories of labor formerly done by racialized others. Utopian hopes for a human freed from degraded labor thus produce platforms that must actively conceal the fact that other forms of 'miserable' work are still being done by human labor. (2015, p. 20)

The kind of degraded labor that Alfred attempts to conceal has a long, distinctly gendered, and racialized history: domestic service work has, in the U.S., traditionally been performed by black, Latina, and Asian American women in white upper/middle-class homes. Notwithstanding Alfred's multicultural depiction of both its workforce and its subscribers on its website, and despite its best efforts to erase 'intimate service obligations (and possible annoyances) from the modern home in a mode consistent with notions of racial and sexual progress', it cannot avoid inheriting 'the prior forms of racialized and feminized, intimate labors supporting the nuclear, heteronormative, and white family form' (Atanasoski & Vora, 2015, p. 23). In other words, the post-domestic work fantasy sold by Alfred is implicitly yet inherently a post-racial and gender-neutral fantasy that effaces the history of how this type of work has been deprived of value, while promoting the service – and the on-demand economy in general – as an inclusive and equal opportunity enterprise.

In order to better understand what is at stake here, it is necessary to briefly recall this history of domestic work in the U.S., before returning to an examination of how this work has been rebranded in today's on-demand economy. Whereas the bourgeois liberal division of labor confined upper- and middle-class white women to the private sphere of

the home, it did not pertain to black, immigrant, and poor women who had long been forced to engage in paid and unpaid work outside their immediate domestic space –if they could even lay claim to such a space. More precisely, white women were able to attend to their duties as housewives, mothers, and hostesses, and could enjoy leisurely activities such as reading and participating in associations and charities, only because they were in a position to offload the more strenuous and dreary chores to domestic servants who were usually women of color with few other options for making a living. In this sense, as Evelyn Nakano Glenn (1992) has argued, the ‘racial division of reproductive labor’ subtends its gendered division, as the image of the virtuous white housewife was sustained by non-white women whose degraded labor was kept safely out of sight. By the 1950s, reproductive labor had become increasingly commodified and organized by the market as ‘institutional service work’ (1992, p. 20), which led to a stark increase in employment for women. Yet also in these public settings the racial – and *racist*– division of labor largely segregated white women from their non-white counterparts, who were hired to do ‘the heavy, dirty, “back room” chores of cooking and serving food in restaurants and cafeterias, cleaning rooms in hotels and office buildings, and caring for the elderly and ill in hospitals and nursing homes’ (Glenn, 1992).

Meanwhile, white middle-class women’s growing labor market participation was contingent on a corresponding rise in the demand for paid domestic work, which was further amplified by waves of extensive labor market restructuring from the 1970s onwards. The end of the Fordist social contract – which was also a sexual contract that ensured a family wage and thereby consolidated the gendered division of labor (Adkins, 2016; Pateman, 1988) – and the subsequent post-Fordist collapse of the remaining distinctions between productive and reproductive spheres have over the past decades heralded a new and more precarious sexual contract that ‘places the ideals of intensive mothering, domesticity, entrepreneurialism and an investor spirit towards work and working on the same continuous plane’ (Adkins, 2016, p. 3). To juggle these responsibilities and live up to these exceedingly high expectations, middle-class women have increasingly come to rely on a large ‘reserve army’ of domestic workers, many of whom are (illegal) immigrant women who are often paid below-minimum wages and live in conditions much more precarious than those faced by their overworked employers (Sassen, 2002; Young, 2001). As Glenn (1992, p. 36) points out: ‘Not only does this practice diffuse pressure for a more equitable sharing of household work but it also recreates race and gender ideologies that justify the subordination of women of color.’ At a time when a growing share of formerly privileged white middle-class men are experiencing what has been called the ‘feminization’ of work, which renders their professional futures more insecure, it is thus crucial to recognize that this has always been a nearly inescapable reality for those engaged in domestic and institutional service work – women and increasingly also men of color (Duffy, 2007). In Donna Haraway’s (1991/2006, p. 133) words:

To be feminized means to be made extremely vulnerable; able to be disassembled, reassembled, exploited as a reserve labor force; seen less as workers than as servers; subjected to time arrangements on and off the paid job that make a mockery of a limited work day; leading an existence that always borders on being obscene, out of place, and reducible to sex.

Yet, as Haraway knows, such forms of structural violence that aim to devalue, dehumanize, displace, and dominate the laboring body are not only gendered but are also deeply

racialized, emerging from a white supremacist institutional legacy in which black labor – and the black body in general – is inherently degraded, unskilled, and superfluous (Mbembe, 2004; Wilderson, 2003).

It is this legacy that on-demand platforms like Alfred, Handy, and Managed by Q disavow when they rebrand domestic and institutional service work as a post-racial and gender-neutral opportunity that combines good pay with a flexible schedule. Even though these companies all employ their share of white middle-class men who approach the work of running errands or cleaning homes and offices with an entrepreneurial spirit characteristic of modern ‘venture laborers’ (Neff, 2012), they are unable to fully detach from the gendered and racialized order of worth that haunts this kind of service work and continues to associate it with a lack of value, skill, and dignity, which subsequently justifies lower pay in comparison to management and engineering jobs. Moreover, despite this influx of white middle-class workers, the majority of cleaners, janitors, and home care providers operating in the gig economy are working-class men and women of color, especially in urban areas (Kirsch, Warren, & Shen, 2015; O’Donovan, 2016; Smith, 2016).¹ Like their newly precarious white co-workers trying to hold on to their middle-class status, minority ‘operators’ working for Managed by Q are encouraged to optimize their professional lives by managing and training new workers who are integrated into the company’s branded routines and best practices (Chayka, 2015). Yet this aspirational image, saturated with start-up mentality and the desire for upward social mobility, ‘obscure[s] relations of servitude between workers and the company at issue’ as well as veiling ‘workers’ generalized class subordination under contemporary capitalism’ (Tomasetti, 2016, p. 60) – a mode of subordination that is not only starkly inflected by racial and gender inequalities but is also encoded into the software infrastructures of on-demand platforms. The techniques that ensure *immunity* for these platforms and enable their *control* over a contingent workforce marked by *superfluity* and *fungibility* are thus far from post-racial or gender-neutral. They actively draw on earlier modes of controlling and exploiting racially feminized service work, whose colorblind makeover as an investment in entrepreneurial futurity serves to hide the extent to which this labor is subjected to algorithmic rationalization according to the just-in-time logic of on-demand market imperatives. While there are indeed significant distinctions between Uber and Managed by Q with regard to how these companies classify, value, and manage their workers, both offer their workforce as a scalable, hyperflexible, and instantly accessible service to individual and corporate clients who are ensured minimal contact with whoever drives them around or cleans their office. As such, consumers can continue to ignore the concealed, people-powered infrastructures of ‘ridesharing’ and cleaning services that safeguard the maintenance of their everyday lives.² Cloaked in the language of market efficiency and technological solutionism, the on-demand model nevertheless conjures an all-too-familiar colonial imaginary of pliable servants who can be, in Haraway’s words, ‘disassembled, reassembled, exploited as a reserve labor force’ that is thoroughly surveilled and mined for value.

Conclusions: platform labor, otherwise

Let me summarize my argument: in the world of platform labor, inequality is a feature rather than a bug. Platform labor remains thoroughly embedded in a world created by

the capitalist value form, which hinges on the gendered and racialized subordination of low-income workers, the unemployed, and the unemployable. The workforce-as-a-service model that currently dominates corporate ‘future of work’ imaginaries promotes a technocratic ideal of flexible labor market optimization organized and managed by platforms, which are thereby becoming increasingly important institutional actors in the exceedingly privatized spheres of policy and governance. Thus far, the Left has been struggling to keep up with the rapidly transforming global landscape of digitally mediated labor, and its provisional response has been largely limited to two types of initiative: litigation and regulation. Efforts to litigate have been met by appeals from companies such as Uber, which has slowed down the process of judicial decision-making (Rogers, 2016). Meanwhile, attempts to regulate the on-demand and sharing economies have generated a concerted pushback from the likes of Airbnb and, again, Uber, each of which has flexed its activist muscle through lobbying efforts and by mobilizing its customer base to protest proposed regulations, in addition to recruiting high-profile public officials to expand its political power in the realm of (inter)national government and policy-making (Christie, 2016; Fiegerman, 2015; Lomas, 2016; Said, 2015).

Meanwhile, other initiatives are hopeful about the efficacy of corporate self-regulation, seeing it as a viable means to achieve social justice in the workplace. One of the most prolific and ambitious efforts to date is the Good Work Code, established by the National Domestic Workers Alliance (NDWA) in response to seeing the market for domestic work move to on-demand platforms. The Code’s eight values serve as a normative framework ‘that guides us in creating a new economy that works for all of us’ and ‘to ensure that as we create the future of work, we are solving for equity as well as efficiency’.³ While, at the time of writing, just 12 startup companies have publicly committed themselves to the Code and there are certainly good reasons to question the extent to which corporate self-regulation will bring about the desired change, what I find incredibly important about this initiative is the fact that it actually involves domestic workers in the act of drawing up alternative ‘future of work’ scenarios. One of the key problems with current debates about how technology is reshaping the future of work has generally been their lack of engagement with the gig workers whose lives and livelihoods are directly affected by changes underway. Many of these debates happen at conferences hosted by universities and other public and private institutions, which frequently charge hefty registration fees and feature academics, policy experts, and/or business consultants speaking on topics intimately familiar to gig workers who nevertheless lack meaningful representation and voice. Despite the laudable efforts of the Association of Internet Researchers to increase the diversity of participation in their annual conferences, by making available conference fee waivers and travel stipends to under-resourced scholars, access to such subsidies is restricted to academic professionals. Consequently, I once again presented this work to a – this time rather diverse – room of engaged peers at the 2016 AoIR conference held in Berlin, which was a great experience that would have nevertheless been better if some low-income workers could have attended. I am obviously not against the idea of experts trying to make sense of complex issues that need to be tackled with care and from a variety of different perspectives, but when discussing platform-mediated labor issues should not we start by asking how these issues impact the everyday lives of people who actually work on/through these platforms? What is there to learn from their perspectives, their experiences, their needs, anxieties, and aspirations? And who does this ‘their’

refer to anyway? Instead of – or in addition to – presenting survey results, why not give these workers a microphone and a place in the debate? This is what some colleagues and I plan to do as we are organizing a conference on the sharing economy and the future of work in Amsterdam (scheduled for October 2017).

Scholars are only slowly starting to differentiate between various types of platforms and their respective workforce, and there is still a lack of long-term ethnographic inquiry into the variegated realities of platform labor. Yet, in my view, ethnography is eminently suitable to convey these realities in a way that does not simply aim to expose but also works to elicit, provoke, and make things possible in concert with research participants. I believe the urgent task of ethnography is to become attuned to – in order to learn from and contribute to – the myriad of ways in which minoritized gig workers are engaged in what Moten and Harney have called ‘planning’. Planning, in their lexicon, means ‘self-sufficiency at the social level’, a form of ‘militant preservation’, and the ‘ongoing experiment with the informal, carried out by and on the means of social reproduction’ (Moten & Harney, 2013, pp. 74–76). As Lobenstine and Bailey (2014) argue, impoverished communities of color have for centuries been sharing, collaborating, hacking, and crowdsourcing in order to survive in environments devoid of formal employment opportunities, yet their improvisation and inventiveness have mostly been discarded if not actively sabotaged and criminalized. But what if we would start our public conversations about the future of work from the vantage point of these communities and the models and imaginaries they are crafting from their ‘undercommon’ knowledge, skills, and spaces of incubation (Moten & Harney, 2013)? What ‘adjacent possibilities’, or shadow futures (Lobenstine & Bailey, 2014), might open up and how will we – scholars, worker advocates, policy-makers *and* low-income workers – collectively ensure their materialization and sustainability in a world that only values a very specific (white, tech-driven) version of creativity and innovation?

In a recent conversation on the *Cultural Anthropology* website, Elizabeth Povinelli (2014) suggests that ‘every arrangement installs its own possible derangements and rearrangements. The otherwise is these immanent derangements and rearrangements’. As Holbraad, Pedersen, and Viveiros de Castro (2014) write in response, the question then becomes ‘[h]ow might “the otherwise” be rendered manifest ethnographically?’ I think at least part of the answer is that ethnography should endeavor to not only describe and analyze but also to cultivate the otherwise of platform-mediated work arrangements, both conceptually and materially. So besides practicing what Dutch sociologist Willem Schinkel has termed ‘imagination against the grain’,⁴ ethnographers should also collaborate with those we study to build support structures that cross digital and physical spaces and help to sustain the labor, lives, and livelihoods of minoritized service workers. In the words of Sylvia Federici (2012, p. 111), which resonate with those of Moten and Harney: ‘What is needed is the reopening of a collective struggle over reproduction, reclaiming control over the material conditions of our reproduction and creating new forms of cooperation around this work outside of the logic of capital and the market.’ Conceptually, this entails two moves. First, it requires a historical critique of the gendered racism that undergirds current, ostensibly post-racial, formations of paid and unpaid social reproduction, building on Evelyn Nakano Glenn’s groundbreaking work by tracing this structural violence from the plantation to the platform.⁵ Second, it also requires that we reassess the value of supposedly ‘low-skilled’ – because racially feminized – service labor and think

about how this essential work of maintenance, care, and support can be otherwise arranged.

Materially, then, this means experimenting with platform architectures that support new forms of cooperation around the work of social reproduction adjacent to – if not exactly outside of – the logic of capital and the market. Recently, a movement has emerged around the notion of ‘platform cooperativism’, which reimagines how work is organized by supporting and engaging in the experimental design of worker-owned digital platforms that are decentralized, democratically governed, collaborative, and radically egalitarian (Scholz & Schneider, 2016). While I consider this movement to be a valuable antidote to the ‘access trumps ownership’ discourse that dominates today’s corporate sharing economy, which perpetuates rather than problematizes wealth inequality by making conditional access to private property the norm, I want to end this essay with two critical aspirations concerning its future. The first aspiration pertains to the specter of ‘technological solutionism’ (Morozov, 2014) that not only haunts venture capital-backed startups but also – albeit to a lesser extent – informs the good life vision of platform cooperativism. Although a collective investment in the dual technologies of open source software and cooperative ownership models may certainly be necessary to imagine ‘a transparent, democratic and decentralized economy which works for everyone’ (<https://2017.open-coop/>), it is not fully sufficient. Such an investment in technical and organizational infrastructures needs to be carefully embedded in local environments and their affective, moral, and political infrastructures, all of which are deeply gendered and racialized. While platform cooperativism operates in tandem with local organizers and activists, its proponents have a tendency to assume the universal applicability of its solution, which posits collaborative software and cooperative ownership as technologies that have the capacity to move us beyond the antagonisms and inequalities that historically shape particular social settings. This tendency risks a perverse reproduction of Silicon Valley’s own vision of the good life, which equates frictionlessness with social justice.

Second, and finally, platform cooperativism would benefit from a more concerted effort to articulate its relationship to public institutions on a local and (inter)national scale. Its roots in commons-based peer production models and its adherence to self-governance make platform cooperativism a cogent movement that can offer valid alternatives in the increasingly entangled fields of production and social reproduction, but if it aims to build infrastructures that amount to more than temporary autonomous zones it will have to rethink how the state can be involved in their legitimation as well as their maintenance and expansion. In other words, a model of social justice that is both sustainable and scalable requires an ongoing ‘collective struggle’ in which those engaged in planning –*pace* Moten and Harney – confront and demand change from those doing policy.

Notes

1. Much more fine-grained research on the demographics of on-demand/gig economies is needed, especially research that breaks these economies down according to the kind of service work provided – ranging from low-income reproductive labor such as cleaning, home care, cooking, human transportation, and delivery work to higher paid services such as consultancy, engineering, and design work (see also Griswold, 2016).

2. With regard to the becoming-infrastructure of low-wage platform workers, Lilly Irani (2015, p. 231) writes: 'Hiding the labor is key to how these startups are valued by investors, and thus key to the speculative but real winnings of entrepreneurs.' In other words, the *depreciation* of platform-mediated labor through 'infrastructural concealment' (Parks, 2012, p. 66) is directly related to the *appreciation* of the platform company.
3. See <http://www.goodworkcode.org/about/>. The Code's eight values are: Safety; Stability & Flexibility; Transparency; Shared Prosperity; A Livable Wage; Inclusion & Input; Support & Connection; and Growth & Development. It should be noted that NDWA is not only trying to achieve market self-regulation through its Good Work Code but also lobbies state and federal legislators to push for regulatory measures that advance social justice for care workers, as well as operating its 'innovation hub' Fair Care Labs (<http://www.faircarelabs.org/>).
4. Schinkel used this phrase during a lecture at the International Architecture Biennale Rotterdam (IABR), where he inaugurated the Center for Public Imagination (see <http://iabr.nl/en/event16/cpi>).
5. According to Katherine McKittrick (2013, p. 3),

the *idea* of the plantation is migratory. Thus, in agriculture, banking, and mining, in trade and tourism, and across other colonial and postcolonial spaces – the prison, the city, the resort – a plantation logic characteristic of (but not identical to) slavery emerges in the present both ideologically and materially. [Emphasis in original]

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References

- Adkins, L. (2016). Contingent labour and the rewriting of the sexual contract. In L. Adkins & M. Dever (Eds.), *The Post-Fordist sexual contract: Working and living in contingency* (pp. 1–27). Basingstoke: Palgrave Macmillan.
- Aloisi, A. (2016). Commoditized workers. Case study research on labour law issues arising from a set of 'on-demand/gig economy' platforms. *Comparative Labor Law & Policy Journal*, 37, 653–690.
- Atanasoski, N., & Vora, K. (2015). Surrogate humanity: Posthuman networks and the (racialized) obsolescence of labor. *Catalyst: Feminism, Theory, Technoscience*, 1(1), 1–40.
- Ben Letaifa, S. (2014). The uneasy transition from supply chains to ecosystems: The value-creation/value-capture dilemma. *Management Decision*, 52(2), 278–295.
- Bhuiyan, J. (2016). Contracts and chaos: Inside Uber's customer service struggles. *Buzzfeed*. Retrieved from https://www.buzzfeed.com/johanabhuiyan/contracts-and-chaos-inside-ubers-customer-service-struggles?utm_term=.esaalPPnx#.ikb3vBBYq
- Booth, A. (2015). The sharing economy, the future of jobs, and 'postcapitalism' – part one. *International Marxist Tendency*. Retrieved from <http://www.marxist.com/the-sharing-economy-the-future-of-jobs-and-postcapitalism-part-one.htm>

- Cagle, S. (2015). Quantifying crisis from a position of comfort: Why the current state of labor economics is a bummer. *Patreon*. Retrieved from <https://www.patreon.com/posts/quantifying-from-3540968>
- Chayka, K. (2015). It's like Uber for janitors, with one huge difference. *Bloomberg News*. Retrieved from <http://www.bloomberg.com/news/features/2015-10-09/it-s-like-uber-for-janitors-with-one-big-difference>
- Cherry, M. A. (2015). Beyond misclassification: The digital transformation of work. *Comparative Labor Law & Policy Journal*, 52, 577–602.
- Christie, R. (2016). Airbnb leads call for EU to block nations' sharing-economy laws. *Bloomberg Technology*. Retrieved from <https://www.bloomberg.com/news/articles/2016-02-11/airbnb-leads-call-for-eu-to-block-nations-sharing-economy-laws>
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299.
- DePillis, L. (2014). At the Uber for home cleaning, workers pay a price for convenience. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/news/storyline/wp/2014/09/10/at-the-uber-for-home-cleaning-workers-pay-a-price-for-convenience/>
- Duffy, M. (2007). Doing the dirty work: Gender, race, and reproductive labor in historical perspective. *Gender & Society*, 21(3), 313–336.
- Federici, S. (2012). *Revolution at point zero: Housework, reproduction, and feminist struggle*. Oakland, CA: PM Press.
- Fiegerman, S. (2015). Airbnb prepares for war by hiring the man who helped Bill Clinton survive impeachment. *Mashable*. Retrieved from <http://mashable.com/2015/08/27/airbnb-preps-for-political-war/#R5KXUblq88qB>
- Glenn, E. N. (1992). From servitude to service work: Historical continuities in the racial division of paid reproductive labor. *Signs*, 18(1), 1–43.
- Gray, K. L. (2012). Intersecting oppressions and online communities: Examining the experiences of women of color in Xbox Live. *Information, Communication & Society*, 15(3), 411–428.
- Griswold, A. (2016). The scariest thing about the gig economy is how little we actually know about it. *Quartz*. Retrieved from <http://qz.com/614218/t/350438/>
- Guyer, J. I. (2010). The eruption of tradition? On ordinality and calculation. *Anthropological Theory*, 10(1–2), 123–131.
- Haraway, D. (1991/2006). A cyborg manifesto: Science, technology, and socialist-feminism in the late 20th century. In J. Weiss, J. Nolan, J. Hunsinger, & P. Trifonas (Eds.), *The international handbook of virtual learning environments* (pp. 117–158). Dordrecht: Springer Netherlands.
- Harvey, D. (2007). *A brief history of neoliberalism*. Oxford: Oxford University Press.
- Hathaway, I., & Muro, M. (2016). *Tracking the gig economy: New numbers* (Brookings Institute report). Retrieved from <https://www.brookings.edu/research/tracking-the-gig-economy-new-numbers/>
- Hill, S. (2015). *Raw deal: How the 'Uber economy' and runaway capitalism are screwing American workers*. London: Macmillan.
- Holbraad, M., Pedersen, M. A., & Viveiros de Castro, E. (2014). The politics of ontology: Anthropological positions. *Cultural Anthropology Fieldsights*. Retrieved from <https://culanth.org/fieldsights/462-the-politics-of-ontology-anthropological-positions>
- Irani, L. (2015). Difference and dependence among digital workers: The case of Amazon Mechanical Turk. *South Atlantic Quarterly*, 114(1), 225–234.
- Kamdar, A. (2016). Why some gig economy startups are reclassifying workers as employees. *Onlabor*. Retrieved from <https://onlabor.org/2016/02/19/why-some-gig-economy-startups-are-reclassifying-workers-as-employees/>
- Kirsch, R., Warren, D., & Shen, A. (2015). *Blueprint to empower workers for shared prosperity* (Roosevelt Institute report). Retrieved from <http://rooseveltinstitute.org/wp-content/uploads/2015/10/Blueprint-to-Empower-Workers.pdf>
- Lerner, B. (2016). The custodians. *The New Yorker*. Retrieved from <http://www.newyorker.com/magazine/2016/01/11/the-custodians-onward-and-upward-with-the-arts-ben-lerner>

- Lobenstine, L., & Bailey, K. (2014). *Redlining the adjacent possible: Youth and communities of color face the (not) new future of (not) work* (Open Society Foundation position paper). Retrieved from <http://static.opensocietyfoundations.org/misc/future-of-work/the-informal-economy-and-the-evolving-hustle.pdf>
- Lomas, N. (2016). Uber appoints former EC VP Neelie Kroes to its public policy board. *TechnCrunch*. Retrieved from <https://techcrunch.com/2016/05/06/uber-appoints-former-ec-vp-neelie-kroes-to-its-public-policy-board/>
- Mahmud, T. (2012). Debt and discipline. *American Quarterly*, 64(3), 469–494.
- Mbembe, J. A. (2004). Aesthetics of superfluity. *Public Culture*, 16(3), 373–405.
- McKittrick, K. (2013). Plantation futures. *Small Axe*, 17(3), 1–15.
- Mirani, L. (2014). The secret to the Uber economy is wealth inequality. *Quartz*. Retrieved from <http://qz.com/312537/the-secret-to-the-uber-economy-is-wealth-inequality/>
- Morozov, E. (2014). *To save everything, click here: The folly of technological solutionism*. New York, NY: Public Affairs.
- Moten, F., & Harney, S. (2013). *The undercommons: Fugitive planning and black study*. New York, NY: Minor Compositions.
- Neff, G. (2012). *Venture labor: Work and the burden of risk in innovative industries*. Cambridge, MA: MIT Press.
- O'Donovan, C. (2016). If most of your income comes from on-demand work, you're probably a racial minority. *Buzzfeed News*. Retrieved from https://www.buzzfeed.com/carolineodonovan/if-most-of-your-income-comes-from-on-demand-work-youre-proba?utm_term=.torj7GGz3#.rhw4P88Le
- Parks, L. (2012). Technostruggles and the satellite dish: A populist approach to infrastructure. In G. Bolin (Ed.), *Cultural technologies: The shaping of culture in media and society* (pp. 64–84). London: Routledge.
- Pateman, C. (1988). *The sexual contract*. Cambridge: Polity.
- Peck, J., & Theodore, N. (2012). Politicizing contingent work: Countering neoliberal labor market regulation ... from the bottom up? *South Atlantic Quarterly*, 111(4), 741–761.
- Peck, J., & Theodore, N. (2013). Selling flexibility: Temporary staffing in a volatile economy. In J. Fudge & K. Strauss (Eds.), *Temporary work, agencies and unfree labour: Insecurity in the new world of work* (pp. 26–47). London: Routledge.
- Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode*, 34(3), 380–404.
- Povinelli, E. A. (2014). Geontologies of the otherwise. *Cultural Anthropology Fieldsights*. Retrieved from <https://culanth.org/fieldsights/465-geontologies-of-the-otherwise>
- Rogers, B. (2015). Social costs of Uber. *The University of Chicago Law Review Dialogue*, 82(85), 85–102.
- Rogers, B. (2016). Employment rights in the platform economy: Getting back to basics. *Harvard Law & Policy Review*, 10, 479–520.
- Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal of Communication*, 10, 3758–3784.
- Rossiter, N. (2015). Coded vanilla: Logistical media and the determination of action. *South Atlantic Quarterly*, 114(1), 135–152.
- Said, C. (2015). Uber, Lyft, Airbnb harness users to lobby lawmakers for them. *SFGate*. Retrieved from <http://www.sfgate.com/business/article/Uber-Lyft-Airbnb-harness-users-to-lobby-6005562.php>
- Sassen, S. (2002). Global cities and survival circuits. In B. Ehrenreich & A. Hochschild (Eds.), *Global woman: Nannies, maids, and sex workers in the new economy* (pp. 254–274). New York, NY: Henry Holt.
- Scholz, T., & Schneider, N. (2016). *Ours to hack and to own: The rise of platform cooperativism, a new vision for the future of work and a fairer internet*. New York, NY: OR Books.
- Singer, N. (2014). In the sharing economy, workers find both freedom and uncertainty. *The New York Times*. Retrieved from http://www.nytimes.com/2014/08/17/technology/in-the-sharing-economy-workers-find-both-freedom-and-uncertainty.html?_r=0

- Smith, A. (2016). *Gig work, online selling and home-sharing* (Pew Research Center report). Retrieved from <http://www.pewinternet.org/2016/11/17/gig-work-online-selling-and-home-sharing/>
- Starner, T. (2015). Has 'workforce-as-a-service' arrived? *HR Dive*. Retrieved from <http://www.hrdiver.com/news/has-workforce-as-a-service-arrived/402237/>
- Tomassetti, J. (2016, June). *It's none of our business: The postindustrial corporation and the guy with a car as entrepreneur*. Paper presented at the meeting of the Society for the Advancement of Socio-Economics, Berkeley, CA.
- Tyner, J. A. (2013). Population geography I: Surplus populations. *Progress in Human Geography*, 37(5), 701–711.
- Van Alstyne, M. W., Parker, G. G., & Choudary, S. P. (2016). Pipelines, platforms, and the new rules of strategy. *Harvard Business Review*. Retrieved from <https://hbr.org/2016/04/pipelines-platforms-and-the-new-rules-of-strategy>
- Van Doorn, N. (2014). The neoliberal subject of value: Measuring human capital in information economies. *Cultural Politics*, 10(3), 354–375.
- Wilderson, F., III. (2003). Gramsci's black Marx: Whither the slave in civil society? *Social Identities*, 9(2), 225–240.
- Yeung, K. (2016). TaskRabbit's app update focuses on getting tasks done in under 90 minutes. *VentureBeat*. Retrieved from <http://venturebeat.com/2016/03/01/taskrabbits-app-update-focuses-on-getting-tasks-done-in-under-90-minutes/>
- Young, B. (2001). The 'mistress' and the 'maid' in the globalized economy. *Socialist Register*, 37, 315–327.