

Necrocapitalism in the Gig Economy: The Case of Platform Food Couriers in Australia

Will Orr

Annenberg School for Communication and Journalism, University of Southern California, Los
Angeles, CA, USA and
Justice and Technoscience Lab, School of Regulation and Global Governance, Australian
National University, Canberra, ACT Australia;
orrw@usc.edu

Kathryn Henne

Justice and Technoscience Lab, School of Regulation and Global Governance, Australian National University, Canberra, ACT Australia and College of Health Solutions, Arizona State University, Tempe, AZ, USA; kathryn.henne@anu.edu.au

Ashlin Lee

Justice and Technoscience Lab, School of Regulation and Global Governance, Australian National University, Canberra, ACT Australia and Environmental Informatics Group, CSIRO, Canberra, ACT, Australia; ashlin.lee@csiro.au

Jenna Imad Harb

Justice and Technoscience Lab, School of Regulation and Global Governance, Australian National University, Canberra, ACT Australia; jenna.harb@anu.edu.au

Franz Carneiro Alphonso

Justice and Technoscience Lab, School of Regulation and Global Governance, Australian National University, Canberra, ACT Australia; franz.carneiroalphonso@anu.edu.au

Abstract: Although recent deaths of multiple couriers on the road have raised awareness of the dangers of on-demand food delivery, there remains limited government regulation of the industry in many jurisdictions. In this article, we argue that the labour conditions of platform couriers in Australia constitute a case of *necrocapitalism* (Banerjee), a contemporary form of accumulation through which organisational structures harness the power of debilitation and death for economic gain. After contextualising food delivery within the Australian gig economy, our analysis underscores how necropower operates through courier labour. We illustrate three dimensions: how this form of labour entails corporeal risks and harms; how these harms are heightened by platform infrastructures; and how strategic regulatory inaction maintains necropolitical orders. The

article concludes with a reflection on how this contemporary example of necrocapitalism illuminates intersecting vectors of domination underpinning the logics and practices of platform governance.

Keywords: necropolitics, gig economy, domination, labour, platforms, regulation

Introduction

On 24 September 2020, a car in Sydney's inner suburbs struck Dede Fredy while he was working as an Uber Eats courier. He suffered a brain injury and died a few days later in the hospital. Fredy had migrated to Australia in 2019 from Indonesia, where he had a wife and a young son, whom he would regularly send a proportion of his earnings to support. His death was the first of five reported deaths of platform food delivery couriers within a two-month period in Australia (Om et al. 2021). Like Fredy, these couriers, all of whom were migrants to Australia, worked for various app-based delivery services and were killed on separate occasions while fulfilling an order (Novak 2020). In response, many food delivery companies denied responsibility and resisted calls to implement reforms aimed at preventing future tragedies (Butler 2021). In fact, Uber Eats did not report the death of one of its couriers, evincing how couriers are arguably expendable labour for these companies (Begley 2021).

It is not just platform companies that resist stronger regulation of the food delivery sector. Governments, too, are hesitant to introduce holistic responses targeting platforms. For example, the New South Wales (NSW) Government's recent report on the work health and safety of food couriers (Convery et al. 2020) suggests individual risk prevention activities to promote gig economy worker safety. It proposes "increasing participation in safety training at onboarding" and "alter [ing] the order acceptance process to minimise the risk of phone distraction" (Convery et al. 2020:26). As such, the recommendations frame couriers' safety as their own responsibility, embracing responsibilisation, a technique of governmentality that shifts culpability and blame from companies by "attributing risk to marginalised groups" (Mythen and Walklate 2008:229). In other words, couriers are rendered culpable for their own deaths rather than platforms and the inequities of gig economy labour.

In this article, we examine how the deaths of several food delivery couriers in Australia point to the risks and insecurities of their work and the devaluation of their labour and lives. As others observe, the conditions of gig economy labour are coercive (Richardson 2020), degenerative (Wood et al. 2019), and insecure (Malin and Chandler 2017). They also reflect wider economic, gendered, and racial inequities characteristic of service work (Shade 2018; van Doorn 2017). The on-demand food delivery market requires workers to manage intersecting social, economic, legal, organisational, and technological pressures as they navigate platforms to perform work. Here, we illustrate how the value of these workers' labour becomes inextricably linked to their capacity to be injured, neglected, and dispossessed—that is, in a biopolitical sense, to *let die*.

To do so, we draw on insights gleaned through an analysis of the regulatory conditions surrounding courier deaths and a larger qualitative study on shifting work conditions during the pandemic in Australia. During our research on how people from different backgrounds adapted to COVID-19 restrictions, interviews revealed striking distinctions in lived experience: While many middle-class participants conveyed a reliance on food couriers to manage long periods of lockdown, interviewees in more precarious situations, particularly international students and other migrants, conveyed a strong sense of abandonment, disregard by government, and risk as they navigated limited options for generating income. Courier work emerged as one of their few prospects. Consistent with the structures of silence that pervade this industry, limited data about courier deaths, injuries, and experiences have been recorded or made public (Ross 2019). Thus, we shifted our emphasis to capture more data on their perspectives and carried out a critical content analysis of news media and government documents on platform food delivery work to investigate how different actors framed this labour and its value. Our analysis yields clear tensions in how different workers' bodies are valued, with courier degradation operating through racialised and socio-economic fault lines.²

Building on scholarship attentive to the biopolitical implications of the platform economy (e.g. Gregory and Sadowski 2021; Walker et al. 2021), we examine how the documented working conditions of platform food couriers bring "biopolitics and necropolitics into crisis", as their bodies "are primed to live *through* his or her dying" (Puar 2007:157–158). As other geographers observe, this form of platform work is predicated on the expendability of couriers' bodies (Bissell 2022). We extend this observation by exploring how such labour is etched and shaped by what Bobby Banerjee (2008) describes as *necrocapitalism*, a form of capital accumulation through which organisational structures harness the power of debility and death for economic gain. A focus on necropolitics, as Achille Mbembe (2003) contends, reveals that states of suffering are not simply manifestations of market actions; they reflect the dispossession of rights and liberties.

Our analysis examines how necropower sustains structural vulnerability through practices of capital accumulation, attending to their entanglement with interlocking systems of oppression. Like scholarship on racial capitalism, our research scrutinises how racism has been central to capitalist accumulation (Robinson 2000), particularly, as other geographers acknowledge, how "capital profits from variegated landscapes of difference" (Inwood et al. 2021:1084). This Australian case study deepens emergent insights into how digital systems can instantiate and extend racial capitalism by exploring how platform technologies exercise a distinct form of sovereign power (Henne et al. 2021). In the pages that follow, we begin by situating the deaths of food delivery couriers within the wider landscape of gig economy work in Australia. We then outline key tenets of necropolitics informing this article, acknowledging that the exercise of necropower entails a spectrum of debilitation that includes, but is not limited to, death. Three parts comprise our analysis of how necropower operates vis-à-vis labour conditions: how corporeal harms are inherent to this work; how these harms are heightened

by platform infrastructure; and how strategic regulatory inaction maintains these necropolitical orders. We conclude by reflecting on how necrocapitalist analysis aids in unveiling underlying logics of platform governance and their connections to interlocking systems of domination. In doing so, this article responds to calls for critical geographers to develop an "intersectional conception of capitalism in which its deeply racialised nature is fully recognised" (Pulido 2016:1) and to query how capitalism enshrines racial hierarchies of those considered "human" (Gilmore 2007).

Precarity and Servitude in Australian Platform-Based Food Delivery

Understanding how necropower operates requires contextualising the deaths of food couriers within broader power disparities between workers and other stakeholders in Australia's platform economy. Frances Flanagan (2018) explains that while the Australian platform economy resembles forms of domination associated with domestic servitude, there are key distinctions—namely that gig economy workers do not serve a single master. Rather, these workers occupy a regime of "structural domination" in which their servitude is facilitated by "a vast multiplicity of potential 'masters' who are brought together within a common, economised matrix founded on the private laws of contract, tort, and property" (Flanagan 2018:71). Platform food couriers are situated at the intersection of three relations of servitude: to customers that provide demand; to restaurants that provide supply; and to platforms that facilitate transactions. Each delivery job brings a new set of "masters" into relation, with couriers positioned centrally among the plurality of people caught in relations of servitude. Dynamics between workers can be volatile, as couriers may establish dominance over one another (Bissell 2022). With one-in-ten riders identifying as women, gendered marginalisation is a core feature of this male-dominated industry (Transport Workers' Union 2020b).

While contemporary capitalism both contributes to relations of servitude and structural domination (van Doorn 2017), law aids in sustaining workers' economic precarity (Malin and Chandler 2017). Workers in Australia are classified as employees or contractors based on a common law test that considers stakeholder relationships, worker control, and autonomy (Forsyth 2020). Rather than being recognised as employees of corporations, couriers are framed as "delivery partners" or "self-employed contractors" (Uber Eats 2021). This labour status benefits platforms; they are not required to ensure government-mandated employee rights and protections, such as minimum pay, overtime pay, holiday pay, sick leave, and maternity leave (Zwick 2018). Estimates place the average hourly wage of platform couriers at \$10.42, which is well below the Australian minimum wage, with an average of \$322.15 of unpaid wages each week (Transport Workers' Union 2020a, 2020b). Couriers must finance their own vehicles, helmets, regular maintenance, and worker insurance, which are legal requirements for their work (Uber Eats 2021). The marketisation of labour without traditional employment protections contributes to conditions in which workers are easily exploited,

terminated, and replaced (Richardson 2020; Zwick 2018). In sum, workers' legal status functions to solidify endemic economic precarity.

Racialised logics are embedded within gig economy work relations. While the violence of Australian racism has been well documented in relation to the killing and subjugation of First Nations peoples (Anderson and Perrin 2008), Australian policies targeting migrants have also bolstered white supremacy (Bonds and Inwood 2016). As a legacy of the White Australia immigration policy, which sought to curtail non-European migration and officially ended in 1973, many migrants still experience limited rights, with notable restrictions placed on work permits. The proliferation of temporary working visas has eroded migrant workers' bargaining power and made them particularly vulnerable to exploitation and precarity (Wright and Clibborn 2020). As of 2018, Asian migrants made up close to 70% of all temporary visa holders in Australia (McDonald 2019). These migrants have come to occupy many jobs in industries with weak labour protections, as epitomised by the gig economy (Zwick 2018). Under temporary work restrictions, workers face deportation two months after the termination of their employment if they do not find another sponsor (Wright and Clibborn 2020). Indeed, threequarters of surveyed food delivery workers in Australia are temporary visa holders, with less than 10% of couriers reporting Australian citizenship (Transport Workers' Union 2020b). Further, the fractured landscape of Australian unions has limited their effectiveness to organise in response to precarious work (Barratt et al. 2020).

The prevalence of migrant workers in this industry reflects the historically racialised nature of service work in settler-colonial states such as Australia (see Anderson 2000). While scholarly examinations of the gig economy have interrogated the poor working conditions of platform workers, they have not yet explored how interlocking systems of oppression constitute the economic, racial, and structural features of their domination. As Ruth Wilson Gilmore (2007:28) explains, racism is "the state-sanctioned or extralegal production and exploitation of group-differentiated vulnerability to premature death". In other words, racism, as a system, is necropolitical. Our examination explores how the conditions of food courier labour reflect this proclivity toward death through engagement with platforms.

Necropower in Contemporary Capitalism

Scholars acknowledge the gig economy enables and extends forms of biopolitical governance through digital means (Walker et al. 2021). Biopower is intertwined with the expansion of capitalism through "the controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes" (Foucault 1978:141). Although biopower may operate in optimising and prolonging the health of individuals and populations, many bodies exist in "spaces of legal and spatial exceptions" where they are not recognised as having political rights or life-affirming protections that others enjoy (Ahmetbeyzade 2008:188). Their existence within this state of exception evinces the sovereign's capacity to determine "who is disposable and who is not"

(Mbembe 2019:80). This status, which Giorgio Agamben (1998) refers to as *bare life*, marks the bodies that can be killed with impunity.

Foucauldian explanations of biopolitics have been criticised for framing death as "a byproduct, a secondary effect of the primary aim and efforts of those cultivating or being cultivated for life" (Puar 2007:32). In contrast, as Jasbir Puar (2007:33) argues, the analysis of necropolitics "foregrounds death decoupled from the project of living—a direct relation to killing". While physical death may be an end of necropower, necropolitics operates beyond the act of killing; certain subjects are valued precisely because their bodies can be devalued and debilitated. Consider, for example, how Mbembe (2003:21) explains the production of "death-in-life" as central to spaces of exception. It cultivates power through exploitation, as exemplified by apartheid systems, colonial occupation, and plantation economies. For Mbembe (2003:21), the slave exemplifies this state of being; they are "kept alive but in a state of injury", experiencing a "triple loss: loss of a 'home', loss of rights over his or her body, and loss of political status". They exist in conditions predicated on the disavowal of their "belonging and autonomy" (Gilbert and Ponder 2013:407). Their labour serves to optimise others' lives. In this case, relations of servitude debilitate food couriers for customer satisfaction and corporate profit.

Contemporary necropolitical agendas underpin dynamics often framed as the free market (Banerjee 2008). Accordingly, the market becomes an arbiter of death, with necroeconomics reflecting the monetary value placed on certain lives and livelihoods (Montag 2005). These capitalist arrangements position certain populations and types of labour as not simply devalued; they are "excess labour, redundant, socially useless, economically unviable, unemployable, or simply put, social excrement" (Haskaj 2018:1155). As Fatmir Haskaj (2018:1148) argues, cohorts of persons become usable and disposable for the vitality of capitalist systems, "valued only in their negation". Their devaluation fosters what Jin-kyung Lee (2010:6) defines as necropolitical labour, which has worth precisely because it is entangled with "the possibility of death"—for example, enlisted military service. The bodies that sustain necroeconomic orders often embody racialised class oppression and are unable to access resources necessary for maintaining robust livelihoods (Banerjee 2008). Accordingly, the food courier industry captures how necropolitics and racial capitalism become inextricably intertwined.

The continued extraction of value from high-risk labour carried out by bodies that can be disposed of, replaced, or killed reflect not only these "death-in-life" market logics, but also the state's tacit endorsement of them (Mbembe 2003:21). Others emphasise how necropolitics manifests through passivity and calculated blindness (Davies et al. 2017), thriving through cultures of "epistemic silence, or wilful ignorance" (Hatch 2019:24). Anthony Hatch (2019), for instance, draws attention to the structures of silence that pervade the US carceral system's use of psychotropic drugs for population control. The gig economy similarly produces cultures of silence around exploitative working conditions, with governments actively contributing to necropolitics. Appearing blind and ignorant, deliberate government *in*action maintains conditions of domination by failing to regulate conditions despite evidence of oppression (Davies et al. 2017). In the remaining

pages, we explore how these dynamics coalesce around the recent deaths of Australian food couriers.

Corporeal Harms Inherent Within the Necroeconomics of Food Delivery

Corporeal harms associated with food delivery labour are an observable manifestation of necropower. Necropolitical conditions of platform couriers manifest, most literally, through the physical injury and killing of food couriers. They also constitutively reflect how workers' subjectivities take shape in their physical contexts (Bissell 2022). External forces become inscribed in their bodies, their affect, and their capacity to be affected (Bissell 2022). Puar (2017) describes these relationships as *corporeal assemblages*. Her framing underscores "bodies as malleable composites of parts, affects, compartmentalised capacities and debilities", which become sites for violence, injury, and suffering under capitalistic conditions (Puar 2017:50).

Recent courier deaths exemplify the corporeal risks of this labour. As a condition of food delivery labour, workers are exposed to situations that often drive them closer to debilitation. Vehicle collision is the most common form of workplace death in Australia, accounting for 43% of all workplace fatalities in 2019 (Safe Work Australia 2020). Platform couriers must navigate the mercurial and often dangerous flows of urban traffic on a regular basis. Often under time pressures and geographic constraints, they frequently use highly mobile vehicles such as bicycles and motorised scooters (Convery et al. 2020), which provide little protection in the event of a collision. Serious injury is a grave concern. Approximately one-in-three couriers report sustaining injuries on the job (Transport Workers' Union 2020a) such as fractured bones, some resulting in permanent impairment (McKinnon 2021). Without financial compensation or sick leave, many couriers continue to work while injured to financially sustain themselves (McKinnon 2021). Over two-thirds of couriers reported fearing the possibility of being seriously hurt or killed while working (Transport Workers' Union 2021b), highlighting the affective burden of these physical risks (Bissell 2022). The possibility of debilitation is necessary to meet the market logics of capital accumulation and profit maximisation central to platform capitalism (Tyner 2019). As couriers accept these necropolitical risks, they are often disposable and seemingly interchangeable, as any one courier could deliver any one order (Richardson 2020). Accumulating capital for corporations, the intrinsic value of couriers comes not from their individual skills, but from their willingness to do labour that puts them at risk of debilitation. Couriers come to bear the economic brunt of their injuries while platforms' bottom line remains largely unscathed.

Couriers' labour nourishes the lives of the customers they serve. These customer-servant relations demonstrate a duality between life maximisation and debilitation: while couriers' work may sustain customers' wellbeing, they do so at the risk of seriously injuring themselves. This dynamic became particularly pronounced during the COVID-19 pandemic. With people encouraged, and even mandated, to remain home to stay safe, average customer spending on Uber Eats

more than tripled from pre-pandemic levels (Accenture 2021). Despite stay-athome orders in place around Australia, couriers were classified as essential workers, meaning they were not subject to movement restrictions and could continue to deliver food to customers. To satisfy demand, more workers became enrolled in food delivery labour, with many of them being exposed to heightened risks over elongated shifts, including increased risk of COVID-19 exposure (Accenture 2021). Chow Khai Shien, a courier working for DoorDash, was killed three days before the end of Melbourne's lockdown (Zhou 2020), with the other four reported couriers killed in NSW around a similar time. Commentaries on these tragedies have acknowledged the deadly toll that the pandemic-fuelled food delivery boom has had on workers (Leeson 2021).

The distribution of these corporeal risks evinces their racialised contours. Indeed, each of the five couriers who were killed were migrants from nearby Asian countries (Om et al. 2021). For instance, Chow would regularly send money from his earnings home to his mother and sisters who were still in Malaysia. He did not complete his final order, which was flagged in the DoorDash system. Yet, Chow's body was not identified for two and a half days, and his death was unreported by DoorDash (Zhou 2020), with his family in Malaysia waiting for him to return their calls. Chow's case highlights the expendability of migrant couriers: as a foreign national without the protections afforded to citizens or employees, he could be forgotten without acknowledgement by the platform he worked for.

Accounting for the range of risks that couriers endure points to other necropolitical concerns. The degradation of health and wellbeing accelerates physical debilitation while they labour. Consider, for instance, the January 2020 bushfires that tore through much of Australia's east coast and engulfed cities in toxic levels of smoke. It is estimated that the number of deaths resulting from bushfire pollution was 13 times greater than the fatalities from the fires themselves (Johnson 2020). Indeed, pollution levels in major cities were deemed so hazardous that governments advised individuals to limit exposure to smoke, reduce outdoor physical exercise, and work from home where possible (Department of Health 2020). Food couriers, however, continued to work—and thus ride through smoke-affected landscapes, delivering meals to residents who were able to stay home. These workers did so despite often lacking access to meaningful protective equipment, such as facemasks. Instead, platforms provided them with weather information and alerts regarding potentially harmful air-quality (Yeo 2020). As such, couriers had to make complex calculations as they engaged platforms, trading their long-term vitality for short-term financial needs. They bore the risks associated with smoke inhalation, compromising vital bodily integrity in the pursuit of capital.

The dehumanising dimensions of platform economy work often manifest in explicitly corporeal ways. For example, couriers often cannot access basic sanitation amenities available in the restaurants they serve (Leon 2021). Half of surveyed NSW couriers reported difficulties accessing restroom facilities while they worked (Convery et al. 2020). Research elsewhere has documented workers resorting to degrading practices, such as having to discreetly "pee in the bottle behind the stairways of buildings after delivering an order" or "pee in the street

basically like a dog" (Leon 2021). These inhumane standards reflect a form of subjugation in which "the besieged body ... is transformed into a mere thing, malleable matter" (Mbembe 2003:37). In fact, the recognition of dignified and sanitary urination as a human right has become a key gig economy worker demand (Klippenstein 2021).

The prospect of bodily harm while carrying out platform delivery labour reveals additional necropolitical dimensions. Couriers have been victims of attacks that reinforce their social subordination, with emotional consequences that can include fear and anxiety of carrying out this work (Walcott 2020). At each end of the food delivery process, delivery workers face the possibility of being verbally degraded. Almost a third of surveyed NSW couriers reported experiencing verbal abuse by restaurant staff, while 37% reported verbal abuse from customers (Convery et al. 2020). Other acts of degradation are not uncommon. Delivery drivers have reported being targeted by disgruntled customers, including being sprayed with a garden hose (Ayling 2020). The violence of these altercations can turn brutal, as reports of attacks and robberies of food delivery drivers are not uncommon (Cunningham 2019).

Migrant couriers have been subjects to racial targeting (Beers 2019; Olle 2020), a set of concerns exacerbated by heightened anti-Asian sentiments during the COVID-19 pandemic (Power 2020). Such attacks not only heighten awareness of the bodily risks associated with courier labour, but they also contribute to a fear of victimisation—for example, in couriers' risk assessments of working late at night or within dangerous neighbourhoods (Leich 2019). These fears are particularly acute among women couriers who experience higher rates of sexual assault (Walcott 2020).3 This observation reflects broad trends of sexual targeting of female gig workers in Australia, with nearly half of surveyed women drivers experiencing sexual harassment (Transport Workers' Union 2021b). Though heightened affective states such as fear are common, others have demonstrated that couriers often develop an acquired numbness to the forms of domination they experience as part of their working conditions (Bissell 2022). These experiences exemplify the psychological maiming of couriers "as slow but simultaneously intensive deathmaking" (Puar 2017:139). Thus, the affective burden of courier labour, including the fear of physical, verbal, and even sexual abuse, are distributed across gendered and racialised lines, compounding at their intersections.

The targeting of food couriers by restaurants, customers, and the public is symptomatic of entrenched subordination characteristic of necropower. Couriers have noted that their branded uniforms, large heat bags, and motorised scooters make them hypervisible (Gregory 2020). While visibility is a commonly proposed solution to the problem of courier road safety (Rabe 2021a), it also makes them identifiable targets and more prone to attacks (Gregory 2020). According to Stephen Walcott (2020), the theft of couriers' vehicles has become prevalent. Couriers not only fear the physical violence of these attacks, but also a loss of their livelihoods, which is compounded economic subjugation (Walcott 2020). In Australia, there are accounts of couriers being attacked for their delivery bags and phones (e.g. ABC News 2021; Chain 2020). Others trace how the lack of support provided by platforms in these instances exacerbates gig economy workers' fears,

with some couriers reporting a two-week account suspension for reporting a crime (Walcott 2020). In short, they are sanctioned for being the victims of crime. They are subject to violence without being recognised as worthy of protection. These distinctly necropolitical dynamics are etched and shaped by interlocking systems of domination, inequality, and servitude.

Platform Infrastructure Exacerbating Necropolitical Conditions

Necropower is exercised directly through the platforms that couriers must interact with and rely on for work, as platforms retain absolute control over the digital infrastructure of food delivery. As Mbembe (2003:22) observes, "this power over the life of another takes the form of commerce: a person's humanity is dissolved to the point where it becomes possible that the slave's life is possessed by the master". While food delivery itself does not amount to slavery, it facilitates unequal power dynamics between corporations and couriers in which the former retains authority over the geographic movement of the latter—a foundational dimension of necrogovernance. In other words, platform capitalism affords control of couriers, even as corporations espouse worker flexibility and autonomy (Richardson 2020). Necropower operates through platform infrastructures in ways that contribute to the dehumanisation of couriers for capital extraction.

App design features interface with couriers as they engage with them, dehumanising couriers by upholding their "structural domination" by multiple masters (Flanagan 2018:71). These affordances⁴ also exploit couriers' subordinate status to exacerbate the corporeal risks associated with their work, thus increasing the probability of death and debilitation. Notably, corporations frame their platforms as licensed to couriers to use, framing couriers as independent contractors that are a class of app users (Uber Eats 2021). However, couriers' standards of treatment sit well below those of other users, such as customers and restaurants, reflecting embedded layers of servitude embedded (Flanagan 2018).

Consider how couriers' accounts of being unexpectedly terminated for failing to comply with community standards. Amita Gupta, for example, had her Uber Eats account suspended and later terminated after allegedly arriving to an order ten minutes late (Chau 2019). Other workers have noted the lack of support for their grievances; there is no direct way to contact a platform representative and in-app complaints are met with automated replies (Walker et al. 2021). This unresponsive complaint process distances workers from the platforms they serve, with the pursuit of claims requiring extensive time and emotional commitment. Abrupt contract termination has also been used to entrench couriers' state of injury as account deactivation is used to dissuade workers from organising (Tran and Sokas 2017), or inquiring about safety, wages, and working conditions (Walcott 2020). Platforms' disciplinary techniques thus encourage couriers to accept their substandard work conditions, creating a compliant labour force. The "rules of the game" are set by the platforms, yet they remain opaque and uncontestable by couriers (Flanagan 2018). As such, platforms retain the power over couriers to

dictate the terms of their work, while disciplinary techniques encourage couriers to remain compliant.

Customers, too, exercise disciplinary power through affordances that implicate couriers' livelihoods. Consider, for example, the use of ratings. At the end of each transaction, many platforms, such as Uber Eats, encourage customers to rate their courier's performance. The burden of maintaining these ratings is a source of fear and anxiety for workers as even a slight drop in reputation scores can result in fare reductions, reduced access to customers, and even profile termination (Jamil 2020). Furthermore, such ratings are also extremely hard to improve, with customers having significantly more power to offer both quantitative (ratings) and qualitative (written feedback) assessments of the drivers. Couriers are pushed to satisfy customers' expectations for fear of a negative review (Veen et al. 2020). Necropolitical contours come to the fore when considering how these transactions reflect entrenched relations of servitude: attending to a multiplicity of customers, most of whom have little visibility of the range of delivery demands, couriers must often take risks to complete various orders—often at the same time —as a condition of retaining the ability to do so in the future. Their debilitation is not just a status, but a state controlled by customers vis-à-vis apps. Analyses of Australian customer attitudes indicate they deliberately overlook these negative outcomes, upholding the necroeconomy through wilful ignorance (Healy et al. 2020).

Platforms aid in enacting a heightened atmosphere of obsequiousness and domination that couriers must navigate. Through a form of algorithmic management, software tools and computational instruments are central to decisions previously made by human managers (Lee et al. 2015). These algorithmic tools manage the geographically and temporally diverse workforce that makes up the on-demand labour sector (Chen 2018; Veen et al. 2020), enabling the largely autonomous and scalable workflows of on-demand work. Because drivers are hypothetically free agents who can choose when and where they work, platforms' use of algorithmic systems ensures an appropriate supply and quality of labour is sufficient for their needs (Richardson 2020). To maintain a workforce available to meet demand, platforms encourage the prolonged engagement of couriers through algorithmic management techniques. This not only secures a workforce available for accruing capital, but also has dangerous—and at times, deadly—implications with fatigue being a major concern reported by couriers (Convery et al. 2020).

Platforms experiment with ways to compel drivers to maximise outputs at minimal cost, through customised incentive schedules that "hook" drivers on a platform (Shalini and Bathini 2021). Techniques include monetary incentives when demand is high as well as bonuses for completing a certain number of orders in a designated time frame (Rosenblat 2018). Richardson (2020:629) describes how "rider statistics" are used to give some drivers "priority access" to meals to be delivered. These statistics include the proportion of attended deliveries to accepted deliveries; late cancellations of deliveries; percentage of super-peak sessions (times of high demand on delivery drivers, often occurring on weekends and evenings). These ratings are designed to maximise the availability of workers

in periods of demand who provide reliable service for the platform and its brand. Conversely, the algorithmic evaluation of humans often constitutes demeaning and dehumanising experiences (Lee 2018), thus compounding the affective burden of the job. Working together, these algorithmic incentives prey upon the financial precarity of couriers to encourage continual engagement with platforms. Subsequent worker fatigue exacerbates the physical and affective strain of couriers, heightening their vulnerability to death and debilitation.

Platform affordances further accentuate couriers' vulnerability by encouraging unsafe practices to expedite delivery. As couriers are paid per delivery, workers are encouraged to complete as many trips as possible. This payment structure creates labour with "one of the highest risks per kilometre travelled" (Ross 2019), promoting unsafe practices for faster delivery such as running red lights, riding on footpaths, or against the flow of traffic (Convery et al. 2020). Couriers also have a reputational incentive for prompt delivery. Platforms often use data from algorithmic management systems to provide numerical estimates and infographics for their customers. This includes real-time tracking of couriers (such as a GPS map allowing users to surveil workers at each step of the delivery), as well as an estimated time of delivery. While these afford a positive customer experience, providing a sense of connection, immediacy, and control over the experience of ordering food, they also pressure couriers to rush to satisfy customers' expectations and maintain their positive worker statistics (Veen et al. 2020). Furthermore, calculated delivery times are often unrealistic as they may not account for factors such as traffic and parking, thus increasing the likelihood of dissatisfied customers (Convery et al. 2020). By algorithmically constructing this drive for speed, platforms heighten the physical and affective vulnerability of their workforce, propelling them closer to premature death and debilitation.

Apps also provide a set of affordances that erode the mental and social health of couriers. Kathleen Griesbach et al.'s (2019) participants highlight how the shopping delivery platform, Instacart, has removed the option to decline orders, and instead has developed an uninterruptible four-minute alarm when receiving an order. Couriers must wait for the alarm to subside or accept the order. Repeated failures to answer the call to work logs a user out of the system, potentially losing them a coveted "early access" status for shifts. This creates what Griesbach et al. (2019:2) call "algorithmic despotism", as the platforms arbitrarily demand greater control over a courier's time and work activities (see also Walker et al. 2021).

This despotism renders workers as disposable labour, whose value to the platform is to maintain the vitality of both the platform's operation and its customers' consumption habits. The platform can unexpectedly intrude into the lives of couriers to call them to work, in a way that is not comparable to other, non-platform work environments. In doing so, the conditions of the gig economy can fuel a sense of alienation, loneliness, and powerlessness amongst platform workers, including poorer psychosocial and mental health outcomes, as algorithmic management distorts the social contract of work (Glavin et al. 2021; Walker et al. 2021). Thus, necropower as the "generalised instrumentalisation of human

existence" (Mbembe 2003:14) operates through delivery platforms, ensuring couriers are driven to carry out work through coercive systems design.

Sovereign Power Through Government Regulatory (In)Action

A third dimension of necropower within the Australian food delivery industry emerges through governments' failure to provide regulation that meaningfully supports the health and livelihoods of couriers. Instead, the Commonwealth and NSW governments have framed safety as a problem that can be managed through self-regulation. By encouraging self-regulation of the industry and individualised risk management by couriers, corporate costs are kept to a minimum. Here, we consider how government regulation is not simply ineffective at protecting the safety of couriers; it also enacts sovereign power by remaining intentionally passive in terms of protecting couriers. In doing so, it maintains market interests by ensuring a workforce that is "available for injury" (Puar 2017:81).

To illustrate, consider government narratives around couriers, which often present them as the source of their own vulnerability as well as the solution to it. Then NSW Minister for Better Regulation and Innovation, Kevin Anderson highlighted this perspective, stating: "We can no longer stand by while riders continue to place themselves and others at risk" (Rabe 2021a). Indeed, this self-reliant framing of personal safety has been enshrined in law. In June 2021, NSW introduced a series of laws that aim to improve the safety of couriers. Focusing on "education and compliance" these laws shift the burden of ensuring the safe operation of the industry onto couriers themselves (Rabe 2021a). These conditions exemplify what Peter Fleming (2017:693) refers to as "radical responsibilisation" of the gig economy "whereby responsibility for all the costs and benefits associated with being an economic actor are solely his or hers". In doing so, governments deflect calls to reform the exploitative sector. Governments' disavowal of accountability for couriers' safety thus legitimises the power imbalance between couriers and their multiple masters, enabling these structures of debilitation to go unchecked.

Disciplinary techniques deployed under the umbrella of courier safety contribute to sustaining a compliant and docile workforce. For example, NSW couriers are to be subjected to increased police scrutiny, with each rider given a unique police identification number so that transgressions can be tracked (Rabe 2021a). Riders who fail to comply with safe practices as determined by police will be fined (Rabe 2021a). Fines deplete the already scarce financial income that couriers rely upon, thereby entrenching financial precarity. To mitigate the financial pressures imposed by fines, 73% of couriers surveyed by the Transport Workers' Union of Australia (2021a) noted working more dangerously, including working longer hours and rushing to complete deliveries, underscoring the co-constitutive cycle of precarity and debility. By framing additional surveillance as a solution to worker debility, the most vulnerable bodies within the supply chain become monitored in ways that are likely to *increase* their exposure to risk and state-sanctioned violence.

This responsibilisation of couriers extends to the costs they bear as contractors who must pay to ensure their safety. As workers must provide their own equipment, the cost of safety can be too much for some, increasing their vulnerability to physical injury and the risk of non-compliance (Transport Workers' Union 2021a). Furthermore, though Australian citizens are eligible for state-funded healthcare in the event of a collision, migrant workers must finance their own medical expenses (Symington 2020). Couriers are therefore not only affected by industry-specific interventions, but also broader regulations that shape access to welfare thereby contributing inequality and the risky nature of work. In contrast, platform corporations' costs of regulation are kept to a relative minimum (Rabe 2021a). The costs borne by the vulnerable actors within this nexus of interlocking oppressions are generative precisely because of their necropolitical logics. Taken together, it becomes clear that government action not only supports cheap gig economy work, but also shifts risk to the actors who are the least equipped to manage them (McDermott et al. 2018).

The COVID-19 pandemic added new pressures to these dynamics, as couriers experienced compounding risks associated with their dual classification as essential and contingent workers. Labelling couriers as "essential" signified their labour as necessary for maintaining the nation throughout social and economic turbulence while legitimising their vulnerability to virus exposure. Through this label, governments legally enshrine couriers' access to work and the expectation to serve (and be dominated by) multiple masters. Despite the recognised value of this work and risks borne by couriers, migrant workers remain precluded from government provisions such as healthcare and income support (Symington 2020). Without this financial support, conditions of precarity and debility spread, with 59% of surveyed couriers commencing delivery work due to pandemicinduced financial strain and 31% increasing hours worked (Accenture 2021). The disregard of couriers' needs for healthcare and financial resources emerge in stark contrast to other government pandemic provisions, which allowed Australian citizens to remain indoors and, for the most part, financially secure. In doing so, government initiatives not only enabled couriers to maintain their relations of servitude, but also maximised customers' wellbeing while heightening couriers' vulnerability to injury and death.

These platform economy relations reflect a longer-term trend in which the Australian Government, at least since the 1980s, positions itself as a "market steward" that supports a business-friendly society (O'Keeffe 2019:109). It has granted platforms jurisdictional authority to oversee market-driven practices. Emphasising worker flexibility, platforms maintain couriers' contractor status, thereby avoiding requirements to provide employee benefits such as minimum wage and superannuation (Select Committee on Job Security 2021). Though contractors can hypothetically dispute their conditions through legal channels (albeit at significant costs), there are no meaningful penalties for unlawful terms in contracts and, consequently, no compelling reason for businesses to amend them (Victorian Government 2021).

The federal government facilitates the exercise of necropower by allowing platforms to circumvent regulations aimed at protecting workers from exploitation

and maltreatment. Despite formal inquiries suggesting the need to overhaul the gig economy to ensure worker rights, the government maintains that "regulation should not come at the cost of innovation and worker flexibility" (Forsyth 2020:290). Instead, platforms are framed as providing "positive disruption" to stagnant markets and as supporting innovation for economic growth (Koutsimpogiorgos et al. 2020:532). These arrangements reflect Foucault's (2008) observation that neoliberalism is not simply a market society, but one in which the principles of the market economy are projected onto and embodied by the project of governance.

Governments further defer responsibility by framing corporations as able to regulate themselves. Instead of imposing interventions into the gig economy, governments have encouraged platforms to implement their own solutions. For example, the NSW Government appointed a taskforce including representatives from platforms, couriers, unions, and restaurants to address the industry's safety problems (NSW Government 2021). Insisting that regulatory change was "beyond scope" (Rabe 2021b), the resulting Industry Action Plan consisted of platforms committing to improve courier safety by providing workers with more information, increasing courier surveillance, gamifying app affordances to improve safety practices, and introducing ergonomic heat bags (NSW Government 2021). Although seemingly proactive, these suggestions place regulatory burden onto couriers by targeting their individual behaviours rather than the structural forms of subjugation they experience. Indeed, courier and union representatives withdrew from this taskforce due to concerns about exploitation, limited worker benefits, lack of platform transparency, and the risk-inducing imperative for speed being "continuously silenced" (Rabe 2021b).

Contradictory framings of platform regulation divert accountability for the lives (and deaths) of couriers. Firstly, the federal government defers power to ensure the working standards of couriers to market logics of supply and demand. For example, when serving as Industrial Relations Minister, Christian Porter stated platforms have a commercial interest in caring for their workers: "those with the best reputation and policies that benefit workers will be more sought after as the workplace of choice" (Zhou 2020). This framing neglects the structures of precarity that underpin Australia's gig economy. In this case, couriers may not willingly accept exploitative and dangerous working conditions, but many are left without an alternative. Platforms, in contrast, argue that governments set standards of work. For instance, following the death of one of their workers, Xiaojun Chen, Hungry Panda denied responsibility by arguing that the NSW Parliament "set the rules around who was covered by workers' compensation and how much companies must pay" (Coë 2021). Government inaction thus enables disavowing accountability, leaving courier safety to market self-regulation aligned with capitalist logics.

In contrast to government rhetoric, self-regulation does not aim to improve the labour conditions of workers. Without enforceable standards, corporations can circumvent responsibilities. It is not surprising, then, that these actions are seen as "a purely promotional exercise ... to dissuade the state from imposing more robust forms of regulation upon them" (Rawling and Munton 2021:34). For

instance, amidst increasing media attention, Menulog announced a plan to move towards a traditional employment model, including unfair dismissal protections and minimum wage. Although seen as a win for labour, Menulog's actions propose the lowest possible award rate (\$20.33) for couriers, below that of both transportation and fast-food workers (Bonyhady 2021b). The company has also noted that they would not permanently switch to an employment model without a legal overhaul to erode employee provisions such as penalty rates which are deemed "unaffordable" (Bonyhady 2021a). The constitutive relationship between government and industry incentivises regulation that serves as a tool to protect corporate interests rather than courier safety. Through strategic inaction (Davies et al. 2017), governments distance themselves from their responsibility to improve couriers' working conditions while simultaneously protecting the interests of corporations. Governments enact sovereign power by intentionally maintaining and reproducing the necropolitical conditions of the sector.

Conclusion

This analysis illuminates how interlocking systems of domination coalesce as necropolitics by situating the recent deaths of platform food couriers within structures of domination and precarity. While critical observers draw attention to individual risks of gig economy labour, the lack of protection from companies, limited financial or medical support from governments, and the racialised dynamics of gig work, this analysis documents how these considerations are entangled in deeply biopolitical ways. Highlighting the proclivity towards debilitation and death as an overlooked structural feature of the gig economy, we trace how the violence of platforms cannot be separated from deep-seated logics of domination, servitude, and racial capitalism. We have mapped three dimensions of necropower to underscore how the pursuit of capital and customer satisfaction comes at the cost of couriers' health—and sometimes their lives. The risks borne by couriers reveal how necrocapitalism sustains a necessarily contingent and expendable labour force for the benefit of corporate revenue. The devaluation of couriers is essential, accentuated by their subservient position within the gig economy to customers, restaurants, and the platform infrastructure that facilitates transactions.

This focus on necropolitics aids in illustrating how interlocking systems of domination and oppression support the sustenance of the gig economy. In this case, couriers' social subordination, compounded by their migrant status, economic precarity, and racial subjugation, positions them as able to be dehumanised, injured, and attacked. Their debilitation is not merely a "by-product of social injustice and inequity"; it is "constitutive of the very mechanisms that enable certain populations to occupy the 'make live' vector" (Puar 2017:69).

In focusing on couriers' labour conditions, our aim has been to shed light on the constitutive logics of necrocapitalism, racialised difference, and their materialisation in practice. While platforms frame themselves as cheap alternatives to traditional market options, the costs of the gig economy persist—though in ways not borne by the companies that benefit from workers' labour. Despite visible victimisation and recent courier deaths, Australian governments' continued commitment

to industrial protection over courier wellbeing amounts to tacit approval of couriers' status as *bare life*. These necropolitical conditions reveal how intersecting vectors of domination contribute to certain bodies being deemed unworthy of protection even as their labour supports the livelihoods of others. These insights underscore the uneven experiences of urban geographies under racial capitalism as the production of "repressed topographies of cruelty" are normalised in the pursuit of capital (Mbembe 2003:40). While other geographic analyses have examined these concerns in particular situations, such as chronic pollution and suburban relocation (Davies 2018; Ortega 2020), this analysis offers a reminder that necropolitics permeates mundane facets of everyday life.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Endnotes

- 1 The initial study included interviews with 40 Australia-based participants carried out over the course of 18 months.
- 2 We carried out an abductive analysis, paying particular attention to how data pushed against theoretical assumptions in novel and unexpected ways (Timmermans and Tavory 2012). Given the embodied emphasis on labour conditions conveyed by participants and in reflections on courier work, biopolitics was a logical starting point; however, the diversity of perspectives revealed contours that more clearly aligned with the nexus between necropolitics and capitalism.
- 3 While there are insufficient data to confirm women couriers are inherently at a greater risk of being attacked, reports of sexual targeting have predominantly come from women (Transport Workers' Union 2021b), which reflects wider gender-based violence trends supported by empirical research.
- 4 Affordances refer to the qualities of artefacts that dynamically enable or constrain subjects' actions when accounting for the situation and the subject's attributes (see Davis 2020).

References

- ABC News (2021) Delivery driver hit with baseball bat, another punched in face in Adelaide attacks. *ABC News* 13 August https://www.abc.net.au/news/2021-08-14/delivery-drivers-attacked-in-suburban-adelaide/100377380 (last accessed 27 April 2022)
- Accenture (2021) "Making Delivery Work for Everyone." Report commissioned by Uber Australia and prepared by Accenture https://ubernewsroomapi.10upcdn.com/wp-content/uploads/2021/04/Accenture-Making-delivery-work-for-everyone-1-1.pdf (last accessed 3 September 2021)
- Agamben G (1998) Homo Sacer: Sovereign Power and Bare Life (trans D Heller-Roazen). Redwood City: Stanford University Press

- Ahmetbeyzade C (2008) Gendering necropolitics: The juridical-political sociality of honor killings in Turkey. *Journal of Human Rights* 7(3):187–206
- Anderson B (2000) Doing the Dirty Work? The Global Politics of Domestic Labour. London: Zed Books
- Anderson K and Perrin C (2008) How race became everything: Australia and polygenism. *Ethnic and Racial Studies* 31(5):962–990
- Ayling E (2020) Disgraceful moment customer drenches Menulog delivery driver with a garden hose because his order "arrived late"—then posts the footage on Facebook. *Daily Mail Australia* 4 September https://www.dailymail.co.uk/news/article-8694557/Customer-turns-garden-hose-Menulog-food-delivery-driver-order-arrived-late.html (last accessed 20 July 2021)
- Banerjee S B (2008) Necrocapitalism. Organization Studies 29(12):1541-1563
- Barratt T, Goods C and Veen A (2020) "I'm my own boss...": Active intermediation and "entrepreneurial" worker agency in the Australian gig-economy. *Environment and Planning A: Economy and Space* 52(8):1643–1661
- Beers L M (2019) Melbourne Uber Eats driver pulled from scooter and bashed. 7 News 24 November https://7news.com.au/news/crime/melbourne-ubereats-driver-pulled-from-scooter-and-bashed-c-573006 (last accessed 20 July 2021)
- Begley P (2021) Food delivery driver's death wasn't recognised by Uber Eats and his family are still fighting for the insurance. *ABC News* 25 June https://www.abc.net.au/news/2021-06-25/background-briefing-uber-eats-delivery-drivers-death/100239920 (last accessed 5 November 2021)
- Bissell D (2022) The anaesthetic politics of being unaffected: Embodying insecure digital platform labour. *Antipode* 54(1):86–105
- Bonds A and Inwood J (2016) Beyond white privilege: Geographies of white supremacy and settler colonialism. *Progress in Human Geography* 40(6):715–733
- Bonyhady N (2021a) Menulog reveals new pay deal to employ delivery riders. *The Sydney Morning Herald* 25 August https://www.smh.com.au/politics/federal/first-gig-economy-delivery-workers-employed-in-australia-20210629-p5855r.html (last accessed 1 December 2021)
- Bonyhady N (2021b) First gig economy delivery workers employed in Australia. *The Sydney Morning Herald* 30 June https://www.smh.com.au/politics/federal/menulog-reveals-new-pay-deal-to-employ-delivery-riders-20210825-p58lsv.html (last accessed 1 December 2021)
- Butler J (2021) Anthony Albanese wants government to call Uber Eats and force better conditions. *The News Daily* 25 February https://thenewdaily.com.au/news/2021/02/25/ubereats-working-conditions/ (last accessed 1 October 2021)
- Chain B (2020) Disturbing moment thug kicks an Uber Eats driver in the face before marching him to an ATM at knifepoint and stealing his scooter and delivery bag. *Daily Mail Australia* 2 June https://www.dailymail.co.uk/news/article-8381839/Uber-Eats-driver-kicked-face-robbed-thug-knife.html (last accessed 27 April 2022)
- Chau D (2019) Sacked Uber Eats worker's Fair Work Commission appeal could change the gig economy. *ABC News* 16 September https://www.abc.net.au/news/2019-09-16/ubereats-fwc-appeal-unfair-dismissal/11516808 (last accessed 3 September 2021)
- Chen J Y (2018) Technologies of control, communication, and calculation: Taxi drivers' labour in the platform economy. In P V Moore, M Upchurch and X Whittaker (eds) *Humans and Machines at Work* (pp. 231–252). Cham: Springer
- Coë C (2021) Chinese-language food delivery firm denies paying its Australian workers just \$3 a trip—as it comes under fire from the family of a driver killed on the job. *Daily Mail Australia* 24 February https://www.dailymail.co.uk/news/article-9297909/Hungry-Pandaraised-70million-pai-Australian-workers-2-894-workers-compensation.html (last accessed 3 November 2021)
- Convery E, Morse A, Fung B, Wodak S, Powell Z, Quinn V, Taylor M, Searle B and Vårhammar A (2020) "Work Health and Safety of Food Delivery Workers in the Gig Economy." Behavioural Insights Team, Macquarie University, and Centre for Work Health and Safety

https://www.centreforwhs.nsw.gov.au/knowledge-hub/work-health-and-safety-of-food-delivery-workers-in-the-gig-economy-report (last accessed 3 September 2021)

- Cunningham M (2019) Food delivery cyclist stabbed and robbed by three women. *The Age* 28 January https://www.theage.com.au/national/victoria/food-delivery-cyclist-stabbed-and-robbed-by-three-women-20190128-p50u5n.html (last accessed 20 July 2021)
- Davis J L (2020) How Artifacts Afford: The Power and Politics of Everyday Things. Cambridge: MIT Press
- Davies T (2018) Toxic space and time: Slow violence, necropolitics, and petrochemical pollution. *Annals of the American Association of Geographers* 108(6):1537–1553
- Davies T, Isakjee A and Dhesi S (2017) Violent inaction: The necropolitical experience of refugees in Europe. *Antipode* 49(5):1263–1284
- Department of Health (2020) "Bushfire Smoke—General Information Fact Sheet." Australian Federal Government https://www.health.gov.au/resources/publications/bushfiresmoke-general-information-fact-sheet (last accessed 20 July 2021)
- Flanagan F (2018) Theorizing the gig economy and home-based service work. *Journal of Industrial Relations* 61(1):57–78
- Fleming P (2017) The human capital hoax: Work, debt, and insecurity in the era of Uberization. *Organization Studies* 38(5):691–709
- Foucault M (1978) The History of Sexuality, Volume 1: An Introduction (trans R Hurley). New York: Pantheon
- Foucault M (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979* (trans G Burchell). London: Palgrave Macmillan
- Forsyth A (2020) Playing catch-up but falling short: Regulating work in the gig economy in Australia. *King's Law Journal* 31(2):287–300
- Gilbert E and Ponder C (2013) Between tragedy and farce: 9/11 compensation and the value of life and death. *Antipode* 46(2):404–425
- Gilmore R W (2007) Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California. Berkeley: University of California Press
- Glavin P, Bierman A and Schieman S (2021) Über-alienated: Powerless and alone in the gig economy. *Work and Occupations* 48(4):399–431
- Gregory K (2020) "My life is more valuable than this": Understanding risk among ondemand food couriers in Edinburgh. Work, Employment, and Society 35(2):316–331
- Gregory K and Sadowski J (2021) Biopolitical platforms: The perverse virtues of digital labor. *Journal of Cultural Economy* 14(6):662–674
- Griesbach K, Reich A, Elliott-Negri L and Milkman R (2019) Algorithmic control in platform food delivery work. *Socius 5* https://doi.org/10.1177%2F2378023119870041
- Hatch A R (2019) Silent Cells: The Secret Drugging of Captive America. Minneapolis: University of Minnesota Press
- Haskaj F (2018) From biopower to necroeconomies: Neoliberalism, biopower, and death economies. *Philosophy and Social Criticism* 44(10):1148–1168
- Healy J, Pekarek A and Vromen A (2020) Sceptics or supporters? Consumers' views of work in the gig economy. New Technology, Work, and Employment 35(1):1–19
- Henne K, Shelby R and Harb J I (2021) The datafication of #MeToo: Whiteness, racial capitalism, and anti-violence technologies. *Big Data and Society* 8(2) https://doi.org/10.1177%2F20539517211055898
- Inwood J F J, Brand A L and Quinn E A (2021) Racial capital, abolition, and a geographic argument for reparations. *Antipode* 53(4):1084–1103
- Jamil R (2020) Uber and the making of an algopticon: Insights from the daily life of Montreal drivers. *Capital and Class* 44(2):241–260
- Johnson F (2020) "EXHIBIT 2-002.001—DFJ.501.001.0001—Witness Statement—Associate Professor Fay Johnston." Royal Commission into National Natural Disaster Arrangements, Commonwealth of Australia https://naturaldisaster.royalcommission.gov.au/publications/exhibit-2-002001-dfj5010010001-witness-statement-associate-professor-fay-johnston (last accessed 3 September 2021)

- Klippenstein K (2021) Documents show Amazon is aware drivers pee in bottles and even defecate en route, despite company denial. *The Intercept* 25 March https://theintercept.com/2021/03/25/amazon-drivers-pee-bottles-union/ (last accessed 27 October 2021)
- Koutsimpogiorgos N, van Slageren J, Herrmann A M and Frenken K (2020) Conceptualizing the gig economy and its regulatory problems. *Policy and Internet* 12(4):525–545
- Lee J (2010) Service Economies: Militarism, Sex Work, and Migrant Labor in South Korea. Minneapolis: University of Minnesota Press
- Lee M K (2018) Understanding perception of algorithmic decisions: Fairness, trust, and emotion in response to algorithmic management. *Big Data and Society* 5(1) https://doi.org/10.1177%2F2053951718756684
- Lee M K, Kusbit D, Metsky E and Dabbish L (2015) Working with machines: The impact of algorithmic and data-driven management on human workers. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* https://doi.org/10.1145/2702123.2702548
- Leeson A (2021) Deaths in Australia highlight plight of delivery riders. *Yahoo News* 11 May https://sg.news.yahoo.com/deaths-australia-highlight-plight-delivery-032428796.html (last accessed 19 April 2022)
- Leich C (2019) Uber Eats delivery rider loses sight in eye after sickening gang attack in Perth suburbs. *PerthNow* 25 January https://www.perthnow.com.au/news/perth/ubereats-delivery-rider-loses-sight-in-eye-after-sickening-gang-attack-in-perth-suburbs-ng-b881085295z (last accessed 20 July 2021)
- Leon L F (2021) The labor battle for the right to pee. *The New Republic* 30 April https://newrepublic.com/article/162266/doordash-uber-eats-delivery-workers-bathrooms-employee-status (last accessed 20 July 2021)
- Malin B J and Chandler C (2017) Free to work anxiously: Splintering precarity among drivers for Uber and Lyft. Communication, Culture, and Critique 10(2):382–400
- Mbembe A (2003) Necropolitics (trans L Meintjes). Public Culture 15(1):11-40
- Mbembe A (2019) Necropolitics (trans S Corcoran). Durham: Duke University Press
- McDermott V, Henne K and Hayes J (2018) Shifting risk to the frontline: Case studies in different contract working environments. *Journal of Risk Research* 21(12):1502–1516
- McDonald P (2019) Migration to Australia: From Asian exclusion to Asian predominance. Revue européenne des migrations internationals 35(1/2):87–105
- McKinnon G (2021) Food delivery riders working through injuries to make "ends meat". Herald Sun 17 May https://www.heraldsun.com.au/leader/melbourne-city/food-delivery-riders-working-through-injuries-to-make-ends-meat/news-story/eead41dac04e95f6fb375ba27ad0410a (last accessed 4 November 2021)
- Montag W (2005) Necro-economics: Adam Smith and death in the life of the universal. *Radical Philosophy* 134:7–17
- Mythen G and Walklate S (2008) Terrorism, risk, and international security: The perils of asking "what if?" Security Dialogue 39(2/3):221–242
- Novak M (2020) Food delivery worker dies in Australia, becoming fifth gig economy death since September. *Gizmodo Australia* 24 November https://www.gizmodo.com. au/2020/11/food-delivery-worker-dies-in-australia-becoming-fifth-gig-economy-death-since-september/ (last accessed 3 September 2021)
- NSW Government (2021) "Working Together to Improve Food Delivery Rider Safety: Industry Action Plan 2021-2022." https://www.safework.nsw.gov.au/__data/assets/pdf_file/0007/978496/working-together-to-improve-food-delivery-rider-safety-industry-action-plan. pdf (last accessed 4 August 2021)
- O'Keeffe P (2019) Making Markets in Australian Agriculture: Shifting Knowledge, Identities, Values, and the Emergence of Corporate Power. London: Palgrave Macmillan
- Olle E (2020) Adelaide food delivery driver hit in "racist" attack on Gouger Street, near Chinatown. 7 News 6 July https://7news.com.au/news/sa/adelaide-food-delivery-driver-hit-in-racist-attack-on-gouger-street-near-chinatown-c-1146884 (last accessed 20 July 2021)
- Om J, McDonald A and Prihantari A (2021) Online food delivery deaths prompt calls for better worker's compensation for gig economy workers. ABC News 9 February https://

www.abc.net.au/news/2021-02-09/exclusive-uber-eats-dede-fredy-riders-deaths-families-speak-out/13118130 (last accessed 3 September 2021)

- Ortega A A C (2020) Exposing necroburbia: Suburban relocation, necropolitics, and violent geographies in Manila. *Antipode* 52(4):1175–1195
- Power J (2020) Chinese Australians feel fear and loathing as coronavirus panic sparks racist incidents. *This Week in Asia* 7 February https://www.scmp.com/week-asia/health-environment/article/3049515/chinese-australians-feel-fear-and-loathing-coronavirus (last accessed 3 September 2021)
- Puar J (2007) Terrorist Assemblages: Homonationalism in Queer Times. Durham: Duke University Press
- Puar J (2017) The Right to Maim: Debility, Capacity, Disability. Durham: Duke University Press
- Pulido L (2016) Flint, environmental racism, and racial capitalism. *Capitalism, Nature, Socialism* 27(3):1–16
- Rabe T (2021a) Toughest laws in Australia set for food delivery companies in NSW. *The Sydney Morning Herald* 5 June https://www.smh.com.au/national/nsw/toughest-laws-in-australia-set-for-food-delivery-companies-in-nsw-20210604-p57y85.html (last accessed 26 July 2021)
- Rabe T (2021b) Food delivery giants facing regulatory overhaul in NSW. *The Sydney Morning Herald* 22 April https://www.smh.com.au/national/nsw/food-delivery-giants-facing-regulatory-overhaul-in-nsw-20210420-p57kul.html (last accessed 4 August 2021)
- Rawling M and Munton J R (2021) "Proposal for Legal Protections of On-Demand Gig Workers in the Road Transport Industry." Report commissioned by Transport Education Audit Compliance Health Organisation (TEACHO) and prepared by University of Technology Sydney https://www.teacho.com.au/images/TEACHO_Report_2021_Regulation_of_the_On_Demand_Economy_in_Road_Transport_in_Australia%20.pdf (last accessed 4 August 2021)
- Richardson L (2020) Platforms, markets, and contingent calculation: The flexible arrangement of the delivered meal. *Antipode* 52(3):619–636
- Robinson C J (2000) Black Marxism: The Making of the Black Radical Tradition. Chapel Hill: University of North Carolina Press
- Rosenblat A (2018) *Uberland: How Algorithms are Rewriting the Rules of Work.* Berkeley: University of California Press
- Ross D (2019) Dead meat: There's a human cost to the uber-fast food delivery gig economy—but no one is keeping tabs. *The New Daily* 3 November https://thenewdaily.com. au/news/national/2019/11/03/deliveroo-uber-delivery-rider-deaths-safety/ (last accessed 17 April 2022)
- Safe Work Australia (2020) "Work-Related Traumatic Injury Fatalities, Australia 2019." https://www.safeworkaustralia.gov.au/doc/work-related-traumatic-injury-fatalities-australia-2019 (last accessed 3 September 2021)
- Select Committee on Job Security (2021) "First Interim Report: On-Demand Platform Work in Australia." Select Committee on Job Security, The Senate, Commonwealth of Australia https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/024635/toc_pdf/Firstinterimreporton-demandplatformworkinAustralia.pdf;fileType%3Dapplication%2Fpdf (last accessed 3 September 2021)
- Shade L R (2018) Hop to it in the gig economy: The sharing economy and neo-liberal feminism. *International Journal of Media and Cultural Politics* 14(1):35–54
- Shalini and Bathini D R (2021) Microtargeting control: Explicating algorithmic control and nudges in platform-mediated cab driving in India. *New Technology, Work, and Employment* 36(1):74–93
- Symington A (2020) Migrant workers and the COVID-19 crisis in Australia: An overview of governmental responses. *Australian Journal of Human Rights* 26(3):507–519
- Timmermans S and Tavory I (2012) Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory* 30(3):167–186
- Tran M and Sokas R K (2017) The gig economy and contingent work: An occupational health assessment. *Journal of Occupational and Environmental Medicine* 59(4):e63–e66

- Transport Workers' Union (2020a) "Food Delivery Rider/Driver Survey." https://www.twu.com.au/wp-content/uploads/2020/09/Delivery-rider-survey-infographic.pdf (last accessed 3 September 2020)
- Transport Workers' Union (2020b) "Food Delivery Riders Survey." https://www.twu.com. au/wage-theft/food-delivery-riders-survey/ (last accessed 3 September 2020)
- Transport Workers' Union (2021a) "Delivery Rider Safety Survey." https://www.twu.com. au/wp-content/uploads/2021/06/TWU-Delivery-Rider-Safety-Survey-Infographic-15.06.21. pdf (last accessed 3 September 2020)
- Transport Workers' Union (2021b) "Submission to the 'Select Committee on Job Security', 5 April." https://www.aph.gov.au/DocumentStore.ashx?id=c7b25fe4-97ca-4c5d-a5f0-8edaf761206f&subId=706183 (last accessed 19 April 2022)
- Tyner J (2019) *Dead Labor: Toward a Political Economy of Premature Death.* Minneapolis: University of Minnesota Press
- Uber Eats (2021) "Uber Eats—Delivery Person Agreement (Australia)." https://www.twu.com.au/wp-content/uploads/2021/01/AU_Delivery_Person_agreement_Jan_2021.pdf (last accessed 27 October 2021)
- van Doorn N (2017) Platform labor: On the gendered and racialized exploitation of low-income service work in the "on-demand" economy. *Information, Communication, and Society* 20(6):898–914
- Veen A, Barratt T and Goods C (2020) Platform-capital's "app-etite" for control: A labour process analysis of food-delivery work in Australia. *Work, Employment, and Society* 34 (3):388–406
- Victorian Government (2021) "The Victorian Government Response to the Report of the Inquiry into the Victorian On-Demand Workforce." https://engage.vic.gov.au/download_file/view/46621/2303 (last accessed 3 September 2021)
- Walcott S (2020) "Victimisation and Fear of Crime in the Gig Economy." The Police Foundation https://www.police-foundation.org.uk/2017/wp-content/uploads/2020/11/crime_gig_economy_nov20.pdf (last accessed 20 July 2021)
- Walker M, Fleming P and Berti M (2021) "You can't pick up a phone and talk to someone": How algorithms function as biopower in the gig economy. *Organization* 28(1):26–43
- Wood A J, Graham M, Lehdonvirta V and Hjorth I (2019) Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment, and Society* 33 (1):56–75
- Wright C F and Clibborn S (2020) A guest-worker state? The declining power and agency of migrant labour in Australia. *Economic and Labour Relations Review* 31(1):34–58
- Yeo A (2020) Uber Eats workers keep riding in Australia's hazardous air with little support. Mashable 14 January https://mashable.com/article/australia-smoke-uber-eats-deliverooriders-health (last accessed 3 September 2021)
- Zhou N (2020) Australia's delivery deaths: The riders who never made it and the families left behind. *The Guardian* 21 November https://www.theguardian.com/business/2020/nov/21/australias-delivery-deaths-the-riders-who-never-made-it-and-the-families-left-behind (last accessed 1 October 2021)
- Zwick A (2018) Welcome to the gig economy: Neoliberal industrial relations and the case of Uber. *GeoJournal* 83(4):679–691