

Dynamiques de pouvoir au sein de l'économie à la demande : les plateformes de taxi Uber et Bolt à Johannesburg en Afrique du Sud

Crispen Chinguno

Résumé

Les changements technologiques survenus dans le secteur du transport public ont introduit de nouvelles formes de services de transport à partir d'applications et de plateformes. Ces nouveaux services et ces nouvelles façons de générer de la valeur culminent avec la (re)constitution du processus de travail et des relations qui le composent, forgeant de nouveaux espaces de contrôle et de résistance. Se fondant sur l'expérience des chauffeurs de taxi commandés par appli à Johannesburg, en Afrique du Sud, cet article révèle les relations de pouvoir émergentes et la façon dont elles sont (re)configurées ou (re)négociées en fonction des nouvelles offres de transport public dictées par la technologie numérique. L'article souligne la nature paradoxale de ces relations de travail émergentes. D'une part, les plateformes de taxi à la demande amplifient le contrôle du processus de travail par les employés, tout en obscurcissant la véritable nature des relations d'emploi et de pouvoir. D'autre part, elles forgent de nouveaux espaces virtuels permettant d'organiser la résistance et la solidarité. L'article suggère que le travail commandé par appli ne disperse pas la capacité d'agir et l'organisation collective des travailleurs, mais les reconstruit. La nouvelle technologie numérique déloge les vieilles formes de résistance tout en faisant une nouvelle place à l'innovation, et en créant de nouveaux répertoires pour l'organisation et la négociation collective. Par contre, ces répertoires sont habituellement des adaptations d'expériences, d'habitudes et de conceptions antérieures de justice sociale. Les changements ne se manifestent qu'en marge des répertoires établis (Tilly 1986) et sont difficiles à maintenir.

Power Dynamics in the Gig/Share Economy: Uber and Bolt Taxi Platforms in Johannesburg, South Africa

Crispen Chinguno¹

Abstract

The changes in technology in the public transport sector have seen the introduction of new forms of transport service using app technology and platforms. This is bringing to the fore new services and ways of generating value. It is culminating in the (re)constitution of the labour process and its constituent labour relations, forging new spaces of control and resistance. Drawing from the experience of app taxi work in Johannesburg, South Africa, this paper unpacks emerging power relations — how they are being (re)configured or (re)negotiated as a result of new ways of providing public transport driven by digital technology. The paper highlights the paradoxical nature of these emerging power relations. On the one hand, the taxi platforms are enhancing employers' control of the labour process while obscuring the true nature of the employment and power relations. Conversely, they are forging new virtual spaces for organizing resistance and solidarity. The paper suggests that app work does not disperse workers' agency and collective organization and voice but reconstructs it. New digital technology dislodges old forms of resistance while opening new space(s) for innovation and new repertoires of organizing and collective bargaining. However, these repertoires are usually adaptations from previous experiences, routines and conceptions of social justice. Changes only manifest on the margins of established repertoires (Tilly 1986) and are difficult to sustain.

Introduction

The changes in technology and work have affected the ways we interact and relate to others and how work and society are organized. This has effects on many facets of life, including the provision and use of public transport. The public transport system is critical to our everyday life and is responsive to changes in digital

technology. Changes in technology in the public transport sector have brought new modes of transport services and delivery. They have also created new spaces and means of generating surplus value. For example, the introduction of taxi platforms, through intermediary digital platforms, links a service provider performing a task for fee-paying customers in a new way. The digital platform company creates value primarily by facilitating observable, direct interaction between two or more users affiliated to the platform. In the taxi industry, the platform company facilitates interaction between the taxi service provider (driver) and a client (rider) in need of transport through mobile phones connected to the platform. The platform company provides the technology and retains a per centage of the exchange from the service provided. The application is a software program that can be downloaded onto a smartphone and is designed to perform a specific task directly for the user. This is what characterizes app work and is a revolutionary way of transforming the means of production. Karl Marx credited this to the bourgeoisie and the role they played in the transformation and development of modern society.

According to Duggan, Sherman, Carbery and McDonnell, app work is where “traditional work activities are performed through apps controlled by an intermediary digital platform company that intervenes in setting minimum quality standards of service and in the selection and management of individuals who perform the work.” (2019:118) This new form of work in the platform economy (re)configures the means of providing public transport, the labour market and the nature of the work experience through the intervention of new technology. This creates new opportunities and directly contributes to resolving the unemployment problem.

In a neoliberal context, capital is under constant pressure to improve productivity and maximize surplus value extraction. This may be attained by reorganizing production and upscaling technology. Production may be reorganized by work restructuring, which may involve adoption of new technology. Upscaling technology increases the pace and quality of production. Increasing the pace of production exerts pressure on the workers to increase the speed of production. This is designed to improve performance, which in turn affects the worker’s experience. The pressure to innovate new technology and increase the pace of production is part of capital’s revolving survival strategy and regime of control,

which conversely produce various forms of resistance. The pressure to upscale technology is an inherent element of (liberal) capitalism and part of its survival strategy and how it organizes work and the production process.

In trying to understand the impact of technological innovation, Schumpeter (2013) saw it as characterized by a paradox. He postulated this as constructive destruction, or alternatively, disruptive innovation. Schumpeter saw technological innovation as having a double effect. On one hand, he argues, it results in the decline and/or destruction of old industries, while on the other hand, this leads to the establishment of new ways of doing things. It generates new industries, business models, jobs and economic values. This means that technological innovation may culminate in the decline or destruction of jobs tied to the traditional ways of doing things, while at the same time new jobs and more efficient means of producing goods and services emerge. Schumpeter's perspective is critical in understanding the impact of digital innovation on the power relations between capital and labour in the share economy.

Foucault (1977) developed a theory of power that challenges the notion that power may be possessed and be wielded by a person or a group. He argued that power is everywhere and that we are all producers of power. Power, according to Foucault (1977), is an everyday socialized and embodied phenomenon. Foucault further argued that there are a number of ways in which power may be resisted. According to his argument, resistance and power are co-extensive; i.e., where there is power there is resistance. As soon as there is a power relation there is bound to be resistance. Resistance, according to Foucault, is always possible no matter how oppressive or manipulative the system may be. I draw from this perspective to understand how the power relations and resistance play out in the taxi share economy. This is applied here in trying to understand the power relations in the matrix involving the platform companies, partners and drivers in the share economy.

The urban public transport sector is not insulated from changes in digital technology and the associated new ways of doing business. The introduction of new ways of providing transport services, such as the app taxi service, has transformed our everyday life experience and how the market and society are organized. The way work is performed and customer expectations and experiences have been transformed and redefined through the creation of new

values and customer behaviour. In South Africa, for example, the introduction of new technology in the urban public transport sector has been disruptive and is reshaping the way the economy and society are organized and the general everyday life experience. App taxi services emerged in South Africa, driven partly by the need to transform and improve the public transport system and as a new space for generating surplus value for capital (global capital). This new flexibility posed a number of challenges, including raising questions on what work is and the boundaries between work and home/leisure time, i.e., the distinction between the spaces of production and reproduction. The introduction of new technology in the sector is not a new phenomenon but has been profound in recent years. The division between what traditionally was viewed as space for production and reproduction is being reconfigured and becoming more blurred. This has indeed been disruptive but is also presenting new opportunities.

The taxi industry in South Africa is characterized by weak regulations, precarious working arrangements, weak worker collective voice, informality and exploitative labour relations. It is part of the informal sector, which in the African context is critical as it accounts for nearly 400,000 jobs (directly and indirectly) (Fourie, 2018; Khosa, 1994; Barrett, 2003). The introduction of new digital technology came with the new experience of accessing public transport, which is a critical component of our everyday life and modernization of human experience. This comes with new conditions which affect how labour and capital relate and how the labour process is organized.

The paper examines how the power relations are changing or being (re)negotiated as a result of the changes and new ways of providing public transport. It draws from the experience of participants in Gauteng metropole conurbation (also referred to as Greater Johannesburg) in South Africa. The aim is to understand how the change in technology is creating new space for generating value and shaping the labour processes and power relations. It explores resistance, the exercise and practice of power by the different players, its field of application and its effects. It questions the notion of control and resistance within the realm of the share economy, which imposes new structural forces. The study explores how the players are able to exercise their agency and autonomy conditioned by the structural forces imposed by digital technological innovation.

Collecting the Empirical Evidence

The empirical evidence for this paper was drawn from an in-depth study of app taxi work in Gauteng province, which covers the area previously known as Pretoria–Witwatersrand–Vereeniging (PWV). The area is divided into many different local government authorities and is an important economic hub as it accounts for 10 per cent of Africa’s industrial production capacity. However, a registered app taxi may work in any part of this metropole conurbation without any restrictions. The study draws from the subjective experiences of the participants interviewed and from observations conducted over a period of three years, from 2017 to 2019.

I was one of the first riders to use the app taxi service when it was introduced in Johannesburg in 2013. At the time I was a postgraduate student and public transport was critical for my everyday life experience. At the time I typically finished work very late, long after public transport’s normal operating hours. The introduction of Uber as the first app taxi service at the time was an important turn as it allowed many of us to work late. As someone who has an interest in understanding how work changes, since that time whenever opportunity has arisen I have engaged in numerous conversations with the people involved in the sector in an attempt to understand the nature of work and working conditions and how it is evolving. I developed a special interest in understanding this new way of providing public transport and its impact on our everyday life experience and on capital and labour power relations. I have also used the app taxi service when I visited other countries and cities, such as New York, Los Angeles, Nairobi and Perth.

Johannesburg has more than 9000 app taxi drivers, divided between Uber and Bolt, which are the only two platforms providing taxi service in Johannesburg. The drivers on these platforms have a number of WhatsApp groups meant for sharing information on issues of common interest. For example, some of the groups emerged out of sharing information on where the drivers can get bargains for services such as car cleaning, tyre repairs and replacement and others. I identified a car washing service in Randburg² which is popular amongst Uber and Bolt drivers from across Johannesburg. I came to know about this from an Uber taxi driver who once gave me a ride and is one of the WhatsApp group members. I introduced myself to the car cleaning service provider and explained the objectives of

my study. I was granted permission to use the space for conducting the study. I met most of my participants and conducted interviews at this car cleaning service. Three interviews were conducted with platform managers and another three with partners who own vehicles but are not drivers on any of the platforms. I also conducted some unstructured interviews with app taxi drivers on the various trips in Johannesburg during the period I conducted this study. This enabled me to have a first-hand, deeper interpretation and understanding of the context and experience of the drivers in situ. Individual consent was sought from each of the participants interviewed, and some of the interviews were recorded and later transcribed. Pseudonyms were used to ensure confidentiality throughout the research process. A total of 20 in-depth interviews were conducted with participants drawn from Uber and Bolt.

Furthermore, I attended a workshop organized by Fairwork Foundation in 2019 which targeted and invited stakeholders within the share economy. This was attended by various platform managers, partners, researchers and others. Fairwork Foundation has been advocating for and working on developing fair working conditions for platform workers, especially given that many of them do not qualify for protection under traditional employment laws in South Africa, such as the Labour Relations Act and the Basic Employment Condition Act (Fairwork 2019). This stakeholders workshop discussed and proposed the setting up of a decent work index for each of the platform sectors in South Africa; this has now been set up and is widely advertised. I attended this workshop as a researcher with a special interest in understanding how and why work changes. This workshop presented an opportunity for me to interact with stakeholders from various platforms, including the platform managers and organizations representing various interests within the share economy.

App Taxi Work in Johannesburg

The Gauteng conurbation covers the area previously referred to as Pretoria–Witwatersrand–Vereeniging (PWV), which includes South Africa’s largest city, Johannesburg, and Pretoria, the administrative capital. The area accounts for more than 10 per cent of Africa’s GDP and extends to Vereeniging in the south. It has an estimated population of about 15 million and is the most populous province of South Africa. It is the country’s economic hub, which

emerged out of a history of mining capitalism, organized through apartheid and colonialism grounded in racial spatiality. Black people were initially not designated as urban citizens, but some temporary sojourners were permitted in the designated whites-only urban areas when required to service white employers. They were required to live in the designated rural reserves and only permitted in white areas when issued a pass, which directed them where they were required by the white capitalist system. This constituted part of the migrant labour policy, which was designed as the conduit that connected the black workers from the rural reserves when required to service capital (Wolpe 1972). However, over time the rural economy declined and more black people became urbanized and proletarianized but confined in reserved black townships, often located in the periphery, far from the main economic activities (Khosa 1994).

Most African towns have a history of poor public transport and this is not an exception in South Africa. This is often tied to colonial and apartheid geography, which saw black communities being located far from or in the periphery of the city's economic hubs. The post-apartheid spatial planning is reproducing this phenomenon. For example, in Johannesburg, the majority of blacks live in townships such as Soweto, far away from the economic hub because of apartheid geography, which demarcated settlements according to race. This created a spatial mismatch between black people, who are the majority but live far from where they can find work (Khosa, 1994). Moreover, blacks have to deal with the problems of poor service delivery, lack of guaranteed safety, unreliable transport service, violence and price fluctuation, which adds another burden to an already strained household income. As a result, affordable and efficient urban transport service is critical for any South African town.

There were two main forms of taxi service in South Africa's urban areas before the entry of app taxi services: the metered taxi and the minibus taxi. The minibus taxi service is the most common servicing the black townships, and it has a long history dating back to the period of apartheid and colonialism. It emerged in the 1970s as part of the informal sector response to poor transport services in black townships and represents black entrepreneurship and is part of the apartheid geography of capitalism. It represents black people's agency to deal with the problem of urban transport and to close the gap left by the state in the provision of public transport

in black townships. It soon became the domain of black business entrepreneurs (Barrett, 2003). Work in the taxi industry has been characterized by poor and precarious working conditions, and in many cases it's run as a family business. A significant proportion of the workers are close family members and/or associates, which brings the problems of kinship and paternalism and the lack of a structured relationship between employers and employees.

Over the years the minibus taxi service has evolved to become the most used form of public transport in South Africa, accounting for over 65 per cent of daily commuter trips (Barrets, 2003). Minibus taxis are registered by the local municipality and licensed to operate in a particular transport corridor. The service does not follow a timetable but is controlled by rank marshals, who ensure there is a fair distribution of trips amongst the drivers. A minibus taxi normally has a carrying capacity of 10–15 passengers and there are currently over 127,000 licensed public taxis in South Africa. Most of the taxis are not owner-driven and the employment relationship is informal and most of the drivers have no formal contracts. The fares for the various commuter corridors are set by the taxi associations of the respective corridor and depend on distance. A taxi that covers a long corridor usually charges different rates depending on the distance within the corridor. The public taxi service is often characterized by various forms of violence, driven by contestation of various drivers' and owners' factions wrestling to control the sector in a particular area. It was designed to cater for the poor urban black working class, and there has not been much change to this mode of public transport since its inception.

The metered taxis are privately owned vehicles which are operated as a public transport business for hire on demand. They are based at designated areas in the city or suburbia and provide service to customers for a fee based on the distance travelled, calculated through a meter. However, although most of them have a meter, as required by law, most of the drivers do not use the meters but negotiate the price with the client or at times arbitrarily declare a charge at the end of the trip. Most of them are marked as taxis and registered for a maximum capacity of four passengers. In many of the cases, metered taxis are old and their charges may be arbitrary and expensive. In order to operate legally, such businesses must be registered with the local municipality. In Johannesburg the sector is controlled by several taxi owners' associations, who regulate entry.

Before the introduction of the platform-based taxi service, there were over 3000 metered taxis in greater Johannesburg. Many of the people in the middle and upper classes eschew metered taxis because of a plethora of problems, including poor efficiency, safety and arbitrary service fee.

App taxi services emerged as a third mode of public taxi service in Johannesburg when Uber was launched in the city in 2013. It is facilitated through a smartphone application that allows interaction between a passenger and a driver, who provides the transport service for a pre-determined fee. This has an effect on social and power relations. The cost for the service is calculated through GPS, considering the distance and time it will take. This model is grounded in the use of digital technology based on a platform that mediates the interaction between a transport service provider and a client through a cell phone app. Uber at its inception was presented as not being in competition with the pre-existing modes of public transport but rather was to complement them. Uber emerged to close a gap and service the middle and upper classes, who in many cases have personal cars but want to enjoy the convenience of not driving. This change in the organization of work affects the labour process and labour relations. Moreover, it produces particular social relations and experiences (Burawoy, 1982) and new landscapes and power relations which may undermine working conditions.

South Africa, currently has two app taxi platforms, Uber and Bolt, both operated by global multinationals. Uber BV was established in San Francisco in 2009 and has operations in at least 500 cities and 70 countries around the world. It started operating in Johannesburg in 2013 and is now the main platform in South Africa, with a 70 per cent market share of the app taxi service. It started with less than 500 drivers on its system in Johannesburg, and by 2019 it had over 6000 drivers. Uber BV uses the service of a third party, Uber South Africa, as a proxy for testing drivers' competency and background screening before registration onto its platform. However, the approval is done by Uber BV, which is also responsible for boarding the drivers onto the system once the registration is verified. Once registered on any of the two platforms, a driver may work anywhere within the PWV conurbation. Bolt (formerly Taxify) was launched in 2017. It was initially established in the city of Tallinn in Estonia in 2013, and by December 2019, it operated in 150 cities, with 30 million clients and 1 million drivers

on its platform.

The app taxi service is organized around an intricate multi-party interaction involving three or, at times, up to four parties: platform company (Uber), partner (vehicle owner) and driver and the client (rider). This creates a complex matrix which amongst others challenges the traditional organization of work and labour processes. The platform company provides and runs the technology (platform), which facilitates the interaction of the transport service provider and the client. Through the app, the platform company has control over the allocation of work and how the service is delivered. The rider makes use of the service on demand for a fee by prompting the app on a cell phone to initiate a request. The partners are those who own the vehicles registered on the platform and are contracted by Uber BV or Bolt as service providers.

Drivers working on a platform have to be registered before they may be boarded and able to work on the system. There are three types of drivers: owner driver (self-employed); employed by a partner (wage employed); and working as an independent contractor on a hired vehicle. All the drivers provide the same service but occupy different positions of power. A driver who does not own a vehicle is required to enter into an agreement with a partner who owns a vehicle registered on the platform either as an employee or as an independent contractor. The driver is required to meet Uber BV standard contract requirements before being activated. This includes possession of both valid South African driver's and professional driver's licences and a clean criminal record.

A significant number of the platform drivers are migrants from Zimbabwe, Somalia, Malawi and Nigeria. One of the drivers explained:

Uber driving here my brother is dominated by us Somalis and Zimbabweans. I would say it's Zimbabweans who are in the majority and we the Somalis come second. For example, my madam boss has six cars on Uber and all her drivers are from Somalia. (Interview 8)

Of the 20 drivers interviewed, 11 are originally from Zimbabwe, 6 are from Somalia and 3 are local. The majority of those from Somalia are refugees or on asylum, which allows them to work legally in South Africa. The drivers from Zimbabwe usually have

a special dispensation work permit, but some were said to have no proper documentation to work legally in South Africa. The greater number of migrants employed as drivers on a number of platforms is because of a large presence of foreigners in Johannesburg. Moreover, this is informed by the exploitative nature of the sector, which is designed to maximize the extraction of surplus value. Migrants are perceived to be unresponsive to trade unions and collective resistance and can accommodate the exploitative nature of work in the sector.

Partners may own one or more vehicles registered on the platform but do not necessarily have to be the driver of the vehicle. A driver may be hired by a partner for a fixed salary with a clear employment relationship, or in some cases the relationship may be governed by a car hire contract which has nothing to do with Uber BV or Bolt. Most app drivers in Johannesburg are on car hire agreements and work as independent contractors. This means that they are not covered by employment laws and do not enjoy the basic rights that come with employment, for example, entitlement to sick leave. Their relationship is governed by a business contract. They are under persistent pressure to work excessive hours to maximize profit and to keep their contracts going, which in turn exposes them to fatigue and susceptibility to accidents.

Drivers prefer a car hire contract to an employment relationship as this gives them the opportunity to work independently and get rewards for hard work. The car is hired from a partner for a fixed fee per week. For example, for a Toyota Corolla on Uber X, most partners in Johannesburg charge a fee of about R2,500 per week or R10,000 per month. The parties in the contract share responsibilities. The driver takes responsibility for the day-to-day cost of running the vehicle, such as traffic tickets, fuelling and minor breakdowns, e.g., tyre punctures. The partner assumes responsibility over major servicing of the car, which usually must be done after every 15,000 kilometres. The partners have no direct control of how drivers organize and conduct their work.

However, the platform companies have control over the allocation of work and charge a service fee (commission) for all the vehicles registered on their platform, deducted from the fee paid for each trip, organized through the app technology. For example, the current service fee for Uber is 20 per cent of the fare for drivers registered before 2017, and 25 per cent for those registered

thereafter. For Bolt, the service fee is 15 per cent. The commission charged by the platforms covers the road accident fund and vehicle comprehensive insurance, which in 2019 was about R1,800 per month.

Platforms may manipulate the pay models to lower costs and flood markets with competition to regulate supply and demand. Uber calls this dynamic pricing and claims that it is all regulated by technology and that it has no direct control on the price fluctuation. Uber argues that this is designed to encourage more drivers to come onto the platform by giving them an incentive for providing their service. For example, some riders were charged over R1,000 for a trip that ordinarily costs R200 during a surge in demand after a late night Global Citizen Festival at Soccer City stadium in Johannesburg in 2018. Uber argued that the clients were reminded of the dynamic pricing and had the option not to take the ride. The price only gets back to normal when supply and demand are in line. This rent-seeking behaviour means the app taxis are at times more expensive than the traditional metered taxis.

Uber and Bolt define their work as intermediaries facilitating the interaction between a driver, who provides transport service to customers paying a fee for service. They are explicit that they are not in the transport business. The general terms of the Bolt agreement emphasize to the driver that:

You hereby acknowledge and agree that we provide an information society service and do not provide Transportation Services. By providing the Bolt Platform and Bolt Services, we act as a marketplace connecting Passengers with Drivers to help them move around cities more efficiently. You acknowledge that you are providing the Transportation Services on the basis of a contract for carriage of passengers and that you provide the Transportation Services either independently or via a company as an economic and professional activity. (Bolt website³)

The organizing model adopted by platform companies is designed to obscure and disguise the true nature and relationship with the partners and drivers. Most of the drivers interviewed highlighted that they are entirely dependent on the app work for their income

and have no other job or skills that can provide alternative income. They are defined as independent contractors but in reality are fully dependent on the platform for their livelihood. The relationship is thus characterized by asymmetric power relations, and there is no recourse in case of a dispute between them and the platform company. A driver may be deactivated from the platform without any prior warning in the case of an alleged breach. Drivers are under constant fear of being deactivated from the platform, and this works as a way of discipline and control.

Taxi platforms enhance flexibility for consumers and operators. For consumers it comes with unprecedented safety, convenience and efficiency. It is available to the client 24 hours a day at the click of a button. For the operator and driver, it comes with unprecedented freedom and flexibility, for example, the choice of when to work. The app taxi service is presented as an opportunity to make money when you want without any nagging from the boss. This model of business and interaction guarantees independence and empowerment to both the operator and the consumer. However, I argue that the freedom proclaimed here is paradoxical. Although the platform companies claim that they are not in the transport business, they directly control the process and how drivers execute their duty. Moreover, drivers cannot be said to be free when they do not have any other means of livelihood and no choice not to conform.

Uber is divided into Uber South Africa and Uber BV, incorporated in the Netherlands, and the two are treated as separate entities. Uber South Africa is registered in South Africa and its operations are not linked to Uber BV, which owns and operates the smartphone application. Uber South Africa does not own or operate a platform despite its direct involvement. Uber BV owns the platform in South Africa and is the contracting company for all the operations. This means that all drivers and partners in South Africa are contracted directly by Uber BV in the Netherlands. Uber South Africa only provides minimum support services on behalf of Uber BV. Although the contract with Uber is clear that partners are independent contractors and the agreement is between them and Uber BV, most of the drivers who were interviewed were not aware of this separation. This affects how they understand their relationship and their expectations. For example, in Cape Town, seven drivers took Uber South Africa to the Commission for Conciliation, Mediation and Arbitration (CCMA), claiming their relationship should be

declared an employment relationship. This claim was affirmed by the CCMA. This, however, was turned down on appeal at the labour court, which clarified the matter after the ruling against the drivers. The highest court of appeal declared that there is no employment relationship between platform drivers and Uber. Furthermore, Uber claims that it is not a transport service provider but a technology company that facilitates the interaction of drivers and their clients for a fee (see website). Its role in this case is presented as a catalyst that brings the two actors together. However, this is not always very clear and is often contested.

As noted earlier, since long before the introduction of the platform economy, the taxi industry has been characterized by poor working conditions, weak regulation and a history of informality. According to some drivers, returns were very high when the platforms were commissioned because there were fewer operators and work arrangements were more lucrative and flexible. However, as more operators were uploaded onto the platforms it became more difficult for available drivers to get assignments. The decline in business is making life difficult for the drivers and clients as most of the vehicles were procured on credit or through hire purchase, which must be serviced monthly. Many platform drivers have seen a drop in their income as the market has become flooded following the entry of Bolt in 2016 and increases in fuel prices and other costs. Since 2018, Uber, for example, has stopped signing up new drivers on their platform. However, Bolt is still open for new drivers.

In response to the squeeze, most of the drivers interviewed highlighted that they are inventing various forms of resistance at both the individual and collective levels. Many of them indicated they work on the platforms but find various means to get trips offline. For example, when in need of instant cash some drivers negotiate with the clients after an app request to cancel the trip and buy it offline at a discounted rate. Some of the drivers working in busy areas, such as the airport and universities, provide services on the app but at the end of each trip they give the clients their private contact numbers and promise a discounted rate if they call them off the platform. Working off the platform enables the drivers to make more money because there is no commission involved. This represents a form of agency and resistance by the drivers.

All the payments for platform taxi services initially went through a credit or debit card. After realizing that the context was

different, Uber reviewed its business model and included the option for cash payments. This was designed to expand its market and embrace clients from the low working class. However, this comes with a number of security challenges. The move escalated tensions and pushback by the metered taxi drivers, who feel they are being elbowed out. According to the drivers interviewed, clients may register on the platform using their cell phone numbers and are not obliged to include a profile picture. The drivers feel that this compromises security as some unscrupulous clients may use fraudulent numbers and get onto the system. The security requirements vary between platforms. Uber is viewed by most drivers as having higher security standards. Its app provides the driver's profile picture and that of the rider at the time of the request. This is not the case with Bolt, which is viewed as being more susceptible to violence and crime.

Uber has faced resistance and a number of other challenges in many parts of the world, and it expected this when it was launched in South Africa. Its business model and clientele were presented as different from the conventional taxis. Its service was presented as for the middle class to high-end market consumers, who are usually expected to pay through a debit or credit card. This prerequisite excludes the majority, especially in a context where many have no access to a bank account. The claim that Uber was for the middle and upper classes did not prevent tension and resistance from those who felt threatened by its model of business.

Uber faced its greatest opposition from the metered taxi drivers. Resistance and clashes between the two became an issue mainly at transport interchanges such as the O.R. Tambo International Airport and the Gautrain stations and other hot spots across the conurbation. A number of Uber drivers have been attacked within such precincts. A number of vehicles have been torched and a driver was killed in these clashes in Johannesburg. Metered taxi drivers closed the highway to O.R. Tambo more than once, protesting against the app taxi services, which they claimed were taking away their jobs. A representative of the metered taxis argued that violence was driven by desperation to defend their jobs. They took the issue to the Minister of Transport and demanded that the app taxis must be disbanded because the work model was too exploitative and divisive.

I observed that the experience of being an app taxi driver in the South African context is not homogeneous. There is a difference in the experience between those who are owner drivers when

compared to those hired as workers or on contract. Information on the ownership of the vehicles on the platforms is not easily accessible. Both Uber and Bolt keep this closely guarded. However, some of the drivers who have been working in the sector since inception estimated that on both Uber and Bolt platforms, less than 20 per cent of the drivers own the vehicles that they drive. A Toyota Corolla, which is the standard app taxi vehicle, costs a monthly instalment of about R4,000 through bank vehicle finance. Many of the drivers cannot afford this. Uber has minimum standards for a vehicle to be eligible. On Uber X, for example the vehicle must be a sedan, less than five years old and with a mileage of not more than 100,000 kilometres. In addition, it must have comprehensive passenger insurance coverage, and insurance premiums have more than doubled since 2015. Most of the drivers cannot afford to have their own vehicles on the platform. They are engaged as third parties by rent-seeking partners, who charge them a fee for hiring the vehicle or hire them as employees. The vehicle ownership model in the app sector in South Africa makes it impossible for the drivers to make any meaningful profit from their service. The app taxi business model was conceived in the global north, where the ride-share service may work well for drivers who own and use their vehicles for a living or to make extra income. In that context the majority of the drivers are better positioned to make money and have more bargaining power. In South Africa, owner drivers are an exception and have different experience from contract drivers. Drivers who own the vehicles are in a better position to negotiate with the platforms.

One way that the platforms can break this ceiling is to promote driver entrepreneurship by supporting them to become partners and owners of the vehicles they drive. This, however, is not happening as platforms are driven by the motive to maximize profit. They are not so keen to stimulate a culture that promotes driver entrepreneurship. As a result, most of the vehicles on the platforms are owned by partners from a middle-class background who can afford new vehicles or have access to and capacity to service vehicle finance credit. Uber encourages drivers to work with people who have the capacity to purchase new vehicles. Some of the rent-seeking, middle-class fleet owners in Johannesburg have up to 50 vehicles which they hire to drivers registered on the platform. This arrangement constrains the driver's income and is reproducing the apartheid hierarchies, characterized by exploitation and inequality.

As a result, the system is sustaining predatory capital. This conforms to the historical structural factors that created racialized social hierarchy and inequality. In this case digital technology is reshaping the South African labour market in a different way from the global north experience and is forging a particular set of socio-economic and political relations and experience.

By 2019 Uber and Bolt accounted for more than 9,000 drivers in Johannesburg. Platform taxi services have the capacity to create many jobs and the potential to be one of the means of resolving the problem of unemployment. They create low skill level jobs, such as drivers, compatible with the local job market. However, app taxi services have also destroyed many jobs. In Durban, for example, a popular metered taxi company, Mozzie, closed shop because of competition from Uber, and more than 20 jobs were lost.

The Exercise and Practice of Power within App Taxi Work

Panoptic control and management

App work in the taxi industry depends heavily on the use of high-end digital technology in monitoring, management and control of the work relations and production process. Platforms set the criteria on who can come on board as drivers and partners and the quality and type of vehicle models. Drivers registered on the Uber platform are required to have no criminal record and must own a smartphone compatible with the app. All drivers are trained on the expected conduct and handling of clients before they may be signed up. The riders have to be registered and must provide their details, including cell phone number and banking details. Uber drivers do not have a uniform or form of identity that links them to the platform. However, they are expected to be presentable and maintain a certain level of cleanliness and handle customers in prescribed way.

Platform drivers have the freedom to choose where and when to work and the time to start and finish work. However, work assignments are managed through the app and monitored through algorithms, which represents a form of panoptic control. The driver's activities are monitored in real time through the app. The app allows work to be managed through the use of algorithms which fragment work into tasks that are closely monitored, and this may be linked to the compensation. For example, Uber is able to monitor the position of the vehicle through the real time GPS system and

what the driver would be doing at a specific period. The app can track driver GPS location and has acceleration sensors built into the driver's version of the app to detect heavy braking and speeding (Prassl, 2018). In Johannesburg, for example, drivers are also alerted about areas where there may be a surge in demand. Uber has security intelligence on the ground for hot spot surveillance. Drivers may decline a pickup if they feel that security may be compromised. Certain areas are known to be of high security risk, for example, the CBD of Johannesburg. Some drivers decline picking up riders on cash payment at night for security reasons. This usually depends on the location of the potential rider. For example, some drivers do not accept pickups from Soweto or Hillbrow suburbs in the evening because they are security hot spots. Uber uses its digital technology to monitor security hot spots which drivers must avoid.

In addition to monitoring job performance such as speed and heavy braking, the driver's performance may also be monitored through facial recognition on the app and GPS. When there is a customer requiring a taxi service, the platform company allocates the work by requesting available drivers within an 8 kilometre radius from the point of request. The driver is expected to accept the request. However, the algorithms also record cases when a driver declines a request. It is not clear how the technology companies make use of the data on declines. However, drivers interviewed feared that those who have a high record of declines may be discriminated against or temporarily deactivated from the platform as a form of punishment. As a result, most of the drivers try to ensure that they accept all requests.

The platform constantly monitors moves by the drivers. Riders can also monitor the moves by the driver from the point when their request has been accepted. The drivers are conscious of the technology-based observation and surveillance, and this has effect on how they perform their duties. The management of the driver's performance through algorithms represents a form of Foucauldian panoptic control. The panoptic form of control, as argued by Foucault (1977) drawing from Bentham, is tied to a central tower that can observe occupants without their knowledge of being watched. The platform drivers are mindful that they are being constantly watched and observed and this configures their performance. The app renders the exercise of power unnecessary because the driver is conscious of the constant gaze, which in turn controls their performance. The app

become part of the modern discipline for the workers.

Rating the experience

Platforms are able to determine, manage and monitor the quality of service provided and received through an anonymous customer rating system. Platforms solicit feedback from both the driver and the rider on the quality of service and experience at the end of each trip on a scale of one to five, with provisions to elaborate the feedback. The scale is based on a continuum measuring the quality of service. A score of one represents a very low level of satisfaction whilst five represents the best and highest possible level. This data is used cumulatively to rate the driver and rider. The platform computes the average score for each driver and rider, and this is displayed on the app for prospective riders when a request for service is prompted. The driver's performance is computed based on the ratings and reviews by customers, and this is often used to compare with other drivers and to monitor and control the quality of the service. This is a measure of the quality and level of productivity. A prospective customer when making a request has the discretion to decline if not happy with the driver's average rating. Moreover, the rider and the operator (partner) are able to constantly monitor and observe the movements of the driver through the app.

Uber uses the ratings and reviews to quantify the quality of performance by drivers and for changing the algorithm that assigns tasks. It claims that its rating system serves three critical purposes: (1) incentivization of high quality service; (2) establishment of accountability; and (3) promotion of courteous conduct and mitigation of the discrimination that is all too common in traditional for-hire transportation (Uber 2015: 5). Furthermore, the rating system is used to monitor and control the performance of drivers. Drivers with a score rating less than the average may be removed from the platform. A regular user of the app taxi service in Johannesburg explained some of the factors that informs how she rate drivers:

Uber and Bolt are all an extreme sport. If I give a driver a bad rating that is because I actually don't want to match with him in the future. From terrible navigation, to endless conversations, car quality to loud music. I imagine passengers are a nightmare but so can drivers. Now add the safety factor to that mix. (Interview 16)

The interview above captures some of the possible factors informing how riders evaluate their experience. The rating system quantifies the experience and computes it into a number. This, however, may be arbitrary. The client's negative experience may be a result of cultural differences between the driver and the rider. For example, in many African contexts, when meeting someone for the first time you are expected to greet them. In the African culture and custom this is part of expressing hospitality. However, from the interview above, this may earn the driver a negative rating. Uber, for example, trains and expects all its drivers to handle customers in a particular universal way, paying lip service to variation and differences in the cultural context. Platforms such as Uber presume that there is a universal culture out there that is ideal for their business. This, however, ignores that the way the drivers respond and handle customers is conditioned by both society and work structural factors, including a culture which may be heterogeneous and specific to a particular context.

The app taxi work not only distorts the employer–employee relationship; it also transfigures the role of the rider to that of the manager. Platforms give both the driver and the rider options to rate their respective experiences at the end of every trip. As a result, drivers with a low rating risk getting deactivated. This works as a form of control which enables the quality of the service to be quantified and compared. For example, Uber drivers scoring an average rating below 4 out of 5 are warned of the poor feedback. Those with an average score below 3 may be deactivated. This represents a form of discipline and control and pressure exerted on the drivers to improve performance. This ostensibly turns the role of the client (rider) into that of management. The customer assumes a critical role in the surveillance and disciplining of the driver, which conventionally is a preserve of management.

Many riders are not accustomed to how the rating system works. Unlike the drivers, they are not trained on how the rating system works and how to give feedback. At the end of the trip the rider is not obliged to respond to the request to rate the service and experience. Uber claims that its customer may be deactivated because of a low rating. It is difficult to know if this is ever effected. Nevertheless, this serves to disguise the riders and drivers as if they are in the same position of power and equally accountable.

However, the power relations in this case is asymmetrical; the rider has more power and is the one always listened to. The rating system as a mode of control is primarily focused on disciplining the driver. Furthermore, it clandestinely turns the role of the rider into a critical position to monitor the driver through panoptic surveillance. This represents a new way of organizing control and the labour process.

The monitoring through algorithm management is presented as reliable and an objective truth without giving space to any form of subjective bias. There is no room for any human interpretation of some of the problems and specific contexts. For example, when a driver declines to pick up a client it's just recorded as any other decline without accounting for the underlying reason. Furthermore, algorithm-based management represents the highest level of alienation as it removes the interpersonal and empathetic ways of managing labour relations and processes.

Many of the drivers interviewed highlighted that they adopt various ways to counter the surveillance and solicit positive feedback from riders. Part of this involves emotional labour. Horchschild (1983) argues that emotional labour involves the expectation that the worker manipulates their actual feelings or appearance in the process of performing their work. Uber drivers modulate their feelings as a ploy to influence the positive experience of their clients. Platform drivers are conscious that they are working under constant technology-based surveillance. This pushes them to deploy emotional labour. The driver is always conscious that at the end of the trip the rider will be prompted to rate the experience, which in a way is also about their performance. The effect of this is that every interaction between the driver and rider becomes a theatre show driven by digital technology and algorithm management. A driver interviewed highlighted that in order to guarantee positive feedback from riders he goes out of his way to ensure that he provides the best customer service. This includes asking the customer preferred car temperature, music and/or radio station, opening the door for the customers, greeting and helping in packing luggage. This becomes a performance and presents the problem of alienation of emotions and inner feelings of the drivers each time when on duty.

Governance

The app taxi work presents new ways of organizing work and the labour process. The platforms occupy an intermediary

position linking the service providers (drivers) and the consumers (riders) through app-based digital technology. This new way of organizing work and production demands the reconfiguration of how work is governed. In the South African context employment law is designed to regulate the relationship between employers and employees. Section 213 of the Labour Relations Act 66 of 1995 defines an employee as excluding an independent contractor. Similar definitions are given in the Basic Conditions of Employment Act 75 of 1997 and the Employment Equity Act 55 of 1998, which are the other principal employment laws. These laws presume a clear distinction between the roles of the employer and employee. An employment relationship confers rights and obligations for the employer and employee, and this comes with a cost to business. This is not the case in the share economy, where the distinction between the two is often obscured and contested. The app taxi sector creates new relations and work arrangements that do not necessarily fit well into the traditional employer and employee binary. Platforms explicitly evade the employment contract, displacing it with a business contract. Bolt's general driver's agreement declares that:

You acknowledge that no employment agreement nor an employment relationship has been or will be established between you and us. You also acknowledge that no joint venture or partnership exists between you and us. You may not act as an employee, agent or representative of us nor bind any contract on behalf of us. If due to the implication of mandatory laws or otherwise, you shall be deemed an employee of us, you hereby agree to waive any claims against us that may arise as a result of such implied employment relationship.

In the app taxi sector the employment relationship is substituted by a business contract, which implies a particular set of obligations and expectations. Uber and Bolt, as owners of the platforms, control the technology and how the service is delivered but present themselves as technology companies and claim non-involvement in the transport business. They elect to be known as technology companies that facilitate the interaction between drivers, who provide transport services, and clients (riders), who request and pay for the services. They generate value by facilitating the

interaction between drivers and riders through digital technology. Bolt, for example, claims that it acts as a “marketplace connecting passengers with drivers to help them move around cities more efficiently”⁴. The Minister of Transport was forced into the debate and clarified that:

Uber and Taxify⁵⁶ are not transport operators. What they operate is the act; it is their partners who are operators. We urge them that their operators should apply for licences through the provincial regulatory entity. (Minister of Transport⁷)

However, the distinction here is not so clear cut. App taxi work presents a complex relationship which does not clearly fit into the traditional employer–employee relationship. The platform links the taxi service providers to their clients. They manage the payment system and keep part of the payment for the service as a fee. As a result, this often creates a vacuum in the regulation and governance of the sector. The regulatory framework is not in sync with the changing context and realities on the ground. New and sometimes murky relationships are emerging or are socially constructed outside the conventional regulatory framework. The new arrangements provide space for the platforms to control the labour process and how work is organized, excluding obligations tied to that right.

On Worker Collective Voice

Trade unions and the collective bargaining process constitute part of the institutionalization of the employment relationship. They represent the contradictions in the employment relationship and the means of managing it. Workers come together as leverage when engaging their employer on issues of common interest. Instead of leaving issues to the arbitrary decision of the employer, trade unions often emerge as the collective voice for workers. The employer and union engagement often take form as collective bargaining. The transformation of work and organization of production in the share economy makes it difficult for such traditional institutions of industrial relations to emerge and thrive.

Trade unions may only be constituted and work legally where there is an employment relationship. The share economy distorts and makes it very difficult to have a clear and structured relationship

between employer and employees. Uber and Bolt have a zero tolerance for trade unions, collective bargaining or any structured relationship with the drivers as a collective. This is informed by a number of factors. Uber drivers in Johannesburg have attempted to organize collectively and enforce collective bargaining and articulate their voice in setting the terms and conditions that affect their work. This, however, has received backlash from the platforms. This has turned into a classification struggle, raising questions about the app taxi business model and whether an employment relationship exists between the drivers and the platforms. The response by the platforms to the drivers who have attempted to organize has been vindictive. Uber and Bolt deactivates without warning any driver suspected of being associated with any form of trade unionism or collective organization. According to one of the drivers:

If you are seen or believed to be aligned to a union, or even an informal drivers' committee, you will be deactivated without any warning. You will lose your job with no explanation, no hearing nothing, just like that. (Interview 9)

The refusal to sanction participation of drivers in trade union activities or any form of collective organization constitutes part of the regimes of control and silencing by the platforms. This leaves the drivers in a constant state of fear, and they do not even trust each other. This fear makes it difficult for them to build any form of collective solidarity. A manager explained why Uber is strongly opposed to the unionization of the drivers:

Representation for the drivers should not come as a union. A union comes with some legal implications. It would mean beyond doubt that there is an employment relationship and this comes with other legal obligations such as UIF etc. A union makes this like an employment relationship and thus more overt more visible, which is not the case. (Interview 14)

The platforms are not open to any form of collective organization by drivers. Conceding to this would imply accepting that the relationship between them and the drivers is an employment

relationship. A manager with one of the platforms explained that as business organizations they tolerate other forms of collective organizations for drivers and partners as long they do not claim an employment relationship. He argued:

We want them to have a voice but not in the form of a union. They can have an association. A union complicates things as it implies that we employ them ... yet there is no employment relationship. If there is a union, then the law deems them as employees. (Interview 14)

Drawing from the above, it clear that the platform companies seek to control and direct how the collective voice for the drivers should be constituted and presented. This is part of the manoeuvre to win the employer–employee classification struggle in the app taxi sector. The resistance by the platforms against the classification of drivers as employees is designed to absolve them from employer responsibility. The demand for collective bargaining rights and union recognition for the drivers poses a direct challenge to the platforms and how they organize the labour and production process.

On Collective Action

The gig economy is organized around change, innovation and adoption of digital technology, which results in the reconfiguration of production processes and work relations. It transforms the way work is performed and the roles of the parties. The intervention of technology in the gig economy makes it very difficult for workers to have any direct physical interaction, shared work experience and collective solidarity. Each worker's experience is disconnected and isolated from others. However, empirical evidence drawn from this study suggests that the displacement of direct physical interaction by workers does always dispense worker collective resistance and solidarity.

Most Uber drivers in Johannesburg are hired as independent contractors and perceive themselves as entrepreneurs and their fellows as competitors. The nature of their work makes it complex to organize collectively and forge solidarity. As a result, trade unions and collective organizations are an exception for platform drivers. Those who are known to be associated with trade unions or any form of collective organization are victimized. However, Johannesburg

experienced a number of strikes organized collectively by app taxi drivers outside the traditional institutions of industrial relations between 2013 and 2018.

I highlighted earlier how Uber and Bolt drivers in Johannesburg are informally organized into various WhatsApp groups. These groups emerged out of the need to share information of collective interest. Some of the groups are made of members from across different platforms. These groups create a virtual collective outside the control of the platforms. A series of events in South Africa before July 2018 threatened the viability of the app taxi economy. There were successive fuel price increases because of weakening domestic currency. Uber increased its commission per trip from 20 to 25 per cent, and this adversely affected drivers' incomes. In some cases, the net income for drivers decreased from R3,500 to R500 per week.

Some of the affected drivers shared the grievance on the WhatsApp groups. This prompted many of them to realize that they were all facing common problems, particularly those related to increasing operating costs. Many of them were feeling the squeeze and failing to absorb the escalation of the operating costs; yet they were suffering in isolation despite the fact that this was a common problem affecting them all. The capacity of app taxi drivers to absorb the rising costs was further undermined by the fact that most of the app taxi drivers do not own the cars they drive. They hire from partners who are fleet owners predominantly from a middle-class background. This common experience ignited a sense of collective consciousness and solidarity which propelled the drivers to organize collectively, and this was overwhelmingly supported by many drivers across various WhatsApp groups.

The collective action was organized virtually through social media, a space accessible to most of the drivers. However, this evolved into real action with foot soldiers on the ground. As the collective action evolved, the drivers constituted a structure to coordinate the action. A committee which the drivers constituted to advance their collective interests prepared a memorandum which was to be presented to Uber and Bolt outlining the following demands:

- That Uber should reduce its commission from 25 per cent to 20 per cent.
- Increase of the base price to R50.

- Operators should have representatives on the companies' boards of directors.
- Uber should stop new entrants to the cab hailing applications market, as they claimed these platforms were "saturated".

These demands were of general interest and supported by most platform drivers. The collective action kicked off on Tuesday, 3 July 2018, initially as "a go slow". A mass meeting of platform drivers was organized on Friday, 6 July 2018, to review the action and map a way forward. The plan was for the drivers to first assemble and march to Uber and Bolt head offices to handover the memorandum. The drivers lamented Uber's unilateral decision to increase the commission to 25 per cent and described it as "theft". They demanded its immediate reduction. The drivers assembled at the Johannesburg Zoo lake before the march to the Uber office in Kramerville. At least 400 drivers attended the mass meeting. Another collective grievance relates to the fact that the drivers felt they were being left out of discussions regarding policy making that directly affects their work. Some of the drivers described their working experience as "technological slavery". They claimed that both Uber and Bolt maintained the charges for the riders despite several increases in fuel price and as a result they were being squeezed out of business. In an effort to diffuse the imminent collective action, Uber made a public announcement in the media that it had introduced a fuel incentive in June 2018 to cushion the drivers from fuel price increases. In addition, during certain hours of the day Uber promised to ensure that the driver's fare earnings were guaranteed and, if not, it was to cover the difference. One of the drivers, elected as the committee spokesperson, highlighted that they were not consulted and unaware of the fuel incentives claimed in the public media by Uber. He argued that the earning guarantees should have been applied to cover all periods of the day. The two parties were in a way talking to each other through the media.

Some drivers were reluctant to participate in the protest for fear of victimization. To counter this, the drivers in support of the action organized "flying pickets" targeting key Uber and Bolt main pick-up points across the city aimed at politically "convincing" their fellow drivers to support the collective action. All the platform drivers passing the march were stopped and their cell phones confiscated, and they were commanded to join or if they had a

client were instructed to drop them at their destination and return to the march. For example, some of the drivers who were on strike blocked some of their fellow drivers early in the morning who were using alternative routes to provide service to passengers from the popular pick-up points in Rosebank, Sandton and Park station. This was meant to force their colleagues to join the strike. The march caused congestion in Johannesburg CBD. Part of the protest included a slow convoy that blocked traffic in the busy N1 road around Corlett Drive and Sandton areas, which is the way leading to Uber Johannesburg head office. When the drivers arrived at the Uber head office the general manager was said to be not present to receive the memorandum. In the end two drivers were allowed into the premises and presented the memorandum to the senior Uber representative who was present. Since the drivers were organized across the two platform companies, a similar memorandum was later handed over to Bolt management in Braynton.

The organization of labour in South Africa in sectors such as mining was dependent on subverting the migrant and hostel system by making space for organizing black workers' resistance. The migrant and hostel system constituted part of the regimes of control for the colonial and apartheid regimes which was overturned by workers into a space of resistance and organizing (Bezuidenhout and Buhlungu, 2011). In a similar way, the platform business model is designed to undermine worker's collective agency through fragmentation of work and isolation using digital technology. This, however, is being subverted by the workers. In this context technology is, on one hand, a means to isolate and individualize workers and to extinguish any potential sense of collective consciousness and solidarity. However, on the other hand, it is opening new modes of communication between workers which allows collective organization and mobilization in virtual space regardless of geographical location (spatiality) and resource challenges. This provides open space for the innovation of new repertoires of organizing for platform workers. Innovation in communication technology allows instantaneous communication amongst many people at the same time in different geographical spaces. This becomes a virtual space for organizing. The nature of the work for Uber drivers limits physical interaction and association amongst drivers but on the other hand technology opens up a new space for organizing and collective association through social media as a virtual space. This overturned digital technology from being an

instrument of control to an instrument of resistance. Uber and Bolt fear that accepting trade unions for drivers or any form of collective organization would imply an employment relationship. The recent strikes by Uber and Bolt workers in Johannesburg suggest that technology may work as a form of disruptive innovation. It suggests that workers' collective voice and collective bargaining in the share economy do not always disappear despite hostile and concerted effort by capital to extinguish them. In this case study, the drivers were able to organize and gain leverage and concessions from a hostile and reluctant capital.

South Africa emerged from a history of protracted struggle against colonialism and apartheid. The collective action by the platform drivers discussed here drew a lot from previous struggle repertoires. Tilly (2005) views repertoires as sets of learned behaviour which collective action groups can draw upon at specific situations in the course of their struggle (Tilly, 2005). These are limited sets of behaviours learned, shared and acted through deliberate processes of action drawn from past experience as successful. People know the rules of the game and they vary performance to meet the purpose at hand. For example, the platform drivers in the strike elected representatives, organized an assembly, drafted a memorandum and organized a march and the associated violence. These are some of the repertoires of protest tied to South Africa's history against apartheid and colonialism. Tilly (2005) further argues that repertoires change as an adaptation but are linked to previous experiences, actors' daily routines and conceptions of justice. Changes to the repertoires may result from deliberate innovation and strenuous bargaining at the margins of established repertoires and succeed only occasionally (Tilly, 2005). In this protest, for example, new repertoires of organizing linked to social media as a virtual space and new communication technology emerged and became critical in forging new forms of collective resistance. WhatsApp groups became crucial virtual spaces of organizing resistance against the platforms.

At the centre of the struggle by platform workers were informal collective organizations that adopted a social movement unionism tradition. This is a form of unionism where workers link their struggle to that of the broader society (Von Holdt, 2002). A number of the platform workers were able to make links between South Africa's problem of inequality and the exploitative

relationship that characterized their relationship with the app technology companies. Apartheid created a social hierarchy that still informs how the South African society is organized. In the strike, the drivers claimed that the platforms were perpetuating the legacies of apartheid of exploitation and inequality. They thus appealed to the government to disband the platforms.

The drivers organized a mass meeting and assembled at the Johannesburg Zoo lake as part of the preparation for the march. The assembly point and mass meeting became an important space in organizing collective resistance. It symbolized a place of assembly where workers converge when in a crisis to map way forward. The mass meetings were addressed by an informal committee constituted by the drivers. Collective decisions passed at the mass meetings were binding to all, including those who may have had dissenting views and/or may not have attended the meeting. For example, after the assembly, the drivers passed a decision collectively that the strike action should continue and some of the drivers proceeded on to block their colleagues who were not part of the strike. Mass meetings constitute part of the collective protest repertoire and an important part of the process of building consensus (Chinguno, 2015). The drivers in this case showed how collective resistance against the platforms remained critical despite the structural challenges presented by this new form of work arrangement.

Fair Work for South African Platforms

In comparison with other contexts, work in the share economy in Africa is still low but increasingly becoming significant. This is viewed as a space for expanding employment opportunities and addressing the problem of unemployment. South Africa faces a serious unemployment challenge and app work is viewed as one of the means of expanding employment opportunities. According to Fairwork Foundation, of the 53 per cent of the South Africans with access to the internet, 6 per cent do app-based work. Of these, work on the taxi platforms is the most common. Uber, for example, has more than 6000 registered drivers on its PWV conurbation platform.

However, as noted earlier, work in the platform economy is precarious and exploitative. Ensuring fair and decent work in the share economy is an important issue requiring careful consideration and support. A major concern is that given South Africa's context of high

unemployment there is high risk that platform work has potential to be more harmful and expose workers to detrimental labour practices in the long run. To address this, Fairwork Foundation has been undertaking action research in South Africa in collaboration with the private sector, workers, civil society organizations, government and other stakeholders aimed at measuring the fairness of working conditions on each platform and laying a basis for appropriate regulation. Fairwork embarked on a project designed to develop a decent work index for all the platform economy businesses in South Africa. The project run by the Oxford Internet Institute is funded by the Federal Ministry of Economic Cooperation and Development (Germany) in collaborations with IIT-Bangalore, University of Cape Town, University of Western Cape and University of Manchester. Fairwork Foundation is committed to highlighting best and worst practices in the emerging platform economy (see website). The rationale behind this initiative, which is philanthropic in nature, is to ensure that platforms take responsibility for fair conditions and protect vulnerable workers. Fairwork Initiative developed and published its first decent work index in 2019 in South Africa regarding five principles of fairness – fair pay, fair conditions, fair contracts, fair management and fair representation – rated out of ten. In 2020 Uber scored 4 out of 10 points, whilst Bolt only scored 1 point out of 10 on the Fairwork Foundation initiative index.

The Fairwork Foundation initiative in this context is important in raising questions about the working conditions in the share economy in South Africa and beyond. However, some of the participants interviewed argued that the project is driven by global capital interests more concerned about how society should adapt and manage change in digital technology. Furthermore, the initiative ignores that digital technology is not politically neutral but is part and parcel of the established global political order and inequality. Technological innovation reproduces the current existing social order and hierarchy unless mediated or conditioned. The response by the Fairwork Foundation is thus paradoxical as, on one hand, it may be viewed as a form of socializing the broader society to accept the new form of order mediated by technology whilst entrenching existing exploitative relationships. On the other hand, this may be viewed as a form of incubating and supporting the sense of consciousness and resistance by those short changed by technological innovation.

Conclusion

South Africa's Gauteng conurbation is following global trends in adopting new ways of providing public transport by embracing digital technology. This has culminated in the introduction of app taxi services, which come with new customer services and experiences and (re)organization of the labour processes and relations. App taxi work presents complex work arrangements and labour processes that subvert the traditional employment relations and work model. Drawing from the experience of app taxi work in Johannesburg, South Africa, this paper unpacks emerging power relations, ways in which they are being (re)configured or (re)negotiated as a result of the changes and new ways of providing public transport driven by digital technology. It explores the exercise and practice of power, its field of application and effects and how different players are able to exercise their agency and autonomy conditioned by the structural forces imposed by digital innovation.

The article shows how app taxi work enhances control by capital through the reconstruction of the labour processes and relations enhanced by the adoption of digital technology. In the case study highlighted, app taxi drivers are presented in disguise as self-employed independent contractors. The platforms retain the privilege to allocate work and control how it is executed. This is facilitated by algorithmic management and panoptic control. Digital technology allows platforms to subvert the traditional work arrangement, labour process and obligations. At the end of each trip the driver and client are requested to evaluate their experience. This rating system transfigures the role of the client into that of a manager. The client assumes the critical role of surveillance and disciplining of drivers. Drivers are conscious that they are working under constant surveillance and this has an effect on their performance.

The effect of digital technology on app work is presented in this paper as paradoxical. This article shows how app work fragments and makes it difficult for the drivers to share their lived experience and forge collective resistance. However, the drivers in the case presented were able to subvert this and exercise their agency and autonomy conditioned by the structural forces imposed by technological innovation. Whilst technological innovation is designed to enhance surveillance and control, it conversely presents new spaces for organizing collective resistance and individual agency. On one hand, it may be adopted to control the organization

of production and labour process and to obscure the true nature of the power relations. Conversely, it may present new virtual space(s) for organizing collective resistance (social media). The study highlights how app taxi drivers appropriated social media as a new space for organizing collective resistance and worker solidarity. The app drivers are able to organize and sustain formidable strikes through use of social media as a new virtual space of resistance.

The paper concludes that the share economy, and in particular digital technology, does not displace worker agency but may (re)configure it. New digital technology opens new sources of power and spaces that may support innovation of new repertoires of collective bargaining and action for platform workers. The new sources of power in this context may be drawn from publicity, reputation and consumer power; a typical example highlighted in this study relates to the push for the adoption of platform decent work indicators advanced by the Fairwork Foundation initiative. However, these repertoires are usually adaptations drawn from previous experience, routine and conceptions of social justice. Changes only manifest on the margins of established repertoires (Tilly 1986) and are difficult to sustain.

Endnotes

1. Crispin Chinguno, Senior Lecturer at Sol Plaatje University, Kimberley South Africa and research associate at SWOP Institute, University of the Witwatersrand, Johannesburg. Article received May 3, 2020.
2. A suburb within Johannesburg.
3. <https://bolt.eu/en/legal/terms-for-drivers/>
4. See website
5. <https://businesstech.co.za/news/mobile/197990/7000-uber-cars-are-flooding-joburg-routes-taxi-owner/>
6. Taxify rebranded to Bolt in 2019.

Bibliography

- Anetos, P. 2016. Uber Price Cut Annoys Drivers. *Times Live*.
<http://www.timeslive.co.za/thetimes/2016/04/08/Uber-price-cut-annoys-drivers> (Accessed 11 September 2019)
- Barrett, J. 2003. *Organizing in the informal economy: A case study of the minibus taxi industry in South Africa* (No. 993581583402676). International Labour Organization.
- Bezuidenhout, A., & Buhlungu, S. 2011. From compounded to fragmented

- labour: Mineworkers and the demise of compounds in South Africa. *Antipode*, 43(2), 237-263.
- Burawoy, M. 1982. *Manufacturing consent: Changes in the labor process under monopoly capitalism*. University of Chicago Press, Chicago.
- Chen, M. K., & Sheldon, M. 2015. Dynamic pricing in a labor market: Surge pricing and flexible work on the Uber platform. *UCLA Anderson*. URL: <https://www.anderson.ucla.edu>. (accessed 22 April 2020)
- Chinguno, C. 2015. *The Shifting Dynamics of the Relations Between Institutionalization and Strike Violence: A Case Study of Impala Platinum. Rustenburg (1982-2012)*, Doctoral Dissertation, Faculty of Humanities, University of the Witwatersrand, Johannesburg.
- Cook, J. 2015. 'Uber's Internal Charts Show How its Driver-rating System Actually Works.' *Business Insider United Kingdom*. <http://uk.businessinsider.com/leaked-charts-show-how-ubers-driver-rating-system-works-2015-2> (Accessed 20 April 2020)
- Corke, E. 2016. 'Metered Taxi Drivers: We Want Uber to be Scrapped Completely' *Eye Witness News*. <http://ewn.co.za/2016/05/16/Metered-taxi-drivers-want-Uberservice-totally-scrapped> (Accessed 11 September 2019)
- Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. 2019. Algorithmic management and app work in the gig economy: A research agenda for employment relations and HRM. *Human Resource Management Journal*, 114-132.
- Fourie, F. C. V. N. 2018. *The South African informal sector: Creating jobs, reducing poverty*. Human Science Research Council (HSRC), Pretoria
- Foucault, Michel 1977. *Discipline and Punish: The Birth of the Prison*, New York: Random House.
- Glöss, M., McGregor, M., & Brown, B. 2016. Designing for labour: uber and the on-demand mobile workforce. In *Proceedings of the 2016 CHI conference on human factors in computing systems* (pp. 1632-1643).
- Hall, J. & Krueger, A. B. 2015. *An Analysis of the Labour Market for Uber's Driver Partners in the United States*. Working Papers, Jan-2015. Princeton University Press
- Harvey, D. 1990. *The Condition of Postmodernity*. Cambridge: Blackwell.
- Hochschild, A. R. 1983. *The Managed Heart: Commercialisation of Human Feeling*. Berkeley: University of California Press.
- Khosa, M. M. 1994. Accumulation and labour relations in the taxi industry. *Transformation*, (24), 55-71.
- Lowitt, S. 2006. *The Job-creating Potential of the Metered Taxi Industry in South Africa Urban Areas: Some Preliminary Findings*. HSRC Library.
- McArdle, M. 2012. 'Why You Can't Get a Taxi: and How an Upstart

- Company May Change That' *The Atlantic*. <https://www.theatlantic.com/magazine/archive/2012/05/why-youcant-get-a-taxi/308942/> (Accessed 11 September 2019)
- Moreu, M. 2016. 'Uber App Review: A Mobile Location-based Private Driver Service' *Lifewire*. <https://www.lifewire.com/uber-app-review-3486481> (Accessed 20 September 2019)
- Mpho, M. 2012 'Working conditions for taxi drivers', *Indaba, South African Transport and Allied Workers Union, 1st Quarter*, <http://www.satawu.org.za> (Accessed 15 September 2019)
- Prassl, J. 2018. *Humans as a service: The promise and perils of work in the gig economy*. Oxford University Press.
- Schumpeter, J. A. 2013. *Capitalism, Socialism and Democracy*. Routledge.
- Standing, G. 2011, *The Precariat – The New Dangerous Class*. London: Bloomsbury
- Tilly, C. 2005. Introduction to Part II: Invention, diffusion, and transformation of the social movement repertoire. *European Review of History: Revue européenne d'histoire*, 12(2), 307-320.
- McAdam, D., Tarrow, S., & Tilly, C. 2009. Comparative perspectives on contentious politics. *Comparative politics: Rationality, culture, and structure*, 260-90.
- Uber. 2016. 'Reasons to Drive'. Uber Newsroom. <https://www.uber.com/en-ZA/drive/> (Accessed 30 September 2019)
- Van Zyl, G. 2016. 'Some Uber Drivers Unhappy with Price Cuts' *Fin24*. 11 April, 2016. <http://www.fin24.com/Tech/Opinion/uber-profits-at-the-expense-of-drivers-20160411> (Accessed 11 September 2019)
- Who Owns Whom. 2016. Report – The Metered Taxi Industry. *Who Owns Whom: African Business Information*. <https://www.woweb.co.za/?=Industries&p=reportinfo&id=3284&country=222&tab=8&platform=mail> (Accessed 10 September 2019).
- Von Holdt, K. 2002. Social Movement Unionism: The case of South Africa. *Work, employment and society*, 16(2), 283-304.
- Wong, K. 2008. 'Modelling Urban Taxi Services with Multiple User Classes and Vehicle Modes.' *Transportation Research*, Vol. 42, No. 1: 990 -
- Zuboff, S. 1988. *In the Age of the Smart Machine: The Future of Work and Power*. New York, Basic Books.