

The Sharing Economy in the Global South: Uber's Precarious

Labour Force in Johannesburg.

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Abstract

The precarious existence of Uber drivers operating within Johannesburg's metropolitan area is the primary area of study in which this dissertation has undertaken. Driver precarity, defined in the study as the loss of labour market security in various forms, is argued to stem from Uber's sharing economy-inspired business model. The analysis of Uber's business model substantively focuses on the service's dynamic pricing model of fare price setting, the implementation of a 'rating' system in which to evaluate driver performance and the use of 'independent contractor' labour. It is argued that each of these three Uber business practices place drivers in a position of precarity in the realm of their income, employment, work and job security. The study mobilises a qualitative research methodology, enlisting the methods of unstructured interviews on eight active Uber drivers, four autoethnographical observations on real-time work behaviour and document analysis to generate data for analysis. The prevailing argument made regarding Uber's precarity (2011), with Harvey's flexible Accumulation theory (1990), Foucault's Panopticism thesis (1975) and Hochschild's emotional labour theory (1983) broadening the scope of the analysis.

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Chapter 1 – Uber's Precarious Labour Force

Prologue

The following ethnographic vignette with a driver named Phillip, encapsulates the typical existence of a Uber driver cruising the streets of Johannesburg, South Africa. An existence constrained by an implicit precarity, one that stems from the perennial pursuit of earning a liveable wage in the face of work instability.

Johannesburg's mid-summer winds cease to relent as my Uber driver begins to weave his Toyota Corolla through the leafy yet mazy corners separating Killarney and Saxonwold. Phillip, as it reads on my Uber smartphone application, is my driver for the course of the morning. He has an Uber rating of 4.7 out of 5 stars, his clients must take to him quite warmly to rate him so highly. 'Not a problem, not a problem at all' he says when I ask him for a short interview. 'This is when we must make our money, man. People are out and about, especially these young ones you know - Melville, Sandton, Braamfontein, those places' he remarks as I ask him about the relative business of Friday's and weekends. 'I have to reach target, last month was not so good - so I must work more', 'targets?' I exclaim, 'My boss expects at least onepoint-one on weekends' he explains with the crescendo in his voice waning. I lament on Phillip's assertion, and one resounding word kept playing itself out - targets. Phillip explained that he was currently driving a car that belonged to someone else. We will call him or her the 'fleet owner'. 'Maybe I will knock off around two or three in the morning' he explains, astounding considering it wasn't even 9am in Africa's tumultuous metropolis. Uber champions 'being your own boss' on its website, promoting self-management and flexible work hours depending on one's taste. For Phillip however, this was the start of a nineteen-hour target chase, balancing the horizon of R1,100 for his fleet owner with whatever amount comes after that, an amount he will live on

1.1. Introduction

The 21st century has seen the world experience a vast socio-economic evolution due to the rise of technology and the internet. Manual Castells' theorisation of 'The Network Society', explains how technology is the new axis in which a new form of social organisation based on networking is emerging, through the diffusion of networking in all realms of activity based on digital communication (Castells & Cardoso, 2005). This new form of social organisation that Castells refers to is perhaps best encapsulated through the birth of the 'sharing economy'. A platform for private buyers and sellers of products and services to interact and transact

online, the sharing economy has reformed traditional ideas of established industry norms and practices (Hamari, 2014). These industry reforms that have been enacted by the sharing economy have chiefly been carried out through what Harvard Professor Clayton Christensen termed as 'disruptive technology' (Christensen, 1997). Disruptive technologies can be characterised as products that disrupt and eventually displace existing industry competitors due to an increased efficiency of service and lower cost due to technological innovation (ibid). Examples of disruptive technologies are found in companies such as Airbnb, Ebay and Uber. Airbnb, a platform where anyone can lease their home or private space online, has disrupted the traditional hotel industry primarily through lower-price points for rooms and heightened user convenience. Ebay, an online platform for the sale and leasing of miscellaneous household products, has shaken the department store sector in the same fashion, allowing users to skip store walk-ins and trade directly with one another online. Peers have been connected through the Internet and technology, mediated through the sharing economy. As a result, labour has either been culled or reconfigured while industries have been intrinsically modified. Travel agents and store shelve isles have been replaced by websites, online user recommendations and smartphone applications.

Ride-sharing service Uber, perhaps the most lucrative of the sharing economy cohort, has single-handedly transformed the world's transport industry within the space of seven years. Providing customers with on-demand taxis that are supplied by fellow consumers, Uber has disrupted the transport industry with its lower-price points, technology-based methods of taxi hailing and security through individual rating scores. Framed around flexible accumulation theory, Uber's business model has informalised labour in the transport industry using independently contracted drivers who 'partner' with Uber while driving their own vehicles. This labour informalisation has allowed Uber to bypass existing transport regulations in the more than 530 cities it has penetrated worldwide since its launch in 2009. According to the company's co-founder and CEO Travis Kalanick, the logic for this regulatory by-passing is simple; Uber is merely a smartphone application that helps people share, not a taxi service (Hamari, 2014). While Kalanick's explanation may hold some validity, this study argues that the company's labour conditions have a direct impact on its labour force, particularly in the developing world. Furthermore, the study will illustrate that Uber places it's labour force in a position of precarity with its practices of labour classifying, dynamic pricing and rating structures as a system of management and evaluation. It is argued that these consequences are particularly unique to the Global South, with data reflecting that there are lower rates of vehicle ownership in the region. The side effect of this trend is the emergence of fleetowners, which are Uber driver-partners that lease several of their own vehicles to drivers, which consequently places drivers in a position of precarity.

The city of Johannesburg is the main research site that this study has employed to make the argument, mobilising the qualitative research methods of unstructured interviews, document review and autoethnography. Furthermore, the study chiefly consults the theory of precarity in its analysis, supplemented with theorisations on emotional labour, panopticism and flexible accumulation.

1.2. Importance of study

As stated, the significance of this study lays in the location from which it is conducted. Uber in the global south and South Africa has been largely left out in much of the literature around the subject. Studies around Uber and its legal, social and economic consequences have been carried out by the European Parliament (2015), Chen & Sheldon (2015), Mehman (2015), Hamari (2016) among many others. This work concentrated primarily and almost exclusively on the developed regions of Europe and the United States. As a result, the differing socioeconomic climate of the developing world would be a significant space in which to conduct a study on the penetration of the sharing economy. Unique features of Johannesburg's Uber network such as the rise of fleet-ownership and driver subletting are but a few of the unique outcomes that the sharing economy has brought to the developing world. It is these outcomes that the sharing one's knowledge into the sharing economy. Considering this importance, this study answers a primary research question, coupled three additional subquestions for increased scope.

1.3. Research Questions

The research question answered throughout the study makes links between the sharing economy, Uber and the main theoretical concepts consulted. The question is as follows;

Primary Research Question

• In what ways, if any, do the labour conditions created by ride-sharing service Uber affect Drivers operating in the taxicab industry of Johannesburg, South Africa

Sub-questions

- In what ways, if any, does the 'dynamic pricing' model implemented by Uber affect the density of work hours and income levels experienced drivers?
- How does the 'independent contractor' status of Uber's driver-partners affect the three-way relations between Uber, drivers and customers?
- What effect, if any, does Uber's evaluative customer to driver 'rating' system have on driver workplace behaviour?

To sufficiently understand how Uber's labour conditions place its drivers in a position of precarity, it would be useful to outline the study's working definitions. This will be followed by a deeper description and justification of the research methods that were employed throughout the study. Finally, the theoretical resources consulted in the study will be outlined and detailed with a key focus on their significance to the primary argument.

1.4. Definitional Considerations

The term labour conditions that is used throughout this study, is defined as the collective agreements between organizations or workmen and their employers that generally determine wages, hours and working conditions such as tools used in the rendering of labour (Douglas, 1919). In accordance with this definition, the specific taxicab labour conditions that were of relevance to this study are as follows;

- A. The wage structure that is used to remunerate taxicab drivers who are driverpartners with Uber.
- B. Uber's relationship with local taxicab regulation and the effects on workplace safety and practices experienced by drivers.
- C. Driver employment status and the subsequent benefits or lack thereof due to Uber's business model
- D. Work hours as a direct result of practices administered in accordance to Uber's business model.

Uber's labour conditions are of primary focus for the study's research question and subquestions, which are pursued throughout the study with the use of a specific set of research methods. At a broad level, the study took the form of a qualitative research methodology, with the use of specific qualitative research methods. It would be useful to first provide a brief justification for the use of the qualitative mode of research in the study before moving on to detailing the research methods that were used.

1.5. Research Methods

Qualitative research relies largely on subjectivism rather than positivism. This means that qualitative researchers hold a human being's subjectivity in creating meanings in the world and in the process of explaining the causal links between research and theory. All facts and truths in the world subsequently, are relative and not definitive as positivists would assert. (Bernard, 2011). As such, the qualitative mode of research was utilised because one could ascertain the individual driver experiences of drivers while providing working with Uber as a service.

It is contended that it would have been challenging to understand the effect that Uber's labour conditions have on drivers without an analysis of the lived experiences of drivers or suppliers of transport in Johannesburg, specifically Uber drivers. This is due to the labour conditions that Uber driver-partners may work under having a subjective thread that is relative from individual to individual, not sharing similar vehicle ownership-status, relative income levels and work hour flexibility. It thus proved more fruitful to employ more of a deductive view of knowledge creation around drivers and their various tribulations as participants of

Johannesburg's bourgeoning sharing economy. This stated knowledge creation, was ascertained through a specific set of research methods as stated.

1.5.1. Interview Process

The prominent research method used in the study took the form of unstructured interviews administered to Uber driver-partners operating in Johannesburg, South Africa over the course of a two-and-a-half-month period. A total of eight driver-partners were solicited primarily by hailing the service through its smart-phone based application, and were subsequently asked if they would be willing to be interviewed for the purposes of the proposed master's dissertation. On all occasions, verbal consent was received and this was documented in the form of taped-recordings. Pseudonyms were given to all participants to ensure confidentiality and security for both participants and researcher alike. An interview was conducted at a public place through a referral from an Uber driver-partner, which was the only interview that was conducted on a non-driving Uber-partner whom employed drivers to render their labour with his fleet of vehicles. Interviews were conducted in Uber trips in various locales in Central Johannesburg such as Melville, Braamfontein, Greenside and Houghton Estate. Furthermore, the interviews ranged from 15 to 21 minutes in length and were on all but one occasion constrained to the duration of the trip itself. The primary reason for utilising unstructured interviews, as opposed to semi-structured interviews for instance, was to complement the non-intimidatory philosophy of acquiring data from participants. Punch (1998) eludes to this philosophy by stating that unstructured interviews are a useful way of understanding the complex behaviour of people without an invasion of their most private space, which may undermine the participants' right to privacy and possibly the research process. Unstructured interviews therefore, became an extension of the continuous ethnographical participation within the Uber driver's organic work environment, with questions generated in line with the natural flow of interaction. The unstructured nature of the interview process with Uber driver-partners, opened the space for respondents to develop their perspectives and direct the line of enquiry into areas they deem to be significant. A broader picture of Uber drivers' contexts was readable through unstructured interviews. This generated a conducive platform for a deeper interpretation of the situational effects that Uber's business model had on Uber drivers' day-to-day actions and activities. As stated before, unstructured interviews formed the larger methodological framework of the study -aframework hallmarked by an autoethnographical model of participant observation.

1.5.2. Autoethnography

For definitional purposes, autoethnography is an approach to research that seeks to actively describe and analyse personal experience to understand cultural experience. Furthermore, it consults elements of autobiography and ethnography. When writing an autobiography, the researcher or author retroactively and selectively documents past experiences. Generally, the author or researcher does not live through these experiences solely to make them part of a published document, rather, these experiences are assembled with the use of hindsight (Bruner, 1993). When researchers conduct ethnography, they conduct study on culture's relational practices such as shared values and beliefs and common experiences in a culture order to better understand that culture (Goodall, 2001). An ethnographer may interview members of a culture, observe their behaviour and actions as well as analyse the use of space and time to better understand that culture. In autoethnography, a researcher retrospectively and selectively documents epiphanies that are based from, or made possible by, being part of a culture or having a cultural identity (Foster, 2006). Autoethnography is typically enacted through using personal experiences to illustrate facets of cultural experience, which can be done through comparing personal experience against existing research. This, as a result, involves and personalises the researcher's participation in the research process.

This research method was particularly useful for this study due to the researcher's active and ongoing experience in the Uber process prior and during the research process. As an active user of Uber for his own personal mobility needs around Johannesburg, the researcher has personal experience of the culture of Uber. Autoethnography thus was useful in comparing the observations made on Uber's drivers with the researchers own hindsight experience of Uber, helping one better understand Uber's business culture. Four of the eight interviewed drivers were observed for ethnographic purposes. The observations aimed to ascertain the atmospherical qualities behind Uber's service, the mannerisms of driver-partners, their interaction with myself as a customer and participant of the sharing economy. Furthermore, ethnographical observations were geared towards better understanding the effect that Uber's bilateral rating system has on the performance, behaviour and actions of driver partners on the job. Further research, which complimented the unstructured interviews and autoethnography, came in the form of document review, which provided the basis for an orientation into the inner mechanics of Uber's historical background as well as its principle business functionality.

1.5.3. Document Review

The analysis of Uber's primary business model, functions and practices were made through document review. Document review entailed ascertaining Uber's primary policy positions regarding its various business practices available on various Uber document publications. The premise behind Uber's policy positions were important in comparing them with those experienced by drivers, assisting in for gauging any correlations or contradictions. In sum, unstructured interviews, autoethnography and document review lubricated the process of knowledge generation. In conjunction with these research methods, a set of theoretical concepts were consulted to create a theoretical framework from which to analyse the knowledge that was created through the research methods.

1.6. Theoretical Resources

The study consulted with four primary theoretical tools that were used as a guide into the respective findings into Uber's potential effect on the labour conditions of drivers in Johannesburg's taxicab industry. The theoretical tools comprised of David Harvey's reflections on 'Post-modernism', his theory on flexible accumulation, Michel Foucault's concept of Panopticism, Guy Standing's theorisation on Precarity and finally Arlie Hochschild's emotional labour theory. These theoretical tools would allow for the construction of a broader theoretical framework that would guide one's understanding of the findings.

Precarity will be chiefly consulted in assessing the effects of Uber while emotional labour, panopticism and flexible accumulation will describe the reasoning and basis of Uber's various business processes. Guy Standing's labour market security is used as a framework in which to explain the various forms of precarity that Uber places onto drivers (Standing, 2011). Foucault's theory on panopticism (1975) and David Harvey's flexible accumulation theory (1990) is mobilised in explaining the premise behind Uber's dynamic pricing model. The informalisation of labour, presented by David Harvey, is used to explain Uber's

employment classification of Uber drivers. Uber's rating system is explained as being the primary arc of Uber's panoptic mechanism of control and management of drivers. Consequently, Hochschild emotional labour theory is used in explaining the behavioural effects of the rating system onto drivers. As such, a broad and succinct exploration into the central tenets of the four theoretical tools would be useful before transitioning to the findings of the research.

1.6.1. Precarity

Precarity, or a collective term the 'precariat' was first uttered and used by a group of French sociologists in the 1980's in attempts to describe a cohort of temporary or seasonal workers. The term 'precarity', conventionally associated with a sense of insecurity and a likelihood of collapse, being closely tethered into the context of labour or workers, was articulated by Guy Standing (2011). Through his work that aimed to analyse the birth of a new class of people on the periphery of employment and security, Standing, rooted the birth a 'precariat' class to the aftershocks of the spread of the 'neo-liberal' economic model at the start of the 1980s - a model that advocated for increased growth and development through increased market competitiveness. A by-product of which was the transferal of risks and insecurity onto workers and their families as the size of the state began to shrink in the global economy (Standing, 2011). As such, this wave of neo-liberalism inadvertently ushered in the growth of a new precarious class.

Standing defined the precariat specifically as alluding to a distinctive socio-economic group, creating a tangible demarcation of what the group was along with creating what Max Weber would deem to be an 'ideal type' of precariat (Standing, 2011: 8). He contextualises the proletariat as a class through a comparison to existing classes, helping locate the Precariat in the class system. He explains that at the very summit of the class system is the elite, consisting of the billionaires and proverbial 'top 1%' that controlled economies and lorded over the universe. Second is what he calls the salariat, who bask in the comfort of full employment, paid holidays and enterprise benefits. They are followed by the Proficians, who are technocrats and artisanal workers who have limited upward mobility but relative security. The conventional working class follows a group that Standing describes as a 'shrinking core' or blue collar workers who are the building blocks of welfare states. Underneath these four groups, standing places the Precariat – who are flanked by an army of unemployed and

'detached groups of socially ill misfits living off the dregs of society' (Standing, 2011: 11). The core of the Precariat comprises of the unique state of holding no bargaining of trust or security in exchange for subordination, along with a distinct lack of secure work-based identity. To delve into more Standing's conception of precarity, he creates a framework or somewhat of a criteria as to what the Precariat is or rather what it is not. In this framework Standing explains that the Precariat consists of people who lack the seven forms of 'labour-related security', namely;

'Labour market security – Adequate income-earning opportunities; at the macrolevel, this is epitomised by a government commitment to 'full employment'.

Employment security – Protection against arbitrary dismissal, regulations on hiring and ring, imposition of costs on employers for failing to adhere to rules and so on.

Job security – Ability and opportunity to retain a niche in employment, plus barriers to skill dilution, and opportunities for 'upward' mobility in terms of status and income.

Work security – Protection against accidents and illness at work, through, for example, safety and health regulations, limits on working time, unsociable hours, night work for women, as well as compensation for mishaps.

Skill reproduction security – Opportunity to gain skills, through apprenticeships, employment training and so on, as well as opportunity to make use of competencies.

Income security – Assurance of an adequate stable income, protected through, for example, minimum wage machinery, wage indexation, comprehensive social security, progressive taxation to reduce inequality and to supplement low incomes.

Representation security – Possessing a collective voice in the labour market, through, for example, independent trade unions, with a right to strike.' (Standing, 2011: 10)

The labour-related security model is useful in assessing the ramifications of Uber driverpartners' independent contractor status with the service, coupled with having a greater analysis of the socioeconomic positioning that Uber's business model and practices place the labour that 'partners' with the service. The labour market security model presented by Standing in his articulation of precarity draws links to insecurities of various kinds. These insecurities are argued as stemming primarily from and increased by Uber's business model. Three theoretical resources are consulted in highlighting the premise behind facets of Uber's business model, the first of which is flexible accumulation.

1.6.2. Flexible Accumulation

The theory of flexible accumulation, or also referred to as Post Fordism, was created by distinguished geography professor David Harvey (1990) in his meditation over the validity of 'post modernity' as a mode of human experience, shifting away from modernity. Harvey explained flexible accumulation as being the result of what he deemed to be a 'surface shift' of the nature of capitalism in the world, especially after the oil shocks of 1973 and the increased competition in foreign markets due to the growing spread of globalisation. This surface shift in the modern capitalist production from the Fordist mode, described as an economic and social system based on the industrialised, standardised mass production and consumption, to flexible accumulation, highlighted by small-batch production, economies of scope, new information technologies and the increased informalisation of work (Harvey, 1990).

Flexible accumulation prompted an environment of mass unemployment and widespread political repression, such as curbs put on unionisation, forced firms to move from mass production to a new tactic of flexible specialisation. Instead of having production focused around generic products, firms now shifted their efforts to producing a diverse array of product lines that targeted different segments of consumer groups, crafting products to different tastes and preferences. An important cog in the emergence and growth of flexible accumulation theory is the development of the computer and other forms of information technology which, as Harvey explains, acted as alternative production and labour control systems opening the way to high remuneration of technical, managerial and entrepreneurial skills (Harvey, 1990). Computers and other forms of information technologies contributed to the ability to change the characteristics of the goods produced as well as, most importantly, analyse data to order suppliers and produce goods that were congruent with current demand flows.

Labour and skill sets were also important in the growth of flexible accumulation, with the workforce now compartmentalised into groups of skill-flexible and temporary, subcontracting segments. A flexible labour pool stimulated and lubricated production processes to be geared towards specialisation of goods (Jessop, 1995). The realms of the economy and political landscapes were also nuanced by the growth of what Harvey deemed to be flexible accumulation. In economics, flexible accumulation brought with it a decline in regulation with mass unionisation growing obsolete and being replaced by workplace-based bargaining processes. As a result, the work force experienced a rise in subcontracted work along with self-employed and home-based work. In the political realm, class-based political parties waned with the proliferation of intersectional social movements based on region, gender and race (Jessop, 1995).

Flexible accumulation in sum brings to the fore a few critical variables relevant to the argument made in the study. Firstly, eventualities of the flexible accumulation model such as a decrease in unionisation and informalisation of work are critical in understanding how the labour that services Uber are independently contracted and have decreased levels of wage and workplace bargaining power due to a lack of unionisation. Secondly, the theory also compliments precarity with increasing ones understanding on how levels of workplace and income security affect the positioning of labour in the sharing economy. Thirdly, the segmentation of labour into different flexible pools, coupled with the shift from mass manufacturing to services after the 1970s is pertinent in understanding the conceptual context that underpins the business model of Uber. Finally, flexible accumulation aids in assessing the role of information technology and computers such as Uber's smartphone application in presenting new forms of analysing various levels of demand flows from consumers. The new forms of analysis that information technology and computers create also assist in efficiently managing and surveying labour processes, an outcome that is expanded more in the theory of panopticism

1.6.3. Panopticism

The theory of Panopticism, first conceptualised by English philosopher Jeremy Bentham, and vastly developed by French philosopher Michel Foucault is to be mobilised in contextualising and unearthing the findings of the research into Uber's potential effect on the labour conditions of the taxicab industry of Johannesburg. Panopticism could perhaps be distilled into two interlinked realms, a physical space and a social construct, with the latter finding initial grounding in the former. The idea of the panopticon was developed by Jeremy Bentham to describe a physical structure of complete control and surveillance over prison

inmates or occupants by a central force, nominally described as a guard. The physical structure's design would be in the form of a circular building that had an observation tower at the centre, with an open space between the tower and the surrounding circular wall. The tower would be comprised of large glass frames that provided visibility to the entirety of the circular wall, which would contain cells or rooms of occupants or inmates. The individual cells or rooms of the circular wall would be flooded with extreme light which would perform a dual function of making the occupants visible to their watcher and the watcher invisible to the blinding effects of the flood lights. These flood lights would also make the act of surveillance more passive to due to subjects not knowing whether they are being surveyed or not. The occupants or inmates thus would be, as Foucault explains, 'the object of information, never a subject of communication' (Foucault, 1975: 200). The panopticon thus, could be considered a means or a philosophy of control through a specific implicit mechanisation of surveillance that used the least resources possible (as seen with one tower, housed by one guard, presiding over a mass of occupants or inmates).

Panopticism theory could be a mechanism of power that bears similarity with the socioeconomic system of capitalism, as illustrated through three tenets. The first would be to obtain a tactic of power that would deplete the least amount of resources possible (as seen in economics with an emphasis of efficiency in the production process). Secondly, a tactic of power that would aim to achieve maximum intensity over as wide of a space as possible (as seen in Economic theory such as Fordism, emphasising mass production for a mass consumer base). Thirdly, the dividends of tactic (control and surveillance) can be inextricably linked to the apparatuses used (education, industry, socialisation). The theory has also been used in the information technology realm, which is pertinent for the research terrain of this paper. Shoshana Zuboff's (1988) links Panopticism as a means of surveillance and control to the work environment. Zuboff makes the distinction from Panopticons in the traditional sense, as per Bentham and Foucault, and Information Panopticons. Information Panopticons would not make use of physical arrangements such as constructing structures or the intervention of human agency. Rather, computer technology surveys the activities of workers through the daily tasks assigned to them. Surveillance would span from the individual duration that every worker takes to complete a task to the hours of operation, would be recorded by computer technology. Based on the data gathered by computer technology, a worker's performance could be measured accordingly (Zuboff, 1988). Information power thus could be a centralised entity that used apparatuses such as computer technology to observe and control subjects.

This theory is useful in assessing Uber's operational mechanisms of control and surveillance in creating a work environment and unique labour conditions. Furthermore, these unique labour conditions that arise due to the surveillance and management mechanisms associated with panopticism, could profoundly affect labour workplace behaviour, administering processes such as emotional labour.

1.6.4. Emotional Labour

Emotional labour is a theory of workplace practices first defined by sociologist Arlie Hochschild (1983). In the work, Hochschild explains how emotional expressions and engagements form part of the job description, often manifesting in engineered senses of self and reflexive performances. In the opening sequences of the work, the author, compares the experience of a flight attendant to those of a minor factory worker portrayed in Karl Marx's Das Kapital. Hochschild exclaims how the flight attendant's expressions and gestures are similar as to that of the minor's body, both being apparatuses of labour. As such, Hochschild elaborates by explaining that the manner of the service rendered becomes the nature of the service itself (Hochschild, 1983). Furthermore, emotional labour is explained as a by-product of 'impression management', with the author arguing that emotional cues may be among the most important in human interaction. Taking that into consideration, Hochschild defines emotional labour as;

The management of feeling to create a publicly observable facial and bodily display; emotional labour is sold for a wage and there has exchange value. [Hochschild] uses the synonymous terms emotion work or emotion management to refer to these same acts done in a private context where they have use value (Hochschild, 1983: 7).

This process involves several internal mechanisation, often referred to as the requirement to "coordinate self and feeling", and to conceal that process because if this processes shows overtly, the 'product-passenger contentment is damaged (passenger in the context of the flight attendant example). Hochschild, as a result, explains that this coordination of self and feeling is conditioned by training one's feelings, and not just training one's overt performance of feelings (Hochschild, 1983: 19). The historical origins behind the existence of the emotional labour would be the transition from manufacturing intensive industries to service industries that required a heightened sense of interpersonal skills. The process of feeling management, which very much on the onus of the employer of the product, is

instrumental in setting the conditions for emotional labour, with Hochschild explaining how businesses often attach advertising to employee behaviour, highlighting the example of America airline carrier Delta airlines' advertising campaigns of the 1970s which created the narrative for certain flight attendant behaviour moving forward (Hochschild, 1983). The research methods and theoretical resources were utilised onto a service in the form of Uber, which is resides at an interface between technology and the taxicab industry. Considering this, it would be beneficial to locate Uber within this interface before discussing its tendency to induce labour precarity.

1.7. Conclusion

The structure of the study will take the form of three chapters. This chapter has highlighted the research methodology that the study utilised for knowledge creation. This included a detailed overview of the theoretical resources used and a brief introduction into the profile of drivers that were interviewed for the study. The second chapter provides a background into two facets of Uber's emergence; the taxicab industry and the sharing economy. In the first instance, the historical basis of the taxicab industry will be analysed, with the rise of regulation given significant attention. Secondly, literature related to the sharing economy will be explored, placing an emphasis on the rise of the new technology and the Internet as a precursor for the emergence of Uber. Finally, flexible accumulation will be argued to be the linkage between the taxicab industry and the sharing economy, ultimately giving birth to a service such as Uber. The third chapter, will explain how Uber's business model creates precarious labour conditions for labour. In this chapter, facets of the sharing economy that Uber instils in its business model such as the informalisation of labour, technological surveillance and management and fluctuating income will be showcased as but a few ways in which labour is placed in a position of precarity. Before following the order of the study, a brief overview of the significance of the study would be useful in contextualising the chapters to follow.

Chapter 2 - The Preconditions to Uber: Taxis and Technology

2.1. Introduction

Uber, as a company that provides a platform for the sharing of transportation within the taxicab industry, smartly combines both elements of the taxicab industry and technology. The following chapter explores both these as seminal cogs in the nexus that makes Uber the service it is today. As such, the chapter comprises of two distinct sections. First, literature relating to the historical basis of the taxi industry unearths the evolution of the taxi industry's functions and regulatory practices both in the developed and the developing world. It is argued that regulation, a legislative arm in the global taxicab industry, serves the dual function of labour protection and management, this argument is exhausted using the work of Snead (2015) and Russell & Hodges (2009). This argument problematises Uber's evasion of various taxicab industry regulations across the world and in South Africa. In assisting how Uber evades these regulatory requirements, the sharing economy is analysed, particularly exploring the work of Hamari (2014) and DiNucci (1999). This exploration unearths the proliferation of the Internet and Web 2.0 as platforms that created the bridge in which technology could later infiltrate the taxicab industry through Uber and as a result by-pass regulation. This chapter serves as a but a mere exploratory prologue for following Chapter, which substantively analyses Uber's business model and why it creates precarious labour conditions for Uber drivers, particularly in Johannesburg.

Part I: The Taxicab Industry

Today, the taxicab industry around the world consists of a myriad of different kinds functions and carries with it a diverse array of forms. In the developing world taxicabs often run concurrently with lower-income based modes of transport such as share-taxis, often found in various regions of the developing world such the Fula Fula's of the Democratic Republic of Congo or the minibus taxis of South Africa. In the developed world, taxicabs too run concurrent to other forms transportation such as the subway in New York or the Tube in London (Grava, 2003). The positioning of the taxicab industry in the core and the periphery of the world's economies is diversified with different consumer choices. Wong (2008), explains how in the developed world, taxicabs are often used with other forms of transportation due its perceived efficiency compared to the use of one's own vehicle. In the developing world, the taxicab industry often resides on the periphery of larger scale lowerincome mass taxi services that are involuntarily used by large segments of society based on affordability. Wong explains that the taxicab industry is often categorised as having multiple user classes in every city, with an entrenched sense of customer hierarchical choice (ibid). Uber, having penetrated more than 500 cities both in the developed and developing world, has entered taxicab landscapes that are heterogeneous in nature. As such, it would be useful to review some of the literature concerning the advent of the modern taxicab industry both internationally and in South Africa as the primary research site of this study. This will be useful in ascertaining the challenges that Uber faces and indeed may create when applying its business model universally in different taxicab landscapes.

2.2. Historical Basis and Background

The first modern taxi emerged in the United Kingdom, continental Europe and the United States in the beginning of the twentieth century. The innovation of electric-powered taxi cabs replacing the heavier horse-drawn handsome cabs that dominated prior decades was a key development that would shape the trajectory of the industry moving forward. In New York, the first modern taxicab named the electrobat, was designed and built in 1894 by Philadelphia-based engineer Henry G. Morris and chemist Pedro G. Salom, becoming later adopted by one of the first prominent taxicab companies in New York, the Electric Vehicle Company (EVC) in 1899 (Gilby, 1903). In the United Kingdom, the taxi industry comprised primarily of handsome cabs that predominantly operated around central London in the 1890's, before the proliferation of gasoline-powered electric cabs in 1905. The development of taxicabs both in New York and London coincided with the creation of the first modern fare-meter by German Friedrich Wilhelm Gustav in the mid-1890's. This innovation, was an initial example of a disruptive technology, a theory pioneered by Clayton Christensen (1997).

Disruptive technology, defined as a technology that disrupts existing industry practices and surges up a market, acted as a revolutionary technology in the early inception of the taxicab industry in Europe and the United States. The innovation was popularised in Europe in 1906 and North America in 1907 (McArdle, 2012).

Following a fire that destroyed a third of its vehicle inventory, the EVC in New York was liquidated in 1907. Horse-drawn carriages were once again used as a primary form of taxicab for hire services in city. At the start of 1908, Harry N. Allen created the New York Taxicab Company, acquiring a fleet of gasoline-powered vehicles. Within ten years of the Taxicab Company, a multitude of similar taxi-cab companies proliferated around New York City, with a standardised fare system hovering around 50 cents per mile (Russell & Hodges, 2009). The significance of the New York Taxicab Company was that it quickly became the largest taxicab service of its time, pioneering a linear fare-based system of taxicab operation. The early advent of traditional taxicab services in the United States and the United Kingdom created the skeletal model for the industry that would proliferate the world over.

The growth of the taxicab industry primarily through the 1920's saw a heightened pool of drivers servicing cities in North America and Continental Europe, with regulation touted by local government to maintain healthy competition and price stability in the industry. The first implementation of regulatory mechanisms in the taxi industry are significant in relation to establishing the most prominent regulatory practices along with creating an industry standard model for fare setting.

2.3. Regulating the Industry

Much like the creation of the rise of the taxicab industry itself, the initial and most extensive regulatory mechanisms in the taxi industry originated in New York and the United Kingdom. The Medallion system in New York, and the knowledge in London remain industry standard to today. The function and relationship that taxicab regulation has on fare setting would be significant in a later analysis on Uber's stance on regulation and the effect it has on its labour force as a result.

New York City's initial regulation of the taxicab industry came as a direct result of the city's socio-economic climate of the time. The Great Depression of the 1930's all but debilitated the city's bourgeoning industry. The Great Depression created concern around the taxicab industry in the city with the industry having more drivers than passengers and drivers willing to render their labour for increasing hours. The result of which placed drivers in a precarious position, with a lack of income security plaguing drivers due to a decrease in the supply of consumers. The precarity plaguing drivers, compelled local government to create a monopoly company to maintain the mechanical quality and maintenance of the vehicles and preserve the wages and work hours for drivers (Russell & Hodges, 2009). Under this system, the local city government would issue stringent permits in the form of medallions that would regulate the number of taxicabs floating in the city. The basic premise behind a medallion system, is the medallion itself, which is usually a metal plaque attached physically to the vehicle. The medallion does not act as a license to drive the taxi, but rather to operate one. Without the medallion, it is illegal to operate a taxi in New York and other cities in the United States that use medallion systems (Snead, 2015). The medallion acts as a permit to label oneself a taxicab operator in a designated city, state or province. The medallion systems, along with other forms of taxicab regulatory frameworks have been argued to be a form of economic protectionism, suppressing competition in the industry along with protecting certain governmental interests that benefit from maintaining an economic monopoly over the taxicab industry. However, as will be argued, regulation acts as a form of income security for drivers, a form of security that Uber will be argued to disregard.

2.3.1. Regulation as Income Security

Under the medallion system, drivers that drive the taxicabs begin their shift with a wage deficit which would effectively start them owing money to the respective medallion owner. The reason for this is that there is a price floor of \$100 for every day of operation, which covers the cost of the actual medallion rental. Medallions and their availability depend on the respective American city, with 13,400 medallions available in New York, with a group of licensed drivers vying for these medallions which results in an increase in the price of medallions in the city. In Boston, 6,200 licensed drivers compete to lease 1825 medallions – the provisions of medallions by city governments prevents rival taxicab services from being established (Snead, 2015). The medallion system, increased the average wage of drivers due to a regulation on the supply of drivers. The premise of regulation of drivers forms a critical

part in the discussion as to how Uber drivers today are in a position of precarity. The regulatory system in the city of London, places a greater spotlight on how regulation can also become a system of advanced management and surveillance.

2.3.2. Regulation as Management

In the city of London, a route-finding test named 'The Knowledge' is used as a mechanism from which to issue driving permits and regulate the supply of taxi-cabs in London and other parts of the United Kingdom. A typical London taxicab driver is required to have extensive knowledge into the geography and routing maps of the London metropole, as such, an indepth study of several pre-set London street routes and other miscellaneous places of potential interest has been created titled 'The Knowledge'. Potential taxicab drivers in London must complete and pass to be granted permission to become a London taxi cab driver. Potential London taxicab drivers must learn 320 standard routes through central London, along with a substantial grasping of points of interest around the city, such as prominent squares, clubs, hospitals, hotels and theatres (Gloss, McGregor & Brown, 2016). The knowledge, thus becomes a mechanism for evaluating drivers according to stringent guidelines, with the test acting as a panoptic structure from the prospective drivers are often culled for failing to adhere to internalising the internal structure of the city of London. The perceived difficulty of the test has resulted in a declining number, and aging, taxicab workforce in the London dating back to the 1960s.

The creation of the taxicab industries of The United States and the United Kingdom, provided a narrative for the taxi industry of the future, specifically the functionality of the taxi industry, its basic fare-system models and the existence of regulatory systems. However, these pioneer industries also illustrated how mechanisms such as regulation can have paradoxical effects on labour itself. While the Medallion system helped secure the income of drivers and curb industry precarity, the Knowledge's stringent demarcations for evaluating drivers inevitably decreased driver inclusion into the industry. The taxicab industry finds much of its historical grounding in the western world, with its model often transplanted onto other socioeconomic regions of the world. As stated before, the taxicab industry has unique structural characteristics in the developing and developed world respectively. Uber's penetration into both markets, illustrates the paradoxical effects it may have on both markets. It is useful to providing a review of the taxicab industry of South Africa, which will be with the purpose contrasting its characteristics with those of the developing world. The taxicab industry in South Africa as a secondary mode of transport to the minibus taxi industry, the racialisation of transport along with the attempts to reform taxicabs in South Africa will be discussed as a precursor for the penetration of Uber in the country.

2.4. Race, Regulation and Reform: Transport in South Africa

South Africa's transport system is a product of an economy systematically constructed on the back of racial ideology. The South African taxi industry has been celebrated as 'one of the most extraordinary socio-economic phenomena in South Africa', with free market capital advocates viewing the growth of the industry as a 'silent revolution transforming South Africa into one of the most integrated economies' and often referred to as one of the 'success stories' of black small business (Khoza, 1992: 232). However, the acclaim is only directed at a segment, albeit a large one, of the South African transport industry, that being the minibus taxi industry. In South Africa, the most common and widely used type of taxi is the minibus taxi, which can be grouped into the 'share taxi' bracket of the taxi industry alluded to earlier in this chapter. These minibus taxis operate by picking up clients on predetermined routes, or from fixed taxi ranks. The minibus taxi industry boasts a large section of the South African taxi landscape and accounts for 65% of current public transport (Mpho, 2012). The taxicab industry on the other hand, only occupies around 10% of the greater taxi market in the country, it is a relatively ancillary cog in the formation of the taxi industry in South Africa. To justify the taxicab's relatively small size in South Africa, a brief historical analysis would be useful in contextualising the dynamics of transport in the country.

The growth of the black taxi industry in South Africa can be located at the turn of the twentieth century, where before the rise of modern black taxis there were horse-drawn cabs, much similar much those discussed earlier in respect to the United States and the United Kingdom, before trains were favoured as the mode of transport for most black workers from the 1920's (Khosa, 1992). The principal difference between the taxi industries of western metropoles such as London and New York and pre-democratic South Africa is that of regulation. The nature of regulation, which was enforced largely around racialised legislation within South Africa, was to stifle the growth and improvement of black industry, and to informalise attempts to monetise from the black mobility space. This regulation and forced informalisation first occurred within the 1940's and 1950's, when black business as a general industry was stifled by several repressive legislative mechanisms aiming to repress and

discourage black entrepreneurship in urbanised areas. The 1970s saw the enactment of the 'One-man-One-Business' policy, which saw black taxis having passenger restrictions and the confiscation of their vehicles for menial offenses (Beavon & Rogerson, 1990). Taxi licensing was controlled and regulated by the white apartheid apparatus and as a result there was a profound scepticism around the potential success and growth of the bourgeoning black taxi industry. In 1978, a turning point in the black taxi industry saw the advent of the kombi, which allowed taxis to carry up to eight passengers instead of the previous minimum four. As a result, the industry experienced a dramatic take off at the start of the 1980's, with permits granted in Johannesburg rising from 401 in 1985 to 15,160 in 1990. The increase in the number of taxi licenses issued nationwide, both for Kombis and sedans, rose by 2,639 per cent over a period of six years by the end of the 1990 (Khosa, 1992).

The minibus taxi industry serviced a large section of South Africa's poor to lower-income population, using a mode of service akin to a Fordist mass-production. In later years, the industry and later Uber, would rely largely on flexible accumulation characterised by service specialisation and small-scale, personalised production to flourish. This shift in production forms the basis for a discussion on the taxicab industry in South Africa, its regulation and the introduction of Uber. As stated previously, while being by in large secondary in the greater transport landscape of the country, the taxicab industry created the initial conditions for Uber's penetration. Through the late 1990's and 2000's, metered taxis became the primary form of taxicab travel in major South African cities, specifically Johannesburg. The birth of metered-taxis set the ground for governmental regulation, fare-setting and industry practices, conditions that Uber would have to manage upon their launch in the country in 2012.

2.5. Metered Taxicabs in South Africa

It can be discerned that the primary apparatus of the formation of the South African taxi industry has been the minibus taxi, primarily operated through an economy primarily populated by black entrepreneurship. Research reflects that the taxi industry as of 2016 accounts for approximately 70% of South Africa's transport usage, with 10% of that number being metered taxis or taxicabs. Furthermore, there is an estimated 20,000 metred taxis on the road in South Africa as of 2016 (Who Owns Whom, 2016). Gauteng boasts around 3700 metred taxis, with only 1860 deemed to be legal. The legality of a metered taxi operation can be demarcated by holding a permit of operation along with abiding by the definitional criteria

of being a metered taxi operator in the country. According to the National Land Transportation Transition Act of 2000, a taxicab service in South Africa is defined as:

'a means of public transport operated by means of a motor vehicle which is designed, or lawfully adopted... to carry fewer than 9 seated persons, including the driver, where that vehicle - (a) is available for hire by hailing, by telephone or otherwise; (b) may stand for hire at a rank: and (c) is equipped with a sealed meter, in good working order, for the purpose of determining the fare payable." (National Land Transportation Act, 2000: 8).

Metered reading fares are charged, on average, at an initial fare of R2.00, then R5.50 per kilometre and 10 cents per 20 second period of engine idling time. Furthermore, no charge is incurred for the distance travelled by the taxi to the client, with some metered taxi companies offering special rates of up to 50% discount for disabled passengers and pensioners (Moyake, 2006). In theory, metered taxi companies are housed through a central control centre from which they can be hailed telephonically, however there is also a large segment of unregistered metered taxi drivers whom by-pass the control centre model of acquiring business. Unregistered 'metered' taxis operate in a nuanced capacity, where they initially acquire clients through parking at taxi ranks and cruising past points of interests and pick-up spots, usually distributing business cards to retain clients. Unregistered metered taxis usually aren't liable for paying month membership fees of R500 (Moyake, 2006).

While most metered taxis, as stipulated by the National Land Transportation Act, can be hailed through telephone or 'otherwise' while stationed at taxi ranks, there is also provision for roaming or 'floating' taxis. However, various provincial governments have prohibited this from of acquiring clients only, allowing direct telephone bookings or taxi pick-ups at specified taxi ranks (Lowitt, 2006). In South Africa's major cities of Johannesburg, Cape Town and Durban, most metered taxi operators have successfully negotiated permission to station their vehicles at major hotels, airports and major retail precincts. While national legislation makes provision for cruising metered taxis, provincial government's reluctance to allow cruising metered taxis has seen a severe shortage of floating taxis and the systematic eradication of this form of acquiring business from the culture of metered transport in South Africa. The penetration of Uber, has seen the service occupy the loopholes that South Africa's National Land Transportation Act creates.

In a precursor before South Africa's hosting of the 2010 FIFA World Cup football tournament, the Department of Transport drafted The Public Transport Strategy and Action Plan [1] (PTSAP), which problematised the metered taxi model currently in operation in South Africa at the time, summarising the metered taxi problem as 'the relative absence of metered taxis, particularly 'cruising taxis', in South African cities represents a major gap in the public transport system, particularly in view of the coming FIFA World Cup' (Pillary & Seedat, 2007). In response to this problem, the PTSAP prioritised the creation of a metered taxi operation in the country that would offer consistently high standards of service in terms of availability, comfort, safety and security with fares that stimulate the widespread usage by the population (PTSAP, 2007). The department proposed three levels of metered taxi, namely: luxury or executive, standard and economy, these being tiered options for the different economic strata of the population. This tiered model that would later be employed Uber with its similar model (UberX, UberBLACK & UberVAN). Following the proposal, no concerted efforts came to fruition both on the level of creating an inclusive metered taxi industry and introducing cruising taxis in cities or providing tiered-level metered taxis. However, it is interesting to note that national government acknowledged the opportunities behind creating such an industry, which created the groundwork for Uber's subsequent introduction.

Lowitt (2006) provides an analysis of potential opportunities of having a widespread usage of the metered taxi industry in South Africa by focusing efforts on the micro level demand conditions already present in South Africa. Lowitt elaborates that while there is a culture of public transport usage in most of the developed world, the culture does not exist in South Africa in middle and upper income residents in urban areas (ibid). Lowitt traces this culture to historical processes, namely high private vehicle ownership, low levels of congestion, high parking availability and low parking costs in South Africa. This was important in explaining how while these historical processes begin to change, the impetus for a viable metered taxi industry in South Africa begins to grow. Lowitt explains how the middle class has grown substantially since the advent of democracy, citing a yearly increase in vehicle financing percentage, especially among black families, which in turn creates increased congestion, allowing for there to be asymmetry of price information for passengers to know where the reasonable price level is, but also for drivers to not over-charge or under-charge which would sap the market or reduce their wages respectively (Lowitt, 2006). The space for a service such as Uber was created, with the company offering cruising taxicabs with a transparent fare-price model. Championing itself as a sharing service as opposed to a taxi service, Uber vehicles have been floating around several major South African cities since it initially launched in the country in 2012. Furthermore, the service has negated the process of carrying the same registration permits that metered taxis are obligated to attain. Metered Taxis in the country have reacted negatively to the service's penetration, with public displays of defiance and violence in major South African cities

2.6. Uber's Penetration of the South African Market

The sharing economy is a phenomenon that rose to prominence primarily in the western centres of Europe and the United States. Sharing Economy services such as Airbnb and Uber have only recently penetrated the global south with forays into Kenya, Nigeria, Egypt, Brazil, Argentina and South Africa coming after 2012. Uber in particular, launched its first African office in Johannesburg in 2014, ready to enter the scene of a complex economy highlighted by high levels of inequality, racial division and poor job security. Uber's growth in the country between 2014 and 2015 has as stated before been met with a high level of resistance from industry competitor. Phillip, a long-standing Uber driver in Johannesburg, reflected on his start with the company, explaining;

'I'm one of the first guys on Uber, I started two years ago – the industry was quite small. The metered guys did not really know about us. I could drive anywhere and pick up clients. But when we started to grow, you could see that they started to notice. They slowly got angry'

Uber continued to grow exponentially in the country and in May 2016, eight regional South African taxi companies and 150 members of the Metered Taxi Association of South African filed and application against Uber to the Competition Commission for what they deemed the company to be 'engaging in predatory pricing and anti-competitive behaviour' (van Zyl, 2016). While the case was unsuccessful due to the Association due members failing to prove that Uber was a dominant actor in the market, it did highlight the plight that the service was in while contending in the taxicab landscape of the country. Uber has also had to contend

with various incidents of violence towards Uber driver-partners and Uber users around the country. Various violent attacks have taken place around metered taxi hotbeds such as Gautrain stations in the Rosebank and Sandton suburbs of Johannesburg, along with passenger threats occurring in Cape Town (van Zyl, 2016). The fear of violence has prompted Uber drivers to amend certain routes, as Phillip explained;

'I tend to not drive past there [Gautrain Stations in Johannesburg]. If I do, I drive on the furthest lane possible. If I have a client that is at the station, I must call them and ask them to walk outside so we can meet somewhere else. We often meet at places where these metered guys cant see'.

Metered Taxi Operators initially claimed to want that Uber required to have the same taxicab permits as other operators, claiming they were operating illegally and putting their livelihoods at risk.

Facing pressure and impending violence, Cabinet and Parliament in South Africa passed a bill in July 2016 that required Uber driver-partners to have metered taxi permits to operate in all South African cities that Uber has operations in (van Zyl, 2016). The implications of the regulation created the space for traffic authorities to impound vehicles of Uber drivers who did not have metered taxi permits. In a report issued by parliament, ongoing violence and tension between Uber and their metered taxi counterparts was cited as a prominent reason for passing the bill, 'The regulation comes in the wake of protests by metered taxi operators concerned about Uber's operations, including that it is not licensed' it was said in the report (van Zyl, 2016). The logistics of the regulatory bill, which included merely paying a yearly levy to acquire a permit, seemed to have little effect on both the supply of drivers and the revenue generated by the service in the country. Alon Lits, General Manager for Uber in Sub-Saharan Africa welcomed what he claimed were 'tough' regulations for Uber drivers in the country, explaining that it was a productive step in regulation catching up with the pace of technology. However, the new bill did little to quell tensions between metered taxi drivers and Uber drivers, with more incidents of violence and intimidation reported at various shopping districts in both Johannesburg and Cape Town along with airport routes. The apparent bone of contention was not Uber's regulatory eligibility, but the existence of Uber itself in the country. Metered taxi operators, facing a severe decline in customers and waning infrastructure, called for Uber to be done away with completely in the country. This

sentiment was perhaps indicative of the effect that the Sharing economy has had on global industries. Uber's disruption of the metered taxi industry in South Africa is an example of the sharing economy's global impact in the 21st century. Labour relations, as seen from metered taxi drivers in South Africa, have soured as Uber drivers have faced increasingly unsafe conditions and increased levels of driver precarity

Uber is a prominent service that has internalised the general practices of the sharing economy in its business model. The sharing economy, and its basis are explored in this section as a precursor to unearthing the precarity that the service creates for drivers through its business model. The first point of departure is the argument that credits the sharing economy to a theory of flexible accumulation (Harvey, 1990).

Part II: The Sharing Economy

The spread of capital beyond domestic boundaries due to globalisation, and the proliferation of the Internet as a means of sharing information, has seen the rise of more flexible and specialised organisations. These organisations, offering specialised goods and services to a greater scale of society, have seen mass-production making way for a mode of production defined as flexible accumulation. It will be argued that the sharing economy's origins can be traced to the rise of flexible accumulation. To illustrate this argument, a review of sharing economy literature will be made, drawing on links to flexible accumulation. This will set the context for Uber and its specific business model.

2.7. Literature: The Web & Disruption

The sharing economy can be defined as a collection of software platforms that essentially act an intermediary between private buyers and private sellers – both of whom could be deemed to be peers in the sharing economy, allowing them to share their existing resources, goods or services. The sharing economy has given birth to large companies that have systematically transformed traditional industries. The functionality of the sharing economy is perhaps best personified through three companies. Ride-sharing service Uber, acts as an intermediary between leasers of private cars and potential customers, Airbnb acts in the same capacity to connect owners of accommodation to potential tenants, while Facebook acts as a platform from which users can create content and media for share. The origins of the sharing economy can be understood to be a complex web of social and economic phenomena, resulting in the digitisation of commerce coupled with the culture of peer-based sharing. Of the many accounts on the origins of the sharing economy, two notable scholars whom have given the subject attention are Juho Hamari (2014) and Arjun Sundararajan (2016). Both rightfully attribute the sharing economy to the evolution of technology and society albeit articulating the respective evolutions trough different lenses

Sundararajan explains how the sharing economy has emerged from three technical developments. These three developments including the ability to render physical items such as currency, music and manufacturing processes as digital information. Second, the existence of increasingly powerful and compact hardware and third, the spread of modular software applications that build on each other (Sundararajan, 2016). Hamari explains how the sharing economy is essentially born from the interface of four separate phenomena, namely, online collaboration, social commerce, the notion of sharing online and changing consumer ideology. Hamari explains how the Web 2.0 era has increase the amount of user generated content and the way information is created and consumed online. Online social commerce through peer-to-peer interactions have proliferated through the growth of social media platforms, allowing for information technology to be used a vehicle in which to entrench a new consumer ideology of sharing both information, through status updates and links and importantly goods and services (Hamari, 2014). Hamari and Sundararajan both credit the emergence of the sharing economy to one or more developments of information technology, specifically the evolution of the Internet and the worldwide web. It would be a necessary step to provide a brief background on how the Internet has morphed into the principle vehicle for the sharing economy. The worldwide web, its successor Web 2.0 and the disruptive technologies that are used as an apparatus of sharing through the sharing economy would be a useful departure of exploration.

The development of the Internet has been a global phenomenon that has systematically catapulted the world into a new age narrated by technologically transmitted information. The development of Web 2.0, which is a term given to describe the second generation of the World Wide Web and is focused on the ability for people to collaborate and share information online, has sparked a new cohort of companies that aim to maximise the functionality of the internet and monetise the way people consume, and produce, the internet (O'Reilly, 2007). The Web 2.0 evolution of the Internet has given rise to online platforms that promote user-generated, peer-produced content, which is subsequently shared between

one or more users. These platforms are often compartmentalised according to the type of content shared and created, with notable examples being that of video sharing site YouTube launched in 2005, image sharing platform Instagram launched in 2010, crowd-funding and micro-financing platforms such GoFundMe and Kickstarter, launched in 2009 and 2010 respectively (Kaplan & Haenlein, 2010). Whilst the sharing platforms are integral into the rise of the sharing economy, they cover minor terrain into the ethos and potential of the sharing economy. The sharing economy, at its core, emerges from several technological developments that have simplified sharing of both physical and non-physical goods and services through the availability of information systems housed on the internet (Hamari, Sjoklint & Ukkonen, 2015). As such, a deeper inquiry into the preconditions to the World Wide Web and Web 2.0 would be integral to unpacking the sharing economy at its core.

The World Wide Web, commonly known as the Web (and referred to as that herein), can be described as a universe of global network-accessible information – a space in which people can interact and is primarily populated by interlinked pages of text, images and animation with occasional sounds, three dimensional words and videos (Berners-lee, 1996). Whilst popularly used as a synonym for the Internet itself, it is merely a platform that powered by the Internet, very much like electronic mail (e-mail). While the creation of the web was a seminal catalyst for the way in which the Internet could be used for the proliferation of information, it is in the second generation of the web, commonly referred to as 'web 2.0', where the web would become a platform in which human beings could share and create content, services and media on a mass scale. The term Web 2.0, coined in 1999 by information architecture consultant Darcy DiNucci in her article 'Fragmented Future', described the second generation of the web as a platform that emphasised user-generated content, in the form of websites, that could function on other products, systems and devices (DiNucci, 1999). While the original advent of the web emphasised mere viewing of webpages, the second generation of the web would allow users, who aren't computer scientists and web developers by trade, to create content on the internet and share it with other end users. Web 2.0 does not refer to a change in the technical characteristics of the Web, but rather the changing way in which the web is designed and used. The rise of social networking sites such as Facebook and Twitter along with social media sites such as YouTube and Vimeo can all be attributed to the second generation of the web, along with mobile phone based 'applications' popularised by the launch of the Apple iPhone and its

virtual application market place App Store launched in 2007. Interestingly, DiNucci foreshadowed the evolution of sharing on Web 2.0 in her article, writing:

'the web we now know, which loads into a browser window, in essential static screenfuls, is only an embryo of the Web to come. The first glimmerings of Web 2.0 are beginning to appear, and we are just starting to see how that embryo might develop. The Web will be understood not as screenfuls of text and graphics but as a transport mechanism, the ether through which interactivity happens. It will appear on your computer screen, on your television set, your car dashboard, your cell phone, hand-held game machines, maybe even your microwave oven' (DiNucci, 1999: 32).

The prediction, made in 1999, would be vindicated in the following two decades. DiNucci's forecasting had an especially apt observation of the Web's impending colonisation on other technological devices such as appliances, gaming platforms and especially cell phone devices. The birth of the cell phone, and its subsequent successor, the smart phone, would become a critical linkage between the web and the rise of the sharing economy. It would also become the centrepiece of operationalising services such as Uber and other companies operating within the sharing economy. Technology, linked industry with the new sharing economy. This linkage only occurred through favourable economic conditions of a changing world. A world that was characterised by a new mode of capitalist production that utilised technology more than before, a mode of production defined as flexible accumulation. This mode of capitalist production created conditions that were favourable for the rise of the sharing economy and the birth of a company such as Uber. With increased product specialisation, informalisation of labour, and increased forms of portable labour management – flexible accumulation is a vital cog in the axis that holds the sharing economy together.

2.8. Sharing Economy as Flexible Accumulation

As previously stated, the sharing economy's origins can be traced to the rise of flexible accumulation, a theory popularised by David Harvey. The spread of capital beyond domestic boundaries due to globalisation and the proliferation of the Internet as a means of sharing information has seen the rise of more flexible and specialised organisations. These organisations, offer specialised goods and services to a greater scale of society, with mass-production making way for flexibility. As such, organisations and individuals have been able

to offer specific and specialised services – creating an economy of sharing. The sharing economy itself, while having its origins in flexible accumulation, has morphed into a marketplace tailor made for individuals rather than large-scale organisations. Industries because of this new form of capitalist accumulation have seen the informalisation of work and the culling of employees worldwide (Harvey, 1990). It is in the process of informalisation, that being the use of labour on a temporary or short-term basis, that Uber fames its business model. It is perhaps most aptly encompassed in Uber's employee classification of 'independent contractors' rather than employees.

2.9. Conclusion

This chapter has provided substantive background into the evolution of the taxi industry along with the technological disruption that the sharing economy has created. The initial emergence of traditional taxicabs in the United Kingdom and the United States explored through the work of Wong (2008), Russell & Hodges (2009) and McArdle (2012), has been argued as creating the universal framework in which the global taxicab industry functions today. Furthermore, the birth of taxi regulation, with its premises based on controlling driver wages and quality of service, has been argued as being a key facet of the taxicab industry. Key examples of London's 'The Knowledge' and New York's 'Medallion systems' have been used to accentuate the importance and salience of regulation. The disruption caused by the sharing economy around the globe, in consultation with Hamari (2014) and DiNucci (1999), has been argued to provide a basis in which ride-sharing Uber has penetrated the taxicab landscape of the world. In this regard, David Harvey's theory on Flexible Accumulation (1990) has been mobilised in assessing how Uber has informalised work in the taxicab industry. This informalisation, is argued to direct lead to driver precarity in regard to Uber. Precarity, in its various forms, will be argued to exist in key facets of Uber's business model in the following chapter. This chapter will mobilise empirical data ascertained from fieldwork to accentuate the argument of precarity.

Chapter 3 – Uber: Modelling Labour Precarity

3.1. Introduction

This chapter fully develops the argument that Uber's labour conditions place drivers in a position of precarity. The argument comprises of three distinct sections that use the empirical data gathered throughout the research paper to address three areas in which precarity exists in Uber's business model. This empirical data operates in conjunction with Guy Standing's theory on precarity (2011) for its overarching hypothesis regarding Uber's precarity-creating business model. The first section argues that 'dynamic pricing' increases work hours and decreases wage. In this regard, literature by Chen, Mislove & Wilson (2015) on labour and dynamic pricing, along with work on supply and demand conditions by Chen & Sheldon (2015) is mobilised to support the argument. This is argued as precarious due to a decrease in a driver's income security and work security in the greater framework of labour market security. The second section hypothesises that Uber's 'independent contractor' status is both misleading in the global south and results in decreased representation security, income security and employment security as it relates to the precarity criterion developed by Guy Standing (2011). In support of this argument, legislative documents such as the Basic Conditions of Employment Act in South Africa (1997) and David Harvey's theorisation on informalised labour is utilised. The third section argues that Uber's rating system increases precarity through the reduction of employment security of drivers. Foucault's theory of Panopticism (1975) is consulted to accentuate the control that Uber is argued to enjoy over drivers in through its rating system. Furthermore, Hochschild's theory on emotional labour (1983) is used to illustrate that the employment insecurity the rating system creates evokes a 'management of feeling' from drivers as they exhibit emotional labour in the work place.

3.2. Uber's Fare System: The Model

Uber's fare system has roots both in the surface shift of capitalism in the 1970s as explained by David Harvey's 'flexible accumulation', which describes a new mode of production that uses technology as an apparatus to change production based on current demand and supply conditions. In the first instance, flexible accumulation states that today's companies use information technology to change the characteristics of goods produced as well as to analyse data to order suppliers and produce goods that are congruent to current demand flaws. Uber's dynamic pricing model, which changes fare-prices based on current supply and demand patterns is a direct descendent of flexible accumulation. In a similar vein, Uber's constant monitoring of the supply of drivers and demand patterns to the service is directly due to the rise of information technology acting as e-management purveyors, or information Panopticons as theorised by Zuboff (1988). A closer look at Uber's fare model will develop these ideas further and locate the argument that its model creates decreased labour market security for drivers.

Uber charges customers based on a distance covered and time elapsed nexus. Fares range between R7 to R10 per kilometre covered, with an additional R1 per minute charge (Uber, 2016). On an initial level, the fare for each Uber trip is typically split 20% and 80% between Uber and driver partner respectively, with the former receiving 20% and the latter 80% of the trip fare. Of the \$1 billion worth of bookings in 2015, Uber generated revenues of \$213 million (Guidero, 2016). The 80% of each respective trip is deemed to be the share received from the relationship that the driver partner has with Uber as a service. As such, the proceeds that a driver partner generates from his/her trips are used as an income that would in theory cover the driver-partner's operating costs. These overheads could include; vehicle repayments, insurance premiums, cellular contract and data rates, fuel and general vehicle maintenance along with providing sustainable wage for the driver partner from month to month. However, this pricing model is not static, but rather moulds to the current supply and demand conditions.

During times of high demand, Uber uses its smartphone based application as an information panopticon to administer a 'surge multiplier' to increase prices. A causal example of this 'surge multiplier' coming into play would be in a scenario where supply decreases, that being the number of drivers not accepting trip requests, and the demand increases, that being the number of uses attempting to book a ride, resulting in Uber failing to form an equilibrium. Uber thus begins to weigh expectation with fairness as it changes production in real-time, assessing how Users expected Uber's prices to be fair to them, while assessing how its prices expect to be fair to drivers. In this instance, the solution thus becomes increasing the average trip fare price, where users are supplied with drivers and drivers are supplied with the requisite rate to operate (Chen, Mislove & Wilson, 2015). Uber provides two justifications for its surge-pricing model; first it reduces demand by pricing some customers out of the

market, thus reducing the wait times for the remaining customers. Second, surge pricing increases profits for drivers, thus incentivising more people to drive during times of high demand (ibid). Chen explores this model of surge-pricing, providing commentary on the way Uber administers it, Chen explains:

'The key difference between Uber and other sharing economy marketplaces is that Uber is a Black box: they do not provide data about supply and demand, and surge multipliers are set by an opaque algorithm. This lack of transparency has led to concerns that Uber may artificially manipulate surge prices to increase profits, as well as apprehension about the fairness of surge pricing' (Chen, Mislove & Wilson, 2015:1).

Chen also further notes the unintended consequences of the surge model, explaining 'these concerns were exacerbated when Uber was forced to publically apologise and refund rides after prices surged during Hurricane Sandy and the Sydney hostage crisis' (ibid). On the inverse, the surge-pricing model is only one side of Uber's 'Dynamic Pricing Model', Uber's trip fares tend to decrease when the demand is low. An example of such a scenario was Uber's price cut during June and July in its South Africa territory, specifically to the major cities of Johannesburg, Cape Town and Durban. Alon Lits, general manager for Uber in Sub-Saharan Africa, stated that the price cuts would benefit drivers specifically. The price cut was due to an expected decrease in demand as Lits intimated that consumers in the country tended to venture out less in the winter months (Anetos, 2016). The price decrease saw resistance from certain quarters of the company's driver-partner fraternity, who argued that the decrease caused a decrease in their average wage. The argument made by aggrieved drivers, holds congruence with the hypothesis that the general practice of dynamic pricing creates precarity. This precarity, and its nature, is developed further in the next section.

3.2.1. Precarity as an Implication

Chen & Sheldon, explain how in many markets, 'new technologies allow traditional jobs to be divided into discrete tasks that are widely distributed across workers and dynamically priced given prevailing supply and demand conditions' (Chen & Sheldon, 2015: 2). These new technologies, such as Uber's smartphone application, allow fares to be changed based on the amount of people in demand of a ride or the number of drivers available. Senzo, a respondent in the study, explains the quick nature of these fare changes;

'Generally, if you drive around Nasrec [South of Johannesburg] when there is soccer or Rugby, you experience a lot of trip requests from customers.... It's crazy sometimes, man. Once you see an arrow shooting up on your phone, that's when you know [that surge pricing has been implemented]. I think it only lasts if there are many people. Sometimes I have seen surge for only five minutes. Sometimes its on for two hours, depends on drivers. If we all drive to that location then there won't be surge, but if maybe there is three or four guys there, they will increase the price for clients'

These sudden changes in income on the whims of their being a big concert at FNB Stadium or a lack of people outdoors during the brisk months of a Johannesburg winter, can all change the trip fares and as a result the amount of income an Uber driver, or driver-partner generates. With Uber administering a price reduction in South Africa during the Winter months of 2016, respondents were asked how this affected their incomes, and ancillary to that, their prevailing work hours. Phillip, asserted that the price decrease affected him initially:

'At first, we didn't really understand why there was a price cut, man. We are used to it going up sometimes [in periods of increased demand for service]. I think they said they told us on e-mail, but many guys don't really look out for that. So there was confusion and some guys weren't happy'

Phillip illustrated that a breakdown in communication between drivers and Uber made the price change difficult to understand and stomach. The effects of the price cut would be of significant interest. Justice, explained;

'We just needed to wake up more, find more clients. What they didn't think about is that petrol didn't decrease when they cut the prices, when price increased we had to work longer because we made less money. Some guys must also pay their bosses the same target every week, so the price cut affected us.

Justice's intimation on the price of living not decreasing with the price of Uber fares pointed to the growing income insecurity and precarity that was associated with dynamic pricing. Uber's dynamic pricing, is not congruent with the pricing structure of the essential items that are needed for drivers to survive. This discrepancy, leaves drivers in a precarious positon.

David, who explained that he was not an Uber driver at the period of the price cut, empathised with the service and the drivers respectively;

'Obviously, they wanted more people to call Uber, they were thinking that many people would request more rides with us, but I don't think that happened. But also, I think they tried to help drivers who lost money. I think some of the guys got compensated by Uber if they drove enough.'

Michael, also explained that Uber compensated drivers who hadn't reached a certain amount of money on an hourly basis. However, drivers also had to have completed a certain number of trips within that hour – which inevitably caused an increase in the density of work on average as the average resting time inevitably dwindled:

'They told us if we completed three or four trips an hour, they would fill in whatever we would lose. Let's say if normally I make R300 in three trips, and now I make R220 because of the price cut, they said they would give us the rest [R80]. But man, if it's a Wednesday at 11 in the morning, there is no way you are making three trips in an hour. Those times are quiet. So, if it is quiet, you don't get [compensated] from Uber'

Dynamic pricing relies on a speculation onto the perceived increase in supply of customers through price incentivising. This speculation, using the smartphone application as its information panopticon, would then change fare pricing (Zuboff, 1988). However, most of the respondents explained that the number of clients they had during the price-cut period remain relatively unchanged, without the surge in clients that Uber initially expected. Phillip explained;

'I don't think the number of clients went up. People in Joburg just don't like travelling when it's cold. I didn't really notice an increase, the only thing that changed was how much guys worked. You see guy's parked at garages sleeping for maybe an hour then going back to work. It was tough.'

The direct implication of this was an increase in work hours and subsequent fatigue. This mis-calibration of outcomes between Uber and real life demand and supply conditions caused tension among drivers who saw their precarious position grow. As a result, Uber drivers illustrated a show of resistance as they held strikes, the most prominent of which was at

Uber's Greenpoint office in Cape Town. About two hundred Uber drivers ceased work and hosted a march to Uber's office in the city, with Uber cutting the tariffs from R7 per kilometre to R6 (Prinsloo, 2016). Uber subsequently halted the price cut in August and returned to regular fare pricing (ibid). The restoration of regular fare price levels, was perhaps the biggest indictment into the speculative nature of dynamic pricing – a negative by-product resulting in Chen's 'black box' theorisation on the price model's unknown algorithms. However, while one can deduce that the price cut period increased the average work hours of drivers, it can not be deduced whether their income levels were higher or lower than they would have been without the price cut in the seasonal period of low-demand.

In conclusion, the data deduces that the dynamic pricing model that Uber implements, based on periodic supply and demand conditions, has a direct effect on the density of work a respective driver needs to render to reach a certain income level that is considered adequate. Based on the responses given in the study, two outcomes are generated. First, dynamic pricing, specifically price-cutting in periods of seasonally low demand, increases work-hours on average as drivers need to attain more clients to reach the same amount of revenue they are used to. Secondly, these price-cuts do not substantively increase the demand for the Uber service in Johannesburg, which results in a net-loss of income for drivers considering periodic fuel price increases and vehicle maintenance costs. The eventualities of the evidence point to precarity in two forms. First, drivers lose income security as their wages and demands on the job change while on shift, with supply and demand conditions constantly influencing the stability and protection of their income levels (Standing, 2011). Secondly, and perhaps the cause of the first form of precarity, is one of a lack of representation security. The lack of representation security, which according to Standing would mean representation in the labour market in the form of unions, means that Uber drivers are unable to bargain against dynamic pricing and the income deficit that respondents claim it evokes (ibid). This nonexistence of representation security, is argued to be a result of the general climate created by flexible accumulation as a mode of capitalist production (Harvey, 1989). The informalisation of labour into small-segmented groups decreases the efficacy of trade union building.

A further foray into the Uber experience is useful as a means of addressing the second section of the argument presented in the study. In the next section, Uber drivers are examined closer, with emphasis given to the way they are sourced by Uber and classified by the company.

3.3. The 'Independent Contractor' Status: The Model

The following section takes an in-depth analysis into the implications of Uber classifying their drivers as 'independent contractors'. It is argued that these drivers are misclassified, which is supported by detailing that some drivers operate for third party fleet owners and are thus in reality employees in terms of the Basic Conditions of Employment Act of 1997. It is argued that the implication of this misclassification is that drivers are precarious because of having to divide their earnings with Uber and the third-party fleet owner, creating income insecurity as per Guy Standing's labour market security theory. Furthermore, it is argued that this misclassification also creates employment insecurity due to a lack of protection against arbitrary dismissal by fleet owners. The first point of departure in this section is through providing a profile of the specific drivers that were mobilised and interviewed for this study, and in particular their backgrounds and reasoning behind joining the service. The driver profile will give context to closely analysing Uber's training and recruitment process along with unearthing the precarious nature of Uber's 'independent contractor' status of classifying drivers.

3.3.1. Drivers Pre-Uber experiences

All the interviewed driver-partners were black African males, whose ages ranged from 24 to 40. Six of the eight respondents explained that they hailed from various regions of South Africa, two of which explaining that they were originally from the KwaZulu-Natal province, one hailing from the Eastern Cape and three other driver-partners did not disclose where specifically in South Africa they hailed from, with the two remaining revealing that they were from neighbouring Zimbabwe. The employment history of the eight respondents was varied in industry. One respondent, 'David', explained

'I used to work in the retail space. I was a part-time merchandiser at Game. I left that so I was just looking for something else to do because I also had to leave college, so I heard about Uber through a friend. I looked it up on the web and decided to give it a try', 'you're my third client, I started last night'

Another driver-partner, 'Senzo', explained how he used to be in the delivery industry;

'I've been driving for a long time. I used to deliver for British American Tobacco. Some guys would get robbed, these guys, they want money – [there is] lots of money in Tobacco. I heard about Uber because a friend of mine is already driving for them'.

One respondent, Sthembiso, came from an existing taxicab service in Johannesburg;

'I used to drive clients strictly from Sandton to other parts of Joburg. Drop them off, and then drive back to Sandton. I decided to join Uber because then I wouldn't waste petrol, you know? I could make money going there and back instead of making money just going one-way'. 'I make a lot more now since I joined Uber three months ago'

Sthembiso highlighted the opportunities that Uber provides him with its disruptive technology. Its technology, in the form of the smartphone application, prevented him from floating or cruising too much on the roads without occupants in his vehicle due the technology constantly scouring the sharing economy for new leasers to his service. In the wake of Uber's technological lure, the process of applying for Uber was the next step to becoming a fully-fledged 'independent contractor'. A closer analysis into the process of applying for the service and its recruitment process brings the ambiguity behind Uber's driver classification into spotlight.

3.3.2. Applying to become an Uber Driver

Uber commonly refers to the labour that carries out the transportation process as 'driver partners'. While this may be a term that evokes a sense of reciprocity and relative warmth between the said partner and Uber as a service, a closer look at the recruitment process will elucidate a different picture. A browse of Uber's official website's recruitment page is highlighted with three bold taglines for prospective drivers; 'Make good money', 'Drive when you want', 'No office, no boss' (Uber, 2016). Applying to be 'your own boss' is carried out on the same disruptive technology that it sources customers, a smartphone based application. The smartphone-based application enables consumers and driver-partners to locate one another within the nexus of the sharing economy. Furthermore, the application also gains a driver entry into partnering with Uber (Gloss, McGregor & Brown, 2016). Once the smartphone application is downloaded on a prospective driver's smartphone, he or she must adhere to Uber's requirements of entry. A skim of Uber's published online driver requirements illuminate what a driver needs to partner with Uber. The services online portal states; 'Requirements vary by city, but there are a few minimum requirements: Possess a valid South African Professional driving permit (PrDP); Complete a safety screening; Pass a

driving evaluation' (Uber, 2017). Furthermore, Uber also has separate vehicle requirements to work for the service, which include:

'A working radio; air conditioning; four doors; A vehicle of 2013 or newer; [a] commercial vehicle insurance with passenger liability; operator's card; vehicle inspection report; certificate of registration; operators permit from the department of transport' (ibid).

The demarcations for entering the Uber platform are encompassed in these requirements. Once these requirements are met, driver training is held at Uber's Johannesburg office based in Parktown North. Sthembiso, highlighted this process:

'They first tell you some of the things you can't really do when you're driving. They tell you to stick to the speed limit on all roads – sometimes customers don't like this because they think we drive too slow, you know. They also tell you some of the things you can and can't talk about. Things like religion and politics are stuff we can't talk about. Maybe things like sport is cool to speak about'

As Sthembiso asserts, upon applying to be a driver, Uber's training process is based largely on shaping a driver's behavioural and physical actions. Moulding them in a way that is palatable to the service. The act of emotional labour is subtly placed into the awareness of drivers, with Uber's training regimen introducing a level of emotional regulation. Emotional regulation here is described as the automatic or controlled process of influencing specific dimensions of their emotions (Hochschild, 1983: 10). The emotional labour, it is argued, is but a mere symptom of the greater precarity that Uber will present the driver once his training is complete and he is on the road.

3.3.3. Driving for Uber: An Ambiguous Employment Status

Uber 'leases' its customer network and thus creates a 'partnership' between driver and service through its smartphone application, where there is a collaboration of revenue generation. In theory, Drivers render their vehicles and time to transport customers and Uber provides these customers. Driver partners thus in theory create their own operation schedules

and are deemed to be 'independent contractors' working on a continuous temporary contract with Uber which is effected only during trips. The premise behind this methodology of Uber's recruitment process is argued to echo the central tenets of David Harvey's flexible accumulation theory. Uber's temporary leasing of drivers and forming strategic 'partnerships' with drivers is but an embellished form of informalising labour. What this includes, as can be seen with the example of Uber, is the compartmentalising of labour into groups of skillflexible and temporary segments for specialised production. Driver partners here are compartmentalised to serve the purpose of driving their vehicles in a specialised manner (Harvey, 1989). However, this compartmentalisation often leaves labour, and in this case drivers, relatively disposable and precarious. A further exploration into the ambiguity of Uber's employee status illustrates this.

As stated, Uber does not provide the vehicles in which trips are administered, but merely act as an intermediary between consumer and producer as per the sharing economy's basic premise. In theory, driver-partners own their cars as the 'tools' they use for their trade. This, as Uber states, renders driver-partners as 'independent contractors' or 'self-employed'. It would be interesting to compare the definitional nature of the employee status that Uber attaches to drivers along with definition of South Africa's department of Labour. An independent contractor, as per the Internal Revenue Service of the United States, the country from which Uber was founded, is a person who fulfils the following criteria:

First, the worker supplies his or her own equipment, materials and tools. Second, all the necessary materials are not supplied by employer. Third, the worker controls the hours of employment thus indicating they are acting with autonomy in the work place (IRS, 2016).

As such, with driver-partners in theory using their own vehicles and smartphones as their fundamental materials of trade, along with dictating their own hours of operation, it is a realistic claim to render them as independent contractors. However, taking a closer look at the South African context, through the findings of this research, a driver's employment status grows blurrier.

Of the eight drivers interviewed during fieldwork, three respondents, Michael, Sthembiso and Justice revealed that they owned the vehicles they drove - while the remainder drove through a fleet owner. One of them, David, explained:

'They [the fleet owner] give you targets generally. For example, my guy has a whole fleet and he's got quite a few guys working for him' 'So by every Monday, we must make a certain amount of money and give it to the owner. After that we get paid from the target. He pays us every month, but weekly the boss gives us money for petrol and data for the phone. He also gives us the phone'

David's revelation would be a common thread between five of the respondents, who all mentioned having to reach 'targets' on the trips or referring to their 'bosses' when asked about the origin of the vehicles. Muzi, explained the relationship he had with his fleet owner, 'these bosses, they want money man... I make her [the vehicles owner] a lot of money, man. She went to Mozambique a few months ago'. Another respondent, justice, explained that he had made the transition from driving for someone else to having his own vehicle:

'I used to [drive for someone else]... but when you realise how much money you make for the owners and you see what you get, it doesn't add up man. I know how much I bring to the table. I know how much money I can make and have been making for other people. I had to try get my own car, man'.

What was interesting about Justice's assertion along with the other respondents who drove for other partners, was that there would inevitably be an excess that was given to the partners, almost a rental fee for using their materials for trade (vehicles & smartphone). The general share of revenue in an Uber operation, and how it was designed by the company, is a bilateral one. With the Uber service taking 25% of a single fare, with the percentage being reduced to 20% for users who have been active on the platform for a longer period, as revealed by one of the respondents. The pool of respondents thus are categorised into two groups. First, those that drove their own vehicles and tend to all the operating costs of being a driver partner such as vehicle maintenance and smartphone connection, and the second group being that of respondents who used the vehicles of fleet owners. In order to further explore the nature of fleet owners, an interview was conducted a fleet owner who explained the rationale and operational mechanisms related to being a driver-manager.

3.3.4. Employment Misclassification Creating Precarity

An additional interview was held to delve deeper into the relationship between a driver and a fleet owner, who was emerging as a proverbial 'middle-man' in Johannesburg's Uber practices. 'Trevor', a fleet owner and by default driver-partner was interviewed for the

purposes of this research. Trevor owned an undisclosed number of vehicles in which all of which were driven by employed drivers. He explained:

'We [he and his business partner who was not present at the interview] primarily want to help these guys out – give them something to do. We supply them with the cars which all have petrol cards, and iPhones... We also give them weekly targets and evaluate them from there generally.'

Trevor further explained that there would be a monetary target that Drivers would need to achieve on a weekly basis, an amount made above that figure would presumably be factored into the remuneration of drivers and a figure below on the inverse would prove to be detrimental for the driver. He noted:

'We generally pay the drivers and pay for the car servicing and petrol and all that before we take anything for ourselves. That's just how we work. The routine could be different with different car owners'.

What could be concluded with Trevor's interview and the general theme of working under fleet owners was that this put Uber's 'independent contractor' status into spotlight, along with the inevitable heightened sense of control that the driver came under having to manage the panoptic mechanisms of Uber's performance evaluation through rating systems coupled with target-based performance measures enacted by fleet owners. The existence of fleet owners like Trevor, it is argued, results in the employment status of Uber drivers being misclassified. The misclassification comes when drivers fail to be classified as 'employees' and as a result not enjoying employee benefits. The eventuality of this misclassification is a heightened labour market insecurity categorised by increased levels of employment insecurity and income insecurity as pay sharing increases and chances of arbitrary dismissal grow. Empirical document analysis will accentuate the validity of this argument.

There is no tangible definition of what an 'independent contractor' is in South Africa's labour legislation, however one can use this legislation to determine what an independent contractor is not. I will use this process of elimination to determine if Johannesburg's Uber drivers who drive through fleet owners are indeed independent contractors. Section 1 of the Basic Conditions of Employment Act defines an employee as:

'Any person excluding an independent contractor, who works for another person, or

for the state, and who receives, or is entitled to receive any remuneration and any other person who, in any manner, assists in carrying or conducting the business of an employer" (BCEA, 1997: 4)'.

One could assume that the five respondents that didn't drive their own vehicles were thus not independent contractors according to the BCEA document, but are rather employees. They A. work for another person, and B. assist in carrying or conducting the business of an employer. The employer in this regard would thus become the fleet owner. However, Section 83 A of the BCEA, further elaborates on defining what an employee is. It explains that employee status is a presumptive matter, explaining that a person is presumed an employee until the contrary is proved regardless of the form of the contract. This document states that a person is an employee if any one or more of these factors are present:

'i) The way the person works is subject to the control or direction of another person.
ii) The person's hours of work are subject to the control or direction of another person. iv) The person has worked for that other person for an average of at least 40 hours per month over the last three months. V) The person is economically dependent on the other person for whom that person works or renders services. VI) The person is provided with tools of trade or work equipment by the other person (BCEA, 1997: 40).

The status of drivers who drive for fleet owners here becomes illuminating. They are presumed employees because they fill the category. The drivers are thus deemed to not enjoy their rightful employee benefits through the fleet-owner, such as annual leave for continuous service and weekly rest days among other rights (BCEA, 1997). Some respondents explained that have worked seven days a week in some instances and have heard of peers working similar hours. Furthermore, the issue of Precarity also comes into spotlight. Guy Standing's labour-related security criteria of Precarity discussed in an earlier section of this paper, I would argue, would render these drivers in a position of Precarity. The premise behind this is that drivers in Johannesburg who work for fleet owners, over and above being misclassified and being liable to certain privileges, are precarious in the sense that they suffer from a lack of A. employment security (the lack of a stable income due to Uber's dynamic pricing model coupled with having to give a portion of their income to their fleet owners), and C. Representation security (there is no existing union for Uber drivers in Johannesburg to assists

in collective bargaining) (Standing, 2011).

A further elaboration of the third premise behind the argument that Drivers are precarious, their lack of Representation security, can also be articulated as being directly caused by a global trend. This trend would be seen in the erosion of unionisation due to the rise of flexible accumulation as a mode of capitalist production in the Post-Fordist era. David Harvey refers to flexible accumulation as the growing informalisation and de-unionisation of work, and the veering away from mass-produced capitalism (Harvey, 1989). In sum, this section argues Uber drivers operating under fleet-owners work informally due to their misclassification. This misclassification consequently results in a lack of collective bargaining for wages and better work conditions. Furthermore, Fleet-owners, along with Uber as a service, operate in producing small-batch segments of the transport industry, making use of flexible Accumulation's model of easily disposable labour and 'contracted' workers. Uber drivers, having to contend with heightened income and work security due to Uber's dynamic pricing and employment status, are faced with the further burden of having to maintain stringent 'rating' averages. The ratings average will form the primary arc of the next section of this study, with the argument made that these ratings increase precarity in reducing the employment security of drivers.

3.4. Uber Driver Ratings: Emotional Labour & Panoptic Management

Uber's rating system is argued as the main arc of Uber's panoptic control over drivers. The rating system, used through a disruptive technology in the form of Uber's smartphone, surveys drivers and their behaviour in ensuring the drivers adheres to Uber's stringent 'control rules'. These rules comprise of having to maintain a 4,7 out of 5 stars rating. Furthermore, as Manual Castells points out, information technology is used as a medium from which people can communicate and function, with technology now acting as management Panopticons in the Uber process (Castells & Cardoso, 2005. The result of having the rating system as the proverbial panoptic structure in the Uber process, is the increase in reducing the employment security, and as a result evoking emotional labour. The first point of departure will be to analyse how Uber's smartphone application acts as a mechanism of surveillance, followed by a broader discussion on how this application uses 'rating' systems to create precarity.

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3.4.1. Uber's Surveillance: The Smartphone Application

Uber's smartphone-based application begins its advanced form of control over labour through the initial process of when a customer hails a ride. The emotional labour commences and the rigidity of being an Uber drivers has subtle beginnings. Once a trip is requested by customer, the next available driver-partner will be alerted and he will be asked by the application to accept the requested ride. If a driver rejects the trip, he is placed in the precarity of insecure work security. Work security here, as Standing explains, is defined as protection against illness and regulation on working time. If an Uber driver decides to reject a trip for the purposes of rest, he may be terminated by the Uber service. The implication is accentuated when Muzi, a participant in the research process explains:

'if you decide not to accept a client, they can disqualify you ... You have to accept a certain number of trips otherwise they will think you are making your own private trips while online with them. So you can't just relax for too long, man. They are always monitoring us'

Furthermore, Uber's smartphone application subsequently provides the details of the driver partner to the consumer, which includes the driver-partners name and a photograph of the driver-partner (which is not always required by various Uber territories), the driver-partner's vehicle model and the driver-partner's registration number along with the driver partner's average rating. The driver-partner will in turn be shown the name of the customer along with his or her own average rating before arriving to the location of the customer. The application also allows the customer and the driver-partner to liaise prior to the trip through a call function. Once the trip is underway, Uber calculates the fare based on the distance covered along with the duration of time taken to complete, with fare estimates being flexible based on the potential for traffic congestion. Uber's smartphone application also creates the route to be used, with driver-partners able to tether their account with mapping services such as Google Maps, Apple Maps or Waze, the customer may also stipulate their own desired route. Once

the trip is concluded, the amount that the trip is worth is automatically deducted from the account that the specific user has tethered to their Uber account.

The smartphone application, in the act of providing advanced transparency on the identity and contact details of both customer and driver – begins the process of panoptic surveillance and labour control. Information panopticon theory critiques how technological systems use transparency to assert power, control and authority. As such, Uber's application and its routegeneration, binds the Uber driver to a constraint of direction. Uber makes use of GPS technology, embedded in its application, to assert power in relation to how trips are administered. Michael explains; that 'they [Uber] can terminate you for using an 'unnatural' route, man. Some guys have been accused of talking to clients before so that they can take them at a certain time'. Michael's assertions illustrate that Uber's panoptic method of management and surveillance begins before the trip with a customer is even administered. However, it is in the trip itself where the rating system itself takes full effect. Here, the surveillance heightens as customers rate one's experience of the driver following every trip.

3.4.2. Driver 'Ratings' as a Mechanism for Precarity and Emotional Labour

As discussed, Uber's smartphone application allows both parties to rate one another's trip experience after every ride. Furthermore, comments could be left by customers to critique or compliment the service that they would have received. Users and driver can rate one another on a scale of one star to five stars. The effects of this bilateral rating system on the driverpartner were of interest throughout the research process. The most prominent finding in this regard was the fact that the rating system was used as a barometer of the performance of the Uber driver in question. David explained how drivers all had individual rating aggregates or averages, with this average being used by Uber as a measure of how effective each driverpartner was. He explained:

'Basically if your rating is below I think about 4.6 or 4.7 stars out of 5, then they can terminate you after a while. I'm not quite sure what happens to these guys, apparently, you receive further training when you are terminated but I know of some guys that were terminated and never let back in'

In a document review of Uber's published list of practices, the service explains the logic behind having these rating systems in place, stating;

'This [the rating system] ensures that people riding with Uber continue to receive a high-quality experience. We find that rides who consistently rate trips with 5 stars request more rides and refer friends and family to try Uber. This leads to more trip requests and earning opportunities for driver-partners' (Uber, 2016).

The rating system thus, is used to whittle out any drivers that are deemed to be underperforming and subsequently reflecting negatively on the Uber brand. A respondent explained that there are specific behavioural cues that they employ to achieve high ratings, these are both physical cues and behavioural ones. Sthembiso explained that Uber demanded a lot of the driver's participation in the trip experience:

'You have to make them [customers] feel comfortable. I have Valpre (bottled water) always. I offer clients and I have some few sweets also. I also ask for small things like if they like the temperature in the car or if they want to listen to 702 or Metro on the radio. These things can boost us in terms of ratings'.

As Sthembiso remarked, he used beverages and sweets to increase the quality of the trip and improve his rating. Muzi explained how the rating system meant that certain conversational topics were to be left alone. He explained that:

'Sometimes I keep quiet in the beginning because you don't want to aggravate customers that don't want to talk. You must just wait and see and just hope. But I do talk to customers; I must keep it light, and most importantly *professional*. For example, if there was no rating system, you could punch me – matter of fact I would punch you back' he jokingly explained.

There seemed to be a level of sanitisation that the rating system made to driver partners and their behaviours. Uber's constant surveillance through this rating system ensured that there would congruence between the driver's behaviour and the service's expectations. Hochschild, explains that 'while emotion work happens within the private sphere, emotional labour is emotion management within workplace according to employer expectations' (Hochschild, 1983). This kind of management is one that is continuously ongoing in the Uber trip process. The threat of imminent termination from the service places drivers under behavioural constraints, concealing their inward emotions with elaborate actions of outward courtesy. Furthermore, as Michael explained:

'You never know how customer will rate you, sometimes they just don't like you for their own reasons' 'you can give the best service, or think you did, but then they still rate you badly. Some people just have agendas'

Michael illustrated that even in a situation where a driver feels as if he has issued exemplary service, a respective client may still give them a poor rating – explaining that their employment security is not necessarily always in their own hands. The rating apparatus within the Uber's smartphone application, it is argued, is Uber's most prominent panoptic mechanism. The service's 'rating' system acts as an emotional straitjacket that limits and constrains a driver's behaviour and actions. The reason for this heightened sense of constraint is that the rating system, acting as Foucault's proverbial tower around a circular wall of Uber drivers, observes the movements, actions and conduct and uses these observations to retain or server labour. Furthermore, the rating system panopticon can be interpreted as having a heavier hand to Uber drivers. Senzo, when asked whether clients were also subject to the average rating system of potential termination, stated:

'They don't suspend clients that much anymore. Now they just fine them. I think mostly if they throw up in the cars. You get these guys that throw up in the car after drinking on the weekends. I think they get fined R250 or something, if I report them. I have heard of some people fighting at the back of another guy's car the one time, I think they [Uber] might have removed them'.

What could be discerned from the responses given was that the service tended to fine clients for moderate to serious offenses, but there was no evidence that indicated that clients with lower than average ratings would face any form of termination. As a result, drivers can be seen operating under a reduced margin for error when it comes to their behaviour in comparison to their customer counterparts. As a result, the onus to act cordially during trips is solely on the shoulders of the driver. The following ethnographic vignette with respondent Muzi will illustrate the relationship that was observed between rating system and driver behaviour:

'I've only heard of one guy being fired from Uber', Muzi explains when I questioned him about the nature of Uber's rating system and its micro-management. 'Apparently, he was driving like a taxi driver, but he was only working here for one week, a new guy', he extends. Regarding dealing with difficult customers, Muzi stated: 'you can't respond to difficult customer's man, you must try and understand, some are rude of course. But some drivers also have problems, like that guy'. He explained that driving for the service required a calmer set of emotions, and self-control when in the presence of customers who he perceived as difficult. He further noted that the emotional control spanned not only one's outward behaviour but the manner of driving. He hurriedly avoided the plastic barricades put up for road renovations on Louis Botha Avenue as we shared laughter around the politics of South Africa's men's football team. His comfort enables a looser sense of driving and behaving, which often ranked below the mechanical emotional control and driving that Uber often lauds and advocated for. Muzi extrapolated a large part of the Uber ecosystem, one of emotional labour and the presentation of conservative driving habits. This requirement often collapsed when comfort was built between himself and myself as a customer in the process. For a temporary period, the smartphone-based rating was forgotten about, a rating system that would form part of Uber's mechanism for evaluating drivers.

In sum, the information panopticon that is Uber's rating system is arguably designed more as a mechanism of evaluating and controlling driver partners than ensuring a balanced and cordial bilateral relationship between driver and customer respectively. The threat of termination and unemployment drastically influences driver behaviour and evokes emotional labour. The emotional labour is a reactionary mechanism utilised by drivers to combat the threat of employment insecurity. The threat of employment security as form of precarity is often coupled with the threat of workplace violence in the context of Uber. This violence, as will be argued in the next section, stems from Uber's regulatory evasion and subsequent antagonist actions towards industry competitors. Work Security, which Standing defines as protection against accidents and illness at work through safety and health regulations, will be argued to recede as Uber disrupts the taxicab industry of Johannesburg.

3.5. Uber's Evasion of Taxi Industry Regulations

Uber, providing a specialised product in the form of a sharing mechanism, is argued to gain inspiration from the central tenets of David Harvey's flexible accumulation theory (Harvey, 1990). This justification comes in the form of Uber stating that it provides a specialised platform from which drivers and customers can liaise and connect, thus not being an actual taxi service and not needing to abide to any form of taxicab regulation. This is argued to aggravate metered taxicab drivers operating in Johannesburg and thus placing Uber drivers in a precarious position when faced with the threat of violence from their metred counterparts.

Furthermore, it is argued that Uber's evasion of regulation also places limitations on the income potentials of drivers as they must participate in fewer trips to preserve their safety. This argument mobilises existing literature from Akkaya (2015) and Hamari (2014) in describing the relationship between Uber and taxicab regulation coupled with the data ascertained from drivers to illuminate their lack of protection and work security.

A respondent, Justice, when asked about his personal background, provided an interesting narrative around the potential perils of Uber's evasion of regulation. He explained that metered taxicab drivers had grown angry over Uber's presence in Johannesburg, with much of the anger directed toward Uber's disruption and failure to adhere to the industry regulation. The following ethnographic vignette details Justice's experience:

'I am originally from Bulawayo ... I moved to Johannesburg around 2000', Justice says with a subtle hush as he navigated the curvy bends around the suburb of Greenside. His tall, streaky psyche was intimidating to the naked eye, his voice on the other hand had a smooth sense of wavy articulation and familiarity. 'I usually pick clients up around this area - sometimes Parktown North and Melrose ... You can't go to places like Yeoville man, they will throw things at your car and damage it. They [metered taxi drivers] don't like Uber drivers, and if they see you're Zimbabwean its worse', he explained. The bulging occurrence of xenophobia-fuelled attacks of foreigners in South Africa in 2008 and 2014 seemed to have vilified his foreignness. 'They say that we are taking their clients away from them. I don't understand this because I have heard clients tell me that it's unsafe to use Roses [a common metered company in Johannesburg]. One guy stopped my car at Park station and asked for my papers. At first I thought he meant my documents because I am from Zimbabwe, but then he told me he wanted to see my permits. At the time we didn't need permits as Uber – that's what pissed them off'

Justice's narrative highlighted a precarious facet of Uber business profile. His nationality when coupled with his line of work as an Uber driver combined both the frustrations from Uber's competitors as well as xenophobes in the South Africa. Uber's competitors, metered taxicab drivers, have grown angry with Uber's growth in Johannesburg and other South African cities, pointing to the fact that Uber evades the regulatory legislation that presides over the taxicab industry in the country. This anger at Uber's evasion of regulation as a result, has created health and safety concerns for drivers when operating in Uber's ondemand cruising network. A closer analysis of the relationship that Uber has with regulatory practices in Johannesburg and South Africa will illuminate how this relationship creates precarity through unsafe working conditions.

3.5.1. Contextualising Competitor Resistance to Uber's Evasion of Regulation

Uber's infiltration of the taxicab industry in over 180 countries worldwide has seen it participate and inevitably displace existing competitors in those markets. An example of this phenomenon can be seen in San Francisco's taxicab industry, with the average trips per month per cab falling from 1400 trips in March of 2012 to 500 trips in April of 2014. This decline is has coincided with Uber's growing presence in the city (Akkaya, 2015). A similar state of affairs can be seen in New York's famed yellow cab industry, with the price of a medallion falling from \$1.32 million in 2013 to \$650 thousand in august of 2015, a byproduce of the dwindling demand for the yellow taxicabs in the city – also coinciding with Uber's growing presence in the city (Stenovec, 2016). A multitude of reasons can be attributed to Uber's rising presence in world cities, one could argue that the reduction of search costs and overall fare price has seen consumers drift toward the service, but one of the more compelling reasons is Uber's apparent lack of regulation in a number markets in the world. The simplistic reasoning for this lack of regulation could be summed up in one basic statement; taxi regulation is aimed to regulate the supply of taxicabs in each city, Uber on the other hand, is not a taxicab supplier, so is thus devoid of any kind of regulation. In theory, applying taxi regulation on Uber would be akin to regulating service and appliance trading company Gumtree for the computers that consumers opt to lease or sell on its website. This is the logic that co-founder and CEO Travis Kalanick holds. He claims that Uber is merely a smartphone application that helps people share, rather than a taxicab service (Hamari, 2014). This claim has helped Uber operate in several markets without being liable to various regulatory networks. The ramification of this has been an increased resistance from the sectors of the taxicab industry, who have systematically seen their own services and companies suffer from declining revenue and customers. Examples of this resistance and the premise thereof are apparent around the world. In Johannesburg, the metered taxi industry has reacted with violence and anger toward Uber's penetration into their industry. The precarity created by the violent cultures permeating the taxicab industry in Johannesburg is accentuated in the next section.

3.5.2. Metered Taxicabs Violence: Implications

The interface between metered taxis and Uber in Johannesburg is violence, which is argued to serve three functions. First, to stifle the link between Uber drivers and their customer base through various preventative measures aimed at halting drivers to pick up customers at certain key points. Secondly, violent protest action at structural institutions that aid or have a direct say in whether Uber operates in the city. And third, to physically threaten or physically harm drivers who operate with Uber.

To elucidate the three functions of violence, one could turn to three distinct incidents as revealed by respondents and various media outlets. First, Phillip, explained how he had experienced physical barriers to reaching his clients. He explained;

'They [metered taxi drivers] blocked me off from going to the drop-off at Park Station – Park Station is quite bad man. My client wanted me to pick her up from inside the station but when I got there they put these orange cones to block me from going in', 'who?' I asked, 'The metered guys' Phillip explained. 'They wanted to block me from getting a client, I could not drive into the station so in their mind this was stopping me from doing the pick-up'

Phillip revealed that Gautrain stations were places where these kinds of incidents were especially rife. 'At Park Station [within Johannesburg's CBD] things always happen man' he explained that Metered taxis saw these Gautrain stations as one of their last reservoir of customers – commuters such as business people from Sandton and the Airport. Phillip explained that after much effort, he had to call the client to arrange an alternative meeting place a few blocks north of the station. Another respondent explained that cones were not the only form of barrier used to halt the activities of Uber drivers. Sthembiso corroborated Phillip's assertion;

'They will block you off with their cars and tell you to turn around. If you try to drive somewhere they don't you to be, they will block you with their cars. I have heard some other Uber guys being stopped with guns and sjamboks. The situation is tense between us and them'

The implications of these blockages lead to trip cancellations by the Uber drivers in question, which too could lead to termination by the service as driver can only cancel as a minimal

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number of trips before being removed from the service. This reduced their opportunities at increasing their wage levels along with reducing their work security and increasing workplace precarity. The metered taxi war on Uber has been operationalised through more mechanisms than just barricading entry into key points. Physical acts of violence have also sparked throughout the city, as Uber drivers have faced threats and incidents of harm. Michael explained how he had metered taxi drivers remove the key from his ignition and threaten him with a fire arm, alluding to other scenes has been witness to, such as a driver being killed by an armed gunman while he was in his vehicle.

'You just can't go to certain places, man. If I see a trip requested from places like Rockey Street – I cancel immediately, even sometimes Hillbrow on some streets. I've seen rocks being thrown at someone's windshield, he didn't even stop, he just kept driving with the broken windows'

The situation is seemingly dire in this respect, with little intervention from Johannesburg's Metro Police Department. In response, Alon Lits, Uber's sub-Saharan Africa general manager, in an interview with the media, acknowledged that the violence was in continuous escalation, 'we are in constant communication with the drivers assuring them that their safety is our number one priority. We're considering ways to reduce cases of intimidation' (Corke, 2015).

In reflection of responses, Drivers have had to take initiative in ensuring their own protection primarily resorting to trip avoidance to maintain a distance between themselves and centres of violence. This kind of trip-avoidance, and trip cancellation because of the threat of violence contradicts Uber's general policies. As stated earlier, and confirmed by respondents, if one cancels (which is done after accepting a requested trip) or rejects (Declining a client's trip request) too many trips, he or she can be terminated from using the service. This as a result further accentuates their precarity, decreasing their employment security (ability to retain employment) and job security (protection against wrongful or arbitrary dismissal).

3.6. Conclusion

This chapter has detailed four principle observations that contribute towards the broader argument related to the precarity that Uber creates for its drivers. First, dynamic pricing has been revealed to have the dual outcome of decreasing driver incomes and increasing the density of work hours experienced by drivers. This has been argued to create decreased labour market security as relating to Standing's theory of precarity (Standing, 2011). Second, Drivers have been argued to suffer from employment insecurity as a result of a misclassification of their employment stemming from Uber's informalisation of labour and the proliferation of third-party fleet owners. This informalisation of labour, has been interpreted using David Harvey's flexible accumulation theory that describes labour informalisation as being a hallmark of a new capitalist mode of production (Harvey, 1990). In the third instance, Uber drivers have been argued to suffer from decreased levels of employment security due to company's rating system, which serves as a mechanism from which to evaluate driver's performance. This insecurity, administered through Uber's information panopticon, has been interpreted to cause the symptom of emotional labour in drivers (Hochschild, 1983). In final instance, Uber's reluctance to abide to taxicab regulation in Johannesburg, has been argued to stifle driver income potential as well create an unsafe working environment due to the threat of violence from industry competitors.

These four strands of precarity, as will be illustrated in the conclusion chapter, generate increased knowledge on the precarity of Uber drivers while they operate with the Uber service.

Chapter 4 – Uber's Precarious Labour Conditions: Final Reflections

The research process has unearthed multiple findings related to Uber's effect on Labour in Johannesburg, which can be interpreted as an implication of the sharing economy's broader penetration of the city and region. The structure of the study has sought to answer three supporting questions with the purpose of giving clarity to the broader enquiry on how the labour conditions created by ride-sharing service Uber affects drivers operating in the taxicab industry in Johannesburg, South Africa. The primary argument in this regard is that Uber's labour conditions result in drivers being placed in a position of precarity. This is justified through six principle observations

Uber is a disruptive technology that has gained momentum in a unique socioeconomic system that has proliferated around the globe since the early 1990s. This socioeconomic system, largely characterised by the sharing of products and services on peer-based platforms, can be defined as the sharing economy (Hamari, 2014). The sharing economy can be traced to two prevailing global trends. First, the rise of a 'network society' characterised by the proliferation of technology as a means of communication and interconnection in society (Castells & Cardoso, 2005). And second, the emergence of a new form of capitalist

production defined as flexible accumulation has given impetus to disruptive platforms such as Uber (Harvey, 1990).

The sharing economy, with its roots in flexible accumulation, has created a climate of informalised labour, which is seen directly in Uber's drivers being classified as 'independent contractors' as opposed to employees (Uber, 2016). Within the context of Johannesburg as a site in which the sharing economy and Uber has penetrated, this study has illustrated that this classification is in some cases not valid due to some drivers operating through third-party vehicle owners in the city. The implication of this is that drivers become de facto employees according to the Basic Conditions of Employment Act of South Africa (BCEA, 1997). Consequently, it is argued that Uber drivers suffer from compromised levels of employment security and limitations on income progress because of sharing earnings with vehicle owners and Uber (Standing, 2011).

Furthermore, the proliferation of information technology has seen organisations such as Uber utilise disruptive technologies as information panopticons with the capacity to change the nature of production based on current supply and demand trends (Zuboff, 1988). Uber utilises an information panopticons in the form of a smartphone-based application. This smartphone application operates within the sharing economy aided by connectivity to the Internet and in particular the web 2.0 (Berners-Lee, 1996).

It is argued that Uber's smartphone application serves the function of changing the nature of production based current supply and demand trend. This change according to current supply and demand trends can be directly interpreted through Uber's use of 'dynamic pricing' which changes trip fares on the whims of current Uber supply and demand conditions. This study has concluded that Uber's dynamic pricing increases driver work hours and decreases the general income of drivers. As a result, an increased driver income insecurity was observed, which is the inability to ensure a stable income and income generating opportunities.

Uber's smartphone-based application is also argued to enact panopticism in the realm of surveying and evaluating driver performance according to specific control rules. This can be directly seen in Uber's use of a customer-issued rating system for drivers, which requires Uber drivers to maintain an average of 4.7 or higher out 5. The study has observed that this rating system places drivers in a precarious position characterised by decreased employment

security. This is due to the risk of dismissal for poor ratings. As a symptom, Uber drivers react to the precariousness created through the rating e-management system by exhibiting emotional labour, a process in which drivers manage their feelings to calibrate with those required in Uber's 4.7 star control rule (Hochschild, 1983).

In sum, Uber's business model, while achieving higher levels of success in western markets, has in effect broadened the scope of precarious work in some areas of the south, particularly in Johannesburg, South Africa. The presence of fleet owners has a distortionary effect on the material circumstances of Uber drivers, along with destabilising their conditions of employment. The effect on the material circumstances of drivers is illuminated when one compares the income generation that Uber's business model affords self-employed drivers with the decreased rate afforded to drivers who drive for fleet owners. The unique presence of fleet owners in the Uber landscape of Johannesburg can be described as a by-product of the decreased rate of private vehicle ownership and lack of access to vehicle finance for drivers in areas that are economically less lucrative, such as in the global south. Uber's implicit failure to account for an operational loophole such as fleet-ownership has increased the labour market insecurity for drivers in comparison to the increased autonomy they are entitled to in Uber's business model. Uber's drivers in Johannesburg engage with Uber's 'Be Your Own Boss' mantra through the illusion that they are in control of their labour, while they are far from being the 'independent contractors' that Uber purports. The argument thus distils itself in two interlinked processes. Firstly, Uber's penetration of a global south market such as Johannesburg means that they are faced with a labour pool that has a decreased material capacity to own their own means of production - which is in stark contrast to their counterparts in the developing world. Secondly, the lack of private ownership of vehicles by drivers creates the conditions for the emergence of fleet owners, who use their own monopoly on capital to purchase several private vehicles and tether those vehicles with willing drivers who then in turn enter the Uber ecosystems as independent contractors. As illustrated previously, these drivers inherit employee benefits once they become employed by fleet owners, which benefits that are lost when Uber misclassifies them as independent contractors. A new form of precarity is introduced into an industry that is already less secure in Johannesburg than it is in developed world.

It thus becomes imperative for Uber drivers to be classified correctly by the service in relation to their employee status. This would entail creating a distinction between a 'driver'

and a 'driver-partner', with the former classified as an employee of the latter. A result of which would bring more bargaining power to drivers when negotiating terms of employment with their fleet owners. Additionally, periods of price-cutting by Uber may achieve a higher level of stability for drivers if they are ensured the same fare-price they are accustomed to during periods of price cutting, with Uber carrying the potential burden for unintended consequences such the customer demand not meeting the supply of drivers even in periods of lower fare-prices.

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