

**The precarious work conditions and livelihood strategies of
app-based food delivery drivers in Shanghai, China**

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Abstract

This research explores the everyday lived experiences and livelihood strategies of platform workers in China's largest city, Shanghai. Building on Polanyi's double movement theory, this thesis holds that marketisation and commodification of platform workers is met by resistance that manifests itself predominantly as self-protection. Focusing on migrant app-based food delivery drivers in Shanghai, the study examines three questions: how drivers are managed by the online food delivery platforms; what kind of precarious conditions drivers face inside and outside the workplace; and how drivers resist precarity.

The research finds that because of management policies pursued by the delivery contractors and the monopoly position occupied by the two biggest companies controlling the platform business, drivers in Shanghai are at the bottom of the interest chain and operate under high degrees of pressure. In addition to their labour, the drivers' data becomes another form of commodity and raw material in platform capitalism. Both full-time and freelance drivers face multi-layered precarities, not only from exploitative platform companies operating strict algorithmic controls, but also from very limited access to liveable housing conditions and exclusion from social insurance as a result of their status as migrants from rural areas. Rather than risk undertaking explicit forms of protest, drivers tend to favour more individual and quiet practices of resistance. However, the drivers' short-term survival goals limit acquisition of skills, and further reinforce their reliance on platforms and commodification in the workplace. By drawing on traditional conceptual avenues as well as current debates around the platform workers' work conditions and resistance, this research places the livelihoods of Shanghai app-based drivers within a broader global context, suggesting similarities and contrasts between conditions in China and those prevailing elsewhere in the world.

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Chapter 1: Introduction

1.1 Background and context

Just as in the UK, so in China various platforms and apps are growing rapidly and have penetrated into every part of people's everyday lives. Bilibili, China's equivalent to YouTube, attracted an average of 1.2bn daily views in 2020.¹ As with Amazon and eBay in Western countries, people in China can buy almost all goods conveniently from online shopping websites (e.g. Tmall, Taobao and JingDong), from clothes and shoes to books and cosmetics, thanks to the sprawling logistics industry underpinning China's e-commerce and the online payment services provided by Alipay and WeChat Pay. Different apps are used to order takeaway food and taxis on demand, to reserve hotels and restaurants or even cleaners and care workers. WeChat, the instant communication app, and Weibo, the Chinese equivalent of Twitter, are favoured by Chinese people, especially the young generations. Kwai and Douyin, two short video apps, have sprung up during the COVID-19 pandemic, when most people have to stay at home in isolation. Fresh food delivery platforms (e.g. Freshippo and Dingdong) have also emerged during the pandemic, benefitting from a community group-buying craze and contactless delivery.² The different types of platforms in the UK and in China are compared in Figure 1.1. However, while we appreciate getting food delivered quickly, hiring web developers and ordering taxis easily, we are not clear in which ways the internet and online labour markets specifically are reconfiguring work processes, and what the effects of that are on the nature of work. This is especially the case for low-paid platform workers (for example, delivery riders, taxi drivers, cleaners and care workers). These workers are often hidden from our gaze, and important questions remain, such as how their work processes are now organised over the internet, usually through an app; what new types of insecurities and vulnerabilities they are facing; and how they protect their rights in the labour process as platform labour.

¹ Data Source: *The Economist*. 27 March, 2021. *China's YouTube*. p. 58.

² See related report: <https://technode.com/2021/01/27/friendly-neighbors-are-key-to-chinas-group-buying-craze/>
Friendly neighbors are the key to China's community group-buying craze Accessed on: 19 September 2022



Figure 1.1 The comparison of different types of platforms in UK and in China. Source: *Economist*. 27 March, 2021. *China's YouTube*. p. 58.

It should be noted that most low-paid platform workers in China are rural–urban migrant workers (*nongmingong*), which refers to a group of industrial and service workers with rural household registration (*hukou*). Large-scale rural–urban labour migration is an important phenomenon in China and has had a broad impact on the Chinese economy and society (Liang, 2016). On the one hand, this great internal migration provided sufficient and cheap labour for urbanisation and industrialisation in booming coastal cities. On the other hand, the development of China's countryside has been restricted by draining it of able-bodied villagers, leaving behind mainly small children and the elderly who look after them, while their parents migrate to the cities to seek work. However, because of their rural *hukou*, migrant workers in cities still cannot enjoy the same welfare amenities as those with urban registration. Scholars have discussed a variety of topics concerning migrant workers, such as their wages, networks, social security, labour rights, second-generation migrants, migrant children and labour unrest (Pun and Lu, 2010b; Chan and O'Brien, 2019; Feng, 2019). This migratory movement and its social impact have garnered major attention nationally and internationally. In 2009, *Time* magazine chose China's migrant workers as runner-up

for its Person of the Year pick because they are “an increasingly influential group in one of the world’s most powerful economies”.³

Due to their limited education and vocational skills, most migrant workers end up in the informal employment sector (see Chapter 3), where their job choices are becoming more diverse; the rise of the urban platform economy means they can find work beyond the factory and construction site. When foreign investment made its way into coastal China starting in the 1980s and 1990s, millions of migrant workers flocked to factories and became factory workers. Working extremely long hours in sweatshop conditions, crowded into cramped dormitories and hit hard by frequent wage arrears, migrant factory workers in China are a significant feature of China’s integration into the global economy (Pun, 2005). Another common job choice for migrant workers has been construction work, which accounted for 18.7% of employment of all rural–urban migrants in 2019, compared to 27.4% of migrant workers in manufacturing.⁴ The popularity of this job is closely related to local governments’ enthusiasm for building roads, high-speed railway lines and other infrastructure, as well as housing, to speed up the process of urbanisation. However, with the restructuring of industry towards the tertiary sector, more than half of migrants (51.5%) participated in the service industry in 2020.⁵ With the deepening insecurity and unpredictability of the economy, especially after January 2020 when the COVID-19 pandemic severely impacted bricks-and-mortar stores in China, migrant workers have been increasingly attracted by gig jobs with platforms and apps. Thanks to favourable government policies and recent advances in technology, the internet/app-based service delivery industry is an emerging business. As of May 2017, the number of DiDi [Chinese equivalent to Uber] drivers

³ See related report: https://www.chinadaily.com.cn/china/2009-12/18/content_9196555.htm. *Chinese workers runners-up for Time's person of the year*. Accessed on: 19 September 2022

⁴ Data source: National Bureau of Statistics, http://www.stats.gov.cn/tjsj/zxfb/202004/t20200430_1742724.html 2019 年农民工监测调查报告 [2019 Migrant Workers Monitoring Survey Report]. Accessed on: 19 September 2022

⁵ Here, the service industry includes wholesale and retail business, the transportation and logistics industry, the accommodation and catering industry, etc. Data source: http://www.stats.gov.cn/tjsj/zxfb/202104/t20210430_1816933.html 2020 年农民工监测调查报告 [2020 Migrant Workers Monitoring Survey Report]. Accessed on: 19 September 2022

has reached 1.5 million (Chen, 2018); by 2018, more than three million people worked as couriers.⁶ The market scale of the so-called sharing economy has increased to 3282.8 billion yuan, and 6.23 million people worked via sharing platforms in 2019.⁷ App-based delivery drivers, couriers and DiDi drivers are to be found in virtually every corner of big cities because of the low barriers to entry and high work flexibility for migrant workers.

Recent studies have discussed the sharing economy, platform economy and platform workers in Western countries, as well as migrant workers in China (Kenney and Zysman, 2016; Vallas and Schor, 2020). However, there has been a notable lack of international English-language scholarship on China's migrant platform workers. For low-paid migrant workers, the platforms provide important opportunities, but the migrants' work is usually taken for granted by both platform managers and customers. There are important questions to be answered in China: how did these platforms emerge, develop, operate and survive? How do these platforms attract and manage migrant workers? What kind of working conditions do the platform workers experience? How do these platform workers respond to vulnerability and precarity? By drawing on research into Shanghai migrant food delivery drivers, this thesis examines the mechanism of the online food delivery industry, the drivers' everyday lived experiences and their multiple strategies to sustain their livelihood.

1.2 Why choose food delivery drivers in Shanghai?

I chose Shanghai as the research site for a number of reasons. First, as the biggest city in China, it has been a popular destination for rural migrants, especially from the adjacent provinces of Jiangsu and Zhejiang and nearby Anhui, Henan and Hubei Province (as shown in Figure 1.2). Secondly, the online food delivery industry, for which the food delivery drivers work, depends disproportionately on customers in big

⁶ Data source: <https://www.cbndata.com/report/983/detail> 2018 年快递员群体洞察报告 [2018 Courier Group Investigation Report] Accessed on: 19 September 2022

⁷ Data source: <https://www.chyxx.com/industry/202004/848007.html> 2019 年中国共享经济各领域市场交易规模、市场结构、融资规模及平台人数分析 [Analysis of market transaction scale, market structure, financing scale and number of user on platforms in China's sharing economy in 2019] Accessed on: 19 September 2022

cities, where population density is highest. Appropriately for China's most populous city (24.89 million residents in 2021), Shanghai had the most online food orders and restaurant take-outs in 2018.⁸ This is attributable to Shanghai's advanced service sector and developed commercial culture, which together contribute to putting the city in top position in China's ranking of cities. Thirdly, with 6340.5 square kilometres and sixteen administrative divisions (as shown in Figure 1.3), Shanghai is an extensive city with much internal variation, providing the researcher with more than enough opportunities to identify different types of migrant food delivery driver and to access a wide range of data. Most restaurants that provide a takeaway service are located in downtown Shanghai, namely in Huangpu, Hongkou, Jingan, Yangpu, Putuo, Changning and Xuhui Districts. The choice of research sites reflects the city's configuration (see Chapter 4). What is more, the choice of Shanghai enabled the obtaining of a fuller and more representative picture of living and work conditions than could have been achieved in a smaller city.

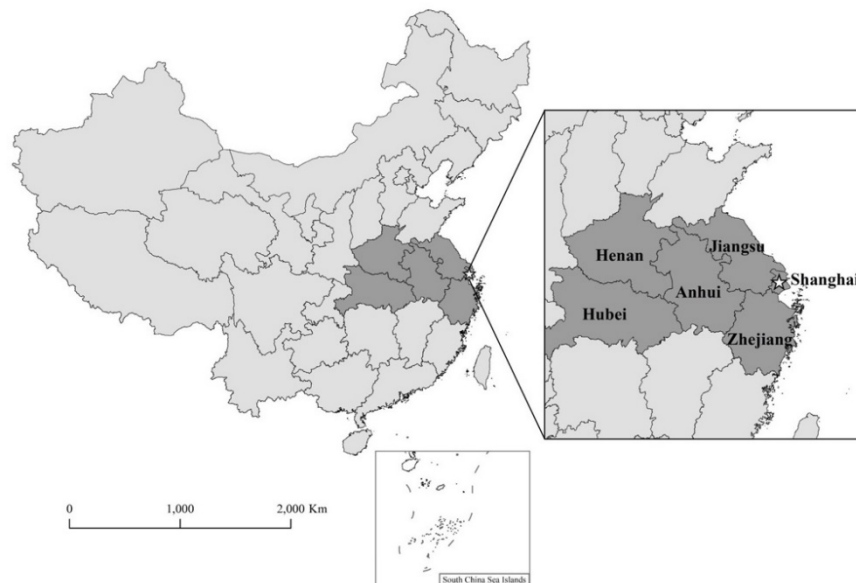


Figure 1.2 Shanghai's location in China and adjacent provinces. Source: Author.

⁸ Data source: <http://www.linkshop.com.cn/web/archives/2018/406910.shtml> 21 城市 2018 年外卖大数据报告：北上广深外卖总单量近 1.7 亿 [Big data report on online food delivery in 21 cities in 2018: The total number of food delivery orders in Beijing, Shanghai, Guangzhou and Shenzhen is nearly 170 million] Accessed on: 19 September 2022

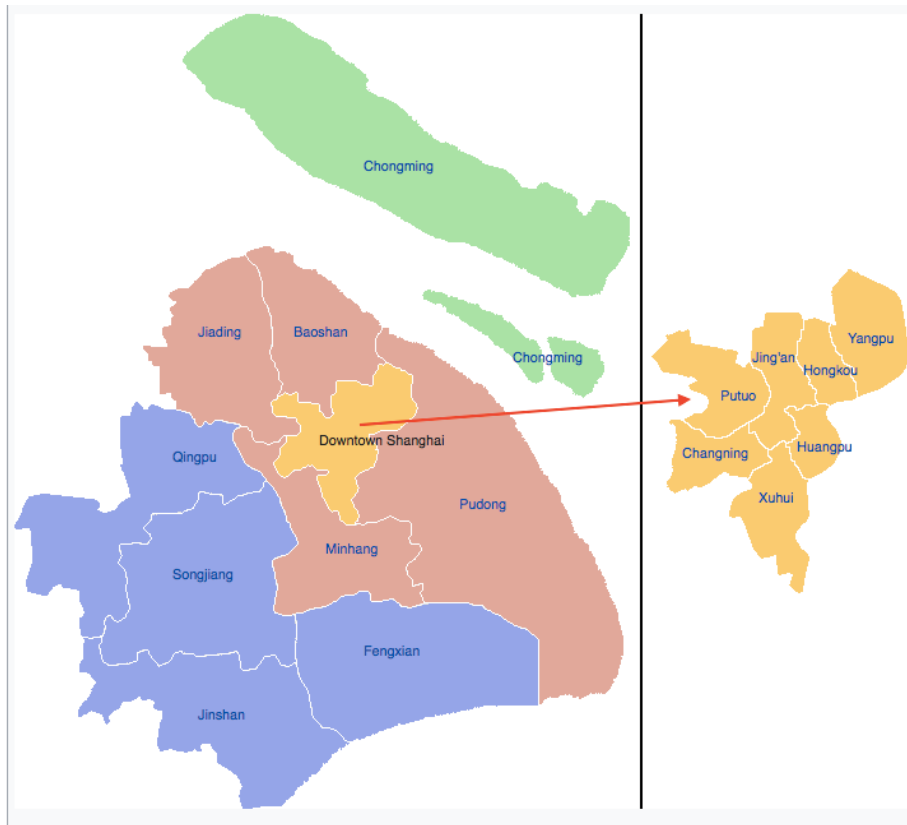


Figure 1.3 Shanghai's District: nine districts outside the city centre and seven districts within the downtown areas. Source: Wikipedia.

Besides this, Shanghai has become a local government model for the development of the informal economy and platform economy in China. Not only has it introduced special policies and measures to expand the informal economy, but it has also experimented with new ideas and practices (Zhang, 2014). In April 2020, Shanghai Municipal Government published the *Shanghai Action Plan for Promoting Online New Economic Development (2020–2022)*, aimed at promoting online shopping, the sharing economy, online education and online healthcare.⁹ Attracted by the favourable business environment, emerging platform companies such as Pinduoduo, an online shopping website, Bilibili, a video-sharing and live-streaming platform, and Eleme, an

⁹ See the Shanghai municipal government's official website: http://www.shanghai.gov.cn/nw48979/20200929/0001-48979_64862.html 上海市人民政府办公厅关于印发《上海市促进在线新经济发展行动方案（2020-2022年）》的通知 [Notice of the Shanghai Municipal Government on Printing and Distributing the “Shanghai Action Plan for Promoting the Development of Online New Economy (2020-2022)”] Accessed on 19 September 2022

online food delivery platform owned by Alibaba, have located their head offices in Shanghai. In other words, the Shanghai municipal government is playing a proactive role in creating jobs and providing business opportunities in the urban platform economy.

I chose food delivery drivers as subjects for my research for two principal reasons: first because, as we have seen, they are virtually all migrants to Shanghai, and secondly because their work places them amongst the most vulnerable of informal workers, more so than other platform workers. In China, there are five main types of platform/app-based and face-to-face service delivery workers: (a) couriers responsible for delivering goods from online stores to customers (such as drivers in logistics companies); (b) couriers responsible for delivering goods from one customer to another customer (such as drivers in Shansong platform); (c) food delivery drivers responsible for delivering cooked food from restaurants to customers (such as drivers in Eleme and Meituan platforms); (d) food delivery drivers responsible for delivering daily necessities and fresh food from supermarkets to customers (such as drivers in Freshippo and Dingdong platforms); and (e) drivers working on ride-hailing platforms (such as DiDi drivers). Drivers sometimes transit between these platforms or work for more than one platform at the same time. After starting the fieldwork, I found that amongst all these platform workers, food delivery drivers are the most vulnerable. Compared with DiDi drivers, food delivery drivers have lower economic status because few of them can afford a car. In addition to this financial reason, becoming a DiDi driver typically means crossing other higher thresholds, such as processing residency status in the city where a driver wants to work. Inevitably, most migrant workers lack proper papers. However, the entry level for becoming a food delivery driver is much lower, with only 100 yuan paid to the platforms as deposit, and only two documents needing to be processed: health certification and battery-powered motorbike license. Compared with couriers, employer controls on food delivery drivers are stricter and their working pace is more intense. Most couriers' workload is assessed daily, while the assessment of food delivery drivers' performance is accurate to the minute because the drivers' real-time

locations can be instantly tracked online by both customers and their employers (see Chapter 6.2.1). Most couriers have a relatively fixed working time, while food delivery drivers have to work irregular shifts and finish orders within a short period of time.

Asef Bayat observes that there is an increasing number of “urban marginals” or “urban disenfranchised” in cities in the Global South; they are, in his words, “unemployed, partially employed, casual labour, street subsistence labour, street children and members of the underworld-groups” (2000, p. 534). Bayat asks “how the disenfranchised survive hardships and improve their lives” (1997b, p. 55). The drivers I survey and interview in this research lack education and professional skills; they have migrated from rural China, many from central parts of the country, to work as platform workers in the international city of Shanghai. Drivers usually find themselves in precarious urban environments in terms of their economies, rural hukou, lack of access to urban healthcare services and exploited employment conditions. Consequently, they have adopted various livelihood strategies to survive in the city. Their strategies include living in poor physical and environmental conditions to save on rent, deferring medical treatment for themselves when traffic accidents happen and relying on their social networks for support. On the one hand, drivers are exposed to different levels of vulnerability which affect their livelihoods; on the other hand, they have identified tactics and strategies to mediate platforms’ digital controls and low income. The commodification inherent in the platform economy and drivers’ self-protection activities can be conceived in terms of Polanyi’s double movement theory, which is the theoretical framework within which this research is set (discussed fully in Chapter 2.2). While applying Polanyi’s thought to contemporary China and the Chinese platform economy might be questioned, I argue in Chapter 2 and 8 for its utility and indeed relevance as a heuristic approach.

1.3 Research questions

This study seeks to address the following research questions:

1. How do the online food delivery platforms emerge, develop, operate and thrive in Shanghai?
2. How do these platforms manage migrant food delivery drivers?
3. As platform workers, what kind of work conditions do food delivery drivers experience?
4. As rural–urban migrant workers in Shanghai, what kind of precarious conditions do they face beyond the workplace?
5. How do these platform workers respond to vulnerability and precarity?

The first two questions serve as background and scene setting for this research. To understand the livelihoods of delivery drivers, it is essential to first investigate their roles and their relationships with other stakeholders in the online food delivery industry. Existing research has looked into the organisation, patterns and financialisation of the platform economy. For instance, Oncini et al. (2020) propose a categorisation of the different forms of organisation within online food provisioning services in Italy; Lehdonvirta et al. (2015) present a typology of five patterns of online labour markets based on platform workers in Southeast Asia; and Montalban et al. (2019) discuss the fundraising strategies of platforms. However, the mechanics of the platform economy in China have not been examined. Therefore, this study will empirically assess the emergence, development, operation, management and financing channels of the online food delivery platforms. These two research questions will be primarily answered in Chapter 5.

The third and fourth research questions aim to explore the livelihoods of migrant food delivery drivers in Shanghai. As van Doorn et al. find, “In urban gig economies around the world, platform labour is predominantly migrant labour” (2020, p. 1). Rural–urban migrant food delivery drivers in Shanghai are facing at least two layers of precarity. Firstly, as platform workers in the online platform delivery industry, they have to work irregular hours during bad weather conditions and deal with possible traffic accidents. This is similar to other face-to-face platform workers globally such as Uber drivers and Deliveroo riders. One of the issues that I examine concerns the employment status of

food delivery drivers, whether they are employees of platforms or “independent contractors” – not least in view of the UK Supreme Court’s ruling in February 2021 that Uber drivers should be treated as workers rather than self-employed.¹⁰ Secondly, in the context of China, migrant workers cannot be covered by urban social insurance and social security schemes. Restricted by their rural hukou and lower economic status, they have to use informal living arrangements and transit through a series of different labour-intensive gig work. In this research, the living conditions, social insurance situation, social integration and isolation, and the impact of lack of hukou registration on the livelihoods of migrant food delivery drivers will be discussed. Chapter 3 provides contextual information on the two identities – platform worker and migrant worker – and Chapter 6 presents my empirical findings on the livelihoods of migrant food delivery drivers in Shanghai.

The last research question sets out to investigate drivers’ responses and reactions to their vulnerability and precarity. Existing research on platform workers in the Global North has found that they have resorted to collective action such as creating a labour movement from Foodora riders in northern Italy (Tassinari and Maccarrone, 2017) as well as utilising flexible skills and work strategies to leverage platforms creatively and productively (Sutherland et al., 2020). Researchers have discussed labour agency and new forms of resistance among platform workers in Africa, but their focus has been on remote platform workers rather than place-based/face-to-face platform workers (Anwar and Graham, 2020; 2021). Lei’s recent research on food delivery drivers in Chongqing, China finds that “platform architecture[s] reinforce one another, escalating grievances, enhancing the appeal of collective contention, and providing spaces for mobilizing solidarity and collective action” (2021, p. 279). This study aims to explore labour agency among migrant food delivery drivers in Shanghai, where resistance is often regarded as challenging regime legitimacy under a fragmented authoritarian regime, as

¹⁰ See related news report: <https://www.bbc.com/news/business-56123668> *Uber drivers are workers not self-employed, Supreme Court rules*. Accessed on 19 September 2022

well as the response of drivers to the COVID-19 pandemic, which severely disrupted their lives, as it did for other disadvantaged groups. After the peak of the COVID-19 pandemic in the late winter and spring of 2020, the pandemic has exacerbated existing health, social and income inequalities, and hurt vulnerable groups even more (Che et al., 2020). However, the impact of COVID-19 on platform workers and their lived experiences and reactions has not been empirically investigated.

1.4 Original contribution of the study

My thesis examines the operating mechanisms of the online food delivery industry and the livelihoods and, more broadly, the livelihood strategies of migrant food delivery drivers in Shanghai. I offer four principal contributions to the literature, firstly through a focus on China as a middle-income country, secondly through a contribution to Polanyi's concepts of commodification and embeddedness, thirdly through a contribution to the concept of precarity, and fourthly through an inquiry into resistance and labour agency. I discuss each of these contributions in the paragraphs that follow.

My research offers one of the first attempts to analyse the platform economy and platform workers empirically in China. Until now, there has been very little work on the platform economy and platform workers in China in an international English-language scholarly format. As Anwar and Graham argue, "A growing body of work exists on the well-being of gig economy workers, but mainly concerning high-income countries" (2020, p. 1270). Scholars from the Oxford Internet Institute (OII)¹¹ have begun to explore remote platform workers in Sub-Saharan Africa and South-East Asia; my research expands the scope of labour geography research by focusing on place-based and low-skilled platform workers in China. Therefore, this research contributes to the wider literature and enriches our understanding of the platform economy and platform workers in China, as a middle-income country. In this sense, it examines "how urban theory can 'travel' from place to place – not just from north to south, as has been

¹¹ See OII website: <https://www.oii.ox.ac.uk/>

the established direction in urban studies, but between different southern contexts” (Gillespie, 2017, p. 975).

In this scholarly context, I build my research on Polanyi’s double movement theory, which has been applied to frame the rise of the platform economy in the Global North as well as the economic transition in China, from planned economy to socialist market economy. Although Polanyi’s double movement theory as laid out in his *The Great Transformation: The Political and Economic Origins of Our Time* (1944) is based on early nineteenth-century Britain, it is valuable in helping us understand today’s platform economy, “as another phase in the continuing upheaval and change driven by capitalism and the market economy” (Kenney et al., 2020, p. 230). Especially when a global pandemic causes serious recession and the power of platform giants is reinforced, it is important to “map this technological terrain and the social relations within it” (Ajunwa and Greene, 2019, p. 85), and to understand whether and how society responds to marketisation with a self-protection movement to create “a more humane and inclusive economy” (Kenney et al., 2020, p. 236). Few scholars have applied Polanyi’s concepts of commodification and embeddedness to platform workers (see Wood et al., 2019b; Kenney et al. 2020). However, the commodification of data, an essential resource for digital platforms, has not been empirically analysed; nor has the intersection between the two sides of Polanyi’s embeddedness -- the “soft” and “hard” meanings -- of embeddedness been sufficiently discussed (see Chapter 2.2.2). To fill these gaps, I argue in this thesis that both the labour of food delivery drivers and their data are commodified in what is therefore an exploitative platform economy; the drivers cannot be dissociated from their embeddedness in the economic system. Therefore, this thesis contributes to Polanyi studies by revealing the fact that soft embeddedness leads to deeper commodification.

Existing research on the livelihoods of platform workers has focused on precarious working conditions (Wood et al., 2019b). Little, however, has been mentioned explicitly about the complex, multi-layered nature of the experience of precarity. In line with other scholars, I argue that the migrant delivery drivers in Shanghai are facing precarious

conditions both inside and, importantly, outside their places of employment (see Chapter 6). Within the same platform, drivers have varying levels of precarity depending on whether they are freelance or full-time. Full-time drivers are subject to even more precarious conditions than freelancers because of the way they are managed by delivery contractors (Chapter 5.4). Moreover, after the outbreak of COVID-19, increasingly degrading working conditions and fiercer competition in the platform economy show the temporal variation in precarity levels (Chapter 7.4).

Those few researchers who have discussed the counter-movement to marketisation in China have concentrated on top-down responses from governments rather than bottom-up reactions (Wang, 2008; Ma and Zhang, 2009). Focusing on Shanghai delivery drivers' self-protection movement, this research argues that they are not passive recipients of digital controls from platforms; rather, they know how to exercise their labour agency to earn and sustain their livelihood in the urban platform economy. Liu and Friedman (2021) and Lei (2021) in their research on food delivery drivers in China find that drivers have organised strikes to express their grievances. However, their research only focuses on one type of resistance – collective action and strikes – and ignores other forms of resistance and the “inter-linkage of shifting forms of resistance” (Lilja et al., 2017, p. 40). My research finds that both open defiance and informal, everyday forms of resistance are used by the drivers to gain a measure of control over their own labour process, although there is no clear dichotomy between these two forms of resistance as Scott (1985) supposed. The forms and effectiveness of resistance from platform workers are conditioned by political, cultural and economic constraints. The intention and consequences of their agency are in line with Bayat's (2000) survival motivation and Katz's (2004) resilience category of resistance. In this sense, my research responds to recent comments on the need to pay attention to the “lived experiences of workers” (Dutta, 2016, p. 1), their “constrained labour agency” (Coe and Lier, 2011) and “the activities and sites that count in analyses of labour”, in other words “labour's spatial fix” (Strauss, 2020, p. 150).

1.5 Chapter structure

The thesis is structured in eight chapters. The first chapter introduces the research background. Chapter 2 and 3 provide a review of the general literature review and contextual information respectively. Chapter 4 explains the methods used in the research and the rationale behind them. Chapters 5, 6 and 7 form the main body of the study. Chapter 5 examines the emergence, development, changes and organisation of the online food delivery industry in Shanghai. Chapters 6 and 7 focus on the work conditions and livelihood strategies of migrant food delivery drivers in Shanghai. While the former concentrates on the multifaceted precarities the drivers are facing, the latter addresses how drivers protect themselves and survive in the competitive market. Finally, Chapter 8 summarises the main findings of the research and reflects on its broader theoretical and practical implications.

Following this chapter of introduction, Chapter 2 provides the framework for the research. It first introduces the theoretical framework – Polanyi’s double movement theory and his key concepts, counter-movement and embeddedness. This is followed by an explanation of why and how this theory can be applied to the platform economy and in China. The chapter then focuses on two concepts closely related to Polanyi’s double movement: precarity and resistance. These two key concepts are identified, elaborated upon, and their relevance and applicability to the study – migrant delivery drivers in Shanghai – is established. The concept of precarity is widely used in the context of international migrants; Scott’s everyday form of resistance and Bayat’s quiet encroachment are concepts that help frame informal workers’ labour agency. The characteristics of social resistance in China and specifically of rightful resistance in China are also introduced. This chapter provides a theoretical and conceptual context for Chapters 6 and 7. Chapter 3 critically reviews the existing literature on platform workers in a global setting and on migrant workers in China, as well as on the identities of migrant delivery drivers in Shanghai. After situating the study in the wider body of scholarship, gaps in the existing literature are identified, and the original contributions of the study are highlighted.

Chapter 4 presents an in-depth discussion of the methods used to answer the research questions. After clarifying the research area and access to the fieldwork, methods of data collection and analysis are detailed. The research is based on fresh secondary data and original first-hand data, which are then analysed by a mixed method combining both qualitative and quantitative analysis. The chapter concludes by discussing the ethical issues thrown up by the research and questions around the positionality of the researcher.

Chapter 5 focuses on the online food delivery industry in Shanghai. It first analyses the emergence and development of this industry, explaining why the two biggest platforms, Eleme and Meituan, are dominating this industry. It then investigates the latest changes since the outbreak of COVID-19 and the impact of the pandemic on the online food delivery industry. Through closer investigation of the relationship between different stakeholders – governments, platforms, contractors, delivery drivers, restaurant owners and customers – in this industry, the operation and mechanism of the industry is discussed in some detail. In particular, attention is drawn to two different working types – full-time driver and freelancer – and their distinct management models and incentives.

Chapter 6 turns to a focus on the migrant food delivery drivers in Shanghai. Following the “beyond employment” approach and a Polanyian perspective on the platform economy, this chapter examines the food delivery drivers’ precarity both inside and outside the workplace. From a “hard Polanyi” perspective, driven by strict algorithmic controls, the food delivery drivers have become a “fictitious commodity” and are exploited in the online food delivery industry, which is centred on business profit and efficiency. From a “soft Polanyi” perspective, the drivers are embedded in their social networks and relationships with customers and other drivers, which could provide more income and cooperation, as well as fierce competition and instability. Since the boundary between work and life is blurred, the drivers face precarity in almost every aspect of their daily lives, such as house renting, living conditions, social integration and job sustainability.

Chapter 7 looks at the migrant delivery drivers' self-protection movement – their reactions and responses to the precarity of their livelihoods. Building upon Polanyi's counter-movement, this chapter argues that the drivers are not simply members of a disadvantaged group or victims; instead, many of them know how to secure their rights in the competitive platform economy. The chapter investigates different forms of resistance, including collective action and quiet everyday resistance, as well as the effectiveness of resistance, and the links between these forms of resistance. Given that the online food delivery industry was greatly impacted by the pandemic, especially in the spring of 2020, the drivers' livelihood strategies during and after this period are also discussed. The empirical findings in this chapter speak to the literature on resistance and labour agency among informal workers and so link up with the literature introduced in Chapter 2.

Chapter 8 concludes the thesis by synthesising the key findings and arguments of the research study, and reflecting on the ways in which the research questions have been addressed. Moreover, the thesis's contributions to scholarship are highlighted, and suggestions for future research directions are offered.

Chapter 2: Double Movement, Precarity and Resistance

2.1 Introduction

The main aim of this study is to investigate the work conditions and livelihood strategies of Shanghai migrant delivery drivers. An interdisciplinary approach drawing on a few relevant concepts is adopted to address the research questions, and to guide the analysis of the selected cases. The theoretical framework is developed from Polanyi's double movement theory, and the conceptual framework incorporates the concept of precarity and ideas around everyday resistance and Bayat's quiet encroachment. In this chapter, I will elaborate on these key concepts and discuss how and why it can help shed light on and advance an understanding of the platform workers' work conditions and resistance.

This chapter commences by reviewing the literature on Polanyi's double movement (Section 2.2). After briefly presenting the gist of the argument in Polanyi's classic *The Great Transformation*, two perspectives are discussed to understand the key concept of embeddedness. Because of the similarities between Polanyi's time and today's society, researchers have applied this theory to the platform economy and to China. However, in a Polanyian reading, the counter-movement from the Chinese society side in the platform economy – i.e., the platform workers – has not been adequately addressed.

Section 2.3 reviews the literature on precarity, a concept that is widely used to explain the vulnerability of migrants. After discussing the definition and academic debates about precarity in Section 2.3.1, I argue that there is a parallel between Polanyi's concept of double movement and precarity, and that there are two main limitations to the existing research on precarity: firstly, there is a failure to unravel the complex, multi-layered nature of the workers' precarious experience; and secondly, there is a lack of scrutiny of the reactionary activity against precarity.

Section 2.4 introduces three concepts to frame the resistance beyond the Global North and within the context of social resistance in China. This research contextualises platform workers' self-protection within the literature on resistance from informal

workers. After reviewing two influential concepts, Scott's everyday resistance and Bayat's quiet encroachment, I propose that their main arguments on resistance are focused around two points: firstly, the relationship between organised resistance and everyday resistance; and secondly, the intention of resistance. Reviewing literature on social resistance in China in Section 2.4.3, this section argues that unlike the social movements and trade unions in Polanyi's book, resistance in China is relatively small, short-lived and easily dispersed under party-state organisations; resistance in China is rightful resistance under a fragmented authoritarian regime (O'Brien, 1996; 2002).

2.2 Polanyi's Double Movement

2.2.1 Main arguments of *The Great Transformation*

Based on early nineteenth-century Britain, Polanyi observes there were basically two organising principles in society at work simultaneously. On the one hand, there was economic liberalism "aiming at the establishment of a self-regulating market, relying on the support of the trading classes and using largely *laissez-faire* and free trade as its methods", and on the other there was "social protection aiming at the conservation of man and nature as well as productive organization, relying on the support of those most immediately affected by the deleterious action of the market – primarily, but not exclusively, the working and the landed classes" (1944, p. 132). Social history in the nineteenth century may thus be understood as:

The result of a double movement... while on the one hand markets spread all over the face of the globe and the amount of goods involved grew to unbelievable proportions, on the other hand a network of measures and policies was integrated into powerful institutions designed to check the action of the market relative to labour, land, and money... society protected itself against the perils in a self-regulating market system. (Polanyi, 1944, p. 76)

A substantial part of *The Great Transformation* is devoted to analysing the tangled tension between market expansion and protective response. Once a market economy is established, it demands the subjugation of "the substance of society itself to the laws of the market" (Polanyi, 1944, p. 71), not only for commodities but also for land, labour

and capital. “A market economy is an economic system controlled, regulated, and directed by markets alone; order in the production and distribution of goods is entrusted to this self-regulating mechanism” (Polanyi, 1944, p. 68). However, Polanyi argues that *laissez-faire* liberalism leads to unstable and “utopian” conditions. He writes, “[S]uch an institution could not exist for any length of time without annihilating the human and natural substance of society; it would have physically destroyed man and transformed his surroundings into a wilderness” (1944, p. 3), “leaving mankind in immediate danger of mass unemployment, cessation of production, loss of incomes and consequent social anarchy and chaos” (Dale, 2008, p. 501). Inevitably, society took measures to protect itself through different forms of social resistance. Protective measures, acting as positive feedback, save society from destruction. These two contradictory forces, expansion of the self-regulating market and society’s self-protection, constitute Polanyi’s double movement. Polanyi writes:

For a century the dynamics of modern society was governed by a double movement: the market expanded continuously but this movement was met by a counter-movement checking the expansion in definite directions. Vital though such a countermovement was for the protection of society, in the last analysis it was incompatible with the self-regulation of the market, and thus the market system itself. (1944, p. 135)

In nineteenth-century England, Polanyi notes that the dehumanisation of labour was countered by voluntary associations, such as trade unions, cooperatives, factory movement, churches, and government action such as tariff policies, the minimum wage and unemployment insurance. Polanyi argues:

The 1830s and 1840s saw not only an outburst of legislation repealing restrictive regulations, but also an enormous increase in the administrative functions of the State, which was now being endowed with a central bureaucracy able to fulfil the tasks set by the adherents of liberalism. (1944, 2001, pp. 145–147).

Polanyi warns that the counter-movements also “impaired the self-regulation of the market, disorganized industrial life and thus endangered society in yet another way” (1944, pp. 3–4). For instance, authoritarian and fascist regimes emerged in most of continental Europe in the nineteenth century. However, unlike in nineteenth-century Britain, the counter-movement and self-regulating market in China’s platform economy, the focus of this thesis, take other forms.

It should be noted that using Polanyi’s ideas in a Chinese context might be considered controversial not least in the light of moves in contemporary geography to decolonise the discipline by recognising and contesting its Eurocentricity (Clement, 2019; Radcliffe and Radhuber, 2020). This is part of long-running attempts to move away from all-powerful all-knowing Western theory (Connell, 2008). Moreover, it is related to debates about the hegemonic position of the Western academy and publishing interests – and the English language (Kong and Qian, 2019). Recently, there have been specific criticisms of the ‘random’ application of Western theory to China (Cartier, 2017), as well as attempts to apply Chinese derived theories (An et al., 2021). However, all this should be seen in the context of a China that is run by a communist party adhering to its own version of Marxist theory. In reference to long-running debates between postcolonial and Marxist scholars, we should recognise that certain concepts such as “capitalism and exploitation have cross-cultural validity” (Chibber, 2014), and the differences between China and the West “will be worked out in response to a common set of compulsions from the underlying capitalist structure” (Chibber, 2014).

There is a history to the use of Polanyi’s ideas in China. A few researchers have applied Polanyi’s “great transformation” to interpret China’s spectacular transition post-Mao, from the planned economy to the market economy in the early 1980s. Wang notes that new social policies “prevent a disembedded and self-regulating market from dominating society” (2008 p. 58); Ma and Zhang (2009) regard Chinese administrative reforms since 1978 as a response, to meet social needs and preserve social values. However, their explanation of counter-movement mainly concentrates on a top-down response from government, rather than bottom-up reactions. Although a macro picture

is provided, the more in-depth and nuanced description of individuals' reactions to the marketisation process in China is unrecognised. Therefore, this thesis aims to explore the bottom-up counter-movement in China, and in an emerging new economic sector – the platform economy.

2.2.2 Two sides of embeddedness: hard and soft Polanyi

Although Polanyi coined the term “embeddedness”, he only used it occasionally in *The Great Transformation*, where it is deployed to refer to the relationship between economy and society. Prior to the advent of the modern market society, “the economy is embedded in non-economic institutions”; in the latter, “instead of economy being embedded in social relations, social relations are embedded in the market system” (1944, p. 57). However, the meaning of embeddedness is imprecise or even contradictory in Polanyi's series of texts written between 1947 and 1957 (Dale, 2011; Cotterrell, 2013). Different interpretations of Polanyi's arguments are presented in later research. Broadly speaking, two distinct pathways come out of Polanyi's work. The first is “gradational embeddedness”, focusing on different degrees of marketness and of embeddedness in different economic structures. The second is the “network embeddedness” approach, arguing that the economy is, always and anywhere, embedded in non-economic institutions. This approach also influences new economic sociology and economic geography. As Dale suggests, Polanyi's embeddedness can be understood either as “a theoretical proposition that refers to differences in the degree of that enmeshment”, or as “a methodological axiom that holds that *all* economic behaviour is enmeshed in non-economic institutions” (2011, p. 323).¹² These two approaches are also referred as “hard” and “soft” Polanyi respectively, which will be explained further now.

The “hard Polanyi” perspective, more critical and radical, holds that the degree of embeddedness is differentiated depending on the extent to which the economy is integrated. A disembedded economy is created through the commodification of labour,

¹² Gemici has a similar argument: “Polanyi employs embeddedness in a dual manner: (a) as a methodological principle akin to methodological holism, and (b) as a theoretical proposition on the changing place of economy in society” (2008, p. 5).

land and money. Since a “market economy must comprise all elements of industry, including labour, land and money” (Polanyi, 2001, p.74), it is possible to “employ money to acquire more money” and “purchase ‘the use of labour’ on the labour market” (Cangiani, 2011, p. 182). However, the commodification of land, labour and money is disastrous. The livelihoods and security of individuals are assured by the market, rather than the traditional kinship, religious, and political institutions. Everybody must “economise” and “maximise”, trying their best to augment capital or to earn a living (Cangiani, 2011). Polanyi terms land, labour and money as “fictitious commodities” because they are “either not produced at all (like land) or, if so, not for sale (like labor)... They are, strictly speaking, not commodities at all” (Polanyi, 1968, p. 35; 1977, p. 10); “the commodity description of labour, land and money is entirely fictitious” (Polanyi, 2001, p. 75).

Here, it is obvious that there is a parallel between Polanyi’s commodification and Marx’s exploitation, despite Polanyi’s criticism of Marx.¹³ Marxian exploitation is the extraction of surplus value from its producers, mainly labour. Marx notes that, in the world of commodities, “labour-power can appear upon the market as a commodity” and the labourer “must *constantly* look upon his labour-power as his own property, his own commodity” (1977, p. 165). Surplus value emerges when there is a difference between the total value produced and the costs of its production, which include labour wages and salaries. Marx writes,

In themselves, money and commodities are no more capital than the means of production and subsistence are. They need to be transformed into capital... on the one hand, the owners of money... who are eager to valorize the sum of values they have appropriated by buying the labour power of others; on the other hand, free workers, the sellers of their own labour-power, and therefore the sellers of labour. (1977, p. 874)

¹³ There is a large literature on the relationship between Polanyi and Marxism, although Polanyi mentioned he was not a Marxist; see Hart (1983).

In this sense, Polanyi accepts “commodity fetishism” in the Marxist language, and the commodification of labour can be understood as the process of proletarianisation (Lie, 1991, p. 225). As Selwyn and Miyamura point out, “commodification of labour and its exploitation under capitalism were, and are, two sides of the same process” (2014, p. 657). Marx’s historical materialism and Polanyi’s institutionalism reflect upon different aspects of capitalism: Marx identifies forms of exploitation, and class struggles to limit and potentially transform labour’s subordinate relations to its exploiters; Polanyi is concerned with how the economy is disembedded from society, and accordingly, with the societal counter-movement aiming at decommodification of labour, land and money (Selwyn and Miyamura, 2014). Cangiani holds that Polanyi’s notion of embedded/disembedded “can originally be found in Marx” (2011, p. 183).

Compared with the “hard Polanyi” perspective (also referred to as technological embeddedness) which focuses on the relationship of tools and machines in a market society (Stroshane, 1997), another way of understanding Polanyi’s concept of embeddedness is the “always embedded” approach. As Polanyi argues, all economic activities are “embedded and enmeshed in institutions economic and non-economic” (1957, p. 250). Later, this perspective has been developed into network-based embeddedness in the seminal work of Granovetter. Focusing on market actors’ interpersonal relationships, Granovetter’s key point is that economic action is “embedded in concrete, ongoing systems of social relations” (1985, p. 487). He writes: “the role of concrete personal relations and structures (or ‘networks’) of such relations in generating trust and discouraging malfeasance” (1985, p. 490). Economic activities are not only shaped by the price mechanism, but also “a larger social context, with particular social practices and technological constraints” (Lie, 1991, p. 227). With the globalisation process, this network-based embeddedness perspective later influences literature on global production networks and business systems. For instance, Hess and Coe further propose territorialised embeddedness, which refers to the ways actors are bundled in the institutional, social and cultural heritage in particular, bounded places or territories (Hess, 2004; Hess and Coe, 2006). Although Granovetter’s approach has

been criticised for locating economies at the individual and the micro level, it is the most influential attempt to elaborate on the concept of embeddedness, and it advances the new economic sociology as well as business and organisation studies.

In this thesis, both the hard and soft Polanyi perspective will be discussed in reference to Shanghai delivery drivers. Focusing on remote platform workers in Southeast Asia and Sub-Saharan Africa, Wood et al. (2019b), from the two sides of Polanyi's thinking, find that these workers are commoditised in external labour markets and simultaneously embedded within interpersonal networks of trust. In a similar vein, the hard perspective of embeddedness will be used to analyse the commodification and exploitation in the Chinese platform economy; the soft perspective of embeddedness will be used to illustrate the platform workers' social networks.

2.2.3 Polanyi and today's society

Although Polanyi's model has weak points, his perspective provides a fruitful overarching framework or paradigm for understanding current globalisation, labour and the relationships of production (Munck, 2013; 2021). Much previous criticism of Polanyi's argument has centred on two aspects: his equation of all market exchange with commoditisation; and his unclear and ambiguous concepts that result from the historical narrative of the book (Halperin, 1988; Hodgson, 2017). However, the criticism does not influence Polanyi's great relevance to today's society and his contribution to different strands of social science, such as the international political economy. His archives in Canada and the special issue in *Environment and Planning A* in 2013 justify the significance of Polanyi in understanding the capitalist system and financial market in the twenty-first century.¹⁴ As Stiglitz notes in the foreword to the new 2001 edition of *The Great Transformation*, "Because the transformation of European civilization is analogous to the transformation developed countries face today, it often seems that it is as if Polanyi is speaking directly to present-day issues" (2001, pp. vii–ix). Polanyi's theoretical framework has strong echoes in the twenty-first

¹⁴ See the archives website: <https://www.concordia.ca/research/polanyi.html>; see the special issue: <https://journals.sagepub.com/toc/epna/45/7>.

century: it is used to compare the similarity between the Great Depression of 1929 and the financial crisis of 2008 and the subsequent socioeconomic crises (Dale, 2012; Maucourant and Plociniczak, 2013). As Holmes writes,

Polanyi's thesis remains relevant today not merely because the spectre of the free market has returned in the conceptual packaging of "globalisation", but because the same binary problematisation of economy and society – marketisation and protection – still shapes the way that political economic questions are problematised. (2013, p. 279)

In this sense, Polanyi is relevant not only in "the advanced industrial societies where he has garnered most attention", but also in "the so-called developing societies" (Munck, 2021, p. 243). Polanyi's interlinked conceptualisations of embeddedness, double movement and counter-movement have been rediscovered across vastly different contexts, both in the Global North and Global South, and in different forms. For instance, Peredo and McLean (2020) focus on two practices that effectively decommodify land and labour – community land trusts and worker cooperatives – and suggest that these represent counter-movement in the neoliberal environment in Western countries. To address poverty and inequality, Thompson et al. (2020) find that in the Liverpool city region, local authorities are working with social enterprises to invest directly in self-sustaining projects that show the decommodification of the fictitious commodities of land, labour and capital and the re-embeddedness of markets.

Recently, Polanyi's framework has begun to be applied to the platform economy, a new form of financial accumulation in the digital era. Regarding data as a new fictitious commodity, Grabher and König (2020) propose that the emergence of the platform economy is the second great transformation, which is driven by technology, science and the state. Similarly, Kenney et al. argue that the platform economy "confirms Polanyi's (and Marx's before him) insight that the reach of the market is based upon increased commodification as it has been able to reach into ever more parts of social life" (2020, p. 228). Based on survey data from three Chinese cities (Beijing, Chengdu and

Hangzhou), Chen et al. argue that “the digital employment sector in China has been increasingly disembedded from statutory social insurance institutions and state regulation”, and there is an institutional affinity and resemblance “between market-society nexus of the 19th century and the digitality-society nexus of the 21st century” (2020, p. 1247). Whereas the process of embeddedness in the platform economy is generally understood in this body of literature, another equally important movement – individuals’ counter-movement against commodification – is less discussed.

In summary, Polanyi’s double movement framework is a valuable tool in helping to understand today’s society. Empirical research on the double movement in China concerns economic transition and the resulting policy changes from governments. Existing research on the great transformation in the platform economy mainly discusses (dis)embeddedness. Within the existing literature on the platform economy in China, the bottom-up counter-movement from platform workers is seldom discussed (for notable exceptions, see: Liu and Friedman (2021) and Lei (2021)). In the nineteenth century, Polanyi wrote that factory workers tried to protect themselves through factory movements and trade unions. Guided by Polanyi, this research aims to explore the Chinese platform workers’ counter movement against commodification in the platform economy. To understand the Shanghai platform workers’ double movement, this research situates it within the existing literatures of precarity, resistance and labour agency beyond the context of the Global North. After introducing precarity, a concept related to Polanyi’s framework, in Section 2.3, concepts to frame the resistance beyond Global North and empirical research on social resistance in China will be presented in Section 2.4.

2.3 Conceptualising precarity and critiquing the literature

As Schierup and Jorgensen wrote, “during the 2000s the notions of ‘precariousness’, ‘precarisation’, ‘precarity’ and ‘precariat’ have gained extended importance in the social sciences” (2016, p. 947).¹⁵ Precarity, as a multidimensional conceptual

¹⁵ Jorgensen (2016) distinguishes between precarity (as a condition), precariat (as an identity) and precarisation (as a process).

framework, is used in “research on migrant labour and emerging work on technological change, flexibilization, restructuring and insecurity” (Strauss, 2018, p. 622). Western researchers have applied the concept of precarity to international migrants, to understand their experiences in the context of contemporary social and economic conditions and social struggles. Among examples are McDowell et al. (2009)’s research on migrants in London service sector, McIlwaine et al. (2019)’s study of Latin American migrants in London, and Lewis et al. (2014)’s book on unrecognised asylum seekers and refugees in the UK. Migrant workers are seen as “among the most disadvantaged in a globally expanding reserve army of labour” (Schierup and Jorgensen, 2016, p. 949). Meanwhile, in China’s case, the internal circular rural–urban migration rather than cross-border movement provides a cheap labour force in urban China, as well as “new scenarios which broaden perceptions of the global precarity” (Schierup and Jorgensen, 2017, p. 8). In this research, Shanghai delivery drivers fit into the precarity framework because of their commodification in the workplace as platform workers and their vulnerability in everyday life as migrant workers, as I will explain in Chapter 6. Before showing the research gap in the precarity literature and how the concept could be applied in this research (Section 2.3.2), definitions and academic debates will be presented (Section 2.3.1).

2.3.1 Definitions and academic debates on precarity

Precarious employment means “uncertain, insecure, unstable, unpredictable, and risky” working arrangements (Vosko, 2011, p. 2). This concept is often related to “disempowerment, vulnerability and insufficiency” (Piper et al., 2017, p. 1092), characterised by a high degree of flexibility, low levels of security, low pay, poor levels of social protection or no social protection at all (Rodgers and Rodgers, 1989; Munck, 2013). Precarious workers are characterised as being without any stable professional identity, and being without access to a future professional career, social security, and statutory entitlements (Hewison and Kalleberg, 2013; Nielsen et al., 2017). They become “differentially exposed to injury, violence, and death” (Butler, 2009, p. 2). In his influential book *The Precariat: The New Dangerous Class* (2011), Standing

proposes the term the “precariat” to capture the emergence of a new era of changing employment conditions for many segments of the labour force and more particularly for migrants. Standing (2014) further identifies seven forms of labour-related security that precarious workers lack: labour market security, employment security, job security, work security, skill reproduction security, income security and representation security. He points out that precarious workers are trapped in a dilemma: they spend a lot of time searching for jobs and “dealing with the state bureaucracy or private commercial organisations as temporary labour” (2014, p. 120).

Although Standing’s work contributes to the popularity of precarity as an analytic concept, his conclusion – “the precariat is a *class-in-the-making*, if not yet a *class-for-itself*” – has been criticised from both labour studies and Marxist approaches. Generally, critiques of his viewpoint concentrate on the following two aspects. Firstly, as Waite (2009) points out, precarious workers are not a unique phenomenon in the twenty-first or twentieth century and insecurity is not a new experience for the working classes. Even during the Keynesian era, many workers were excluded from the regime of labour security (Ettlinger, 2007), and this ‘state of exception’ can become normalised (Ettlinger, 2020). Following this logic, Standing’s class-based approach to precarity ignores the historical and geographical development of capitalism. Neilson and Rossiter argue that “Fordism is exception, and precarity is the norm” (2008, p. 54). In other words, precarity is intrinsic to capitalism. As Spencer states, “employment under capitalism has always featured some element of precariousness” (2012, p. 688). In this sense, “we are all precarious” in post-Fordist capitalist society, rather than as a specific new class (Seymour, 2012). Munck (2013) goes even further, arguing that the precariat cannot be considered a new “class-in-the-making” because it does not alter the relations of production in contemporary capitalism. Smith and Pun, similarly, refute Standing’s precariat as a class because “class is not defined by status, identity or legal rights, but location in the sphere of production” (2018, p. 599). Meanwhile for Kalleberg and Hewison, precarious work is not determined only by the nature of work or by global

processes: another significant factor is “the *degree of social protection* provided by a country’s welfare regime” (2013, p. 274).

Secondly, Standing’s viewpoint ignores the multiple layers and varieties of precarity. As Waite (2009, p. 413) argues, “precarity as a concept for geographical enquiry will be hollow and of questionable value if it flattens or homogenises difference”. Manolchev et al. (2018) also agree that the homogeneity within the precariat is overstated. To supplement the “hierarchies” or multiple layers of precariousness within labour markets, Lewis et al. (2015) propose the idea of “hyper-precarity” to describe migrants’ working lives in the UK, distinguishing this from being “merely” precarious. Following their studies, Lauren and Eeva-Kaisa (2017) investigate how differential exposure to precarious working and living conditions are produced. In the case of flexible labour in Finland, they find that differences in mobility and labour protections produce a spectrum of labour precarity.

Rather than revealing various levels of precarity, recent research has focused on the spatial and/or temporal variations of precarity. McIlwaine’s research on “feminised onward precarity” focuses on “how certain structural and life course factors mediate onward precarity across place as well as considering the different stages of the journeys to capture the processual and temporal dimensions” (2020, p. 2618). Schierup and Jorgensen argue that precarity takes different forms “in different parts of the world, on different scales and in different socio-economic contexts” (2016, p. 947). Grenier et al. (2017) find that precarity can be used to illustrate the insecurities and inequalities that disadvantaged groups experience over time, and that austerity in the economic and political context can deepen their disadvantages. Similarly, Baey and Yeoh (2018)’s research on Bangladeshi migrant workers in Singapore’s construction industry approaches precarity as a cumulative, intensively mediated process which is compounded through the risks and vulnerabilities in migrants’ trajectories. By comparing young people’s experiences in England, Italy and Sweden, Antonucci (2018) holds that “not all experiences of precarious work lead to precarity” and that precarious work is widely diffused. These researchers all question Standing’s (2011) assumption

that placing all precarious jobs under a single umbrella category of precarity, rather than exploring the structural factors that intervene to transform precarious work into precarity.

Later research on precarity and precariousness proposes the “beyond employment” approach. Therefore, the concepts of precarity goes beyond the status of employment, associated with weaker citizenship rights (Piper and Lee, 2016). For instance, Papadopoulos et al. (2018) provide a description of four types of precarity which are relevant to migrant labour: status precarity, labour precarity, workplace precarity and life precarity; and Ferreira (2016) points out five dimensions of precarious work based on a Colombian case study: (i) lack of sufficient social protection; (ii) instability of employment trajectory; (iii) low labour income and deprivation of labour entitlements; (iv) lack of sufficient protection from an unfavourable work environment and organisation; and (v) scarcity of freedom of association, speech and collective bargaining. In 2012, the International Labour Organisation noted that precarity also includes obstacles to joining a trade union and bargaining collectively (Fanelli et al., 2017). In summary, precarity denotes vulnerability both in economic and social dimensions (Rogers and Rogers, 1989). Precarious workers may face disadvantages in terms of training, employment, and livelihood outside the workplace, including health, housing, education, culture and social rights.

2.3.2 Critiquing the literature: how to fight against precarity

Although precarity has long been criticised as a Euro-American-centric concept, it has recently been applied beyond the Global North (Mosoetsa et al., 2016). In this sense, later researchers are filling the early research gap raised by Munck (2013), who points out that precariat discourse did not speak to the Global Southern experience. Western scholars have investigated precarity in different industries in the Global North (see for example, Brenton and Curry (2017), Fanelli et al. (2017) and Farr-Wharton et al. (2014)). However, recent decades have witnessed remarkable economic growth in Asia. The changes in globe-girdling value chains have not only brought extensive economic and social transformations but also the expansion of precarious work. Therefore,

academic research has started to pay attention to precarity in the Global South. In 2013, the journal *American Behavioral Scientist* examined the origins, extent, nature, and consequences of different forms of precarious work in East Asia, and South and Southeast Asia in two special issues. This research has expanded the analysis of precarity to Indonesia, Vietnam, Sri Lanka, Japan and China.¹⁶ In 2016, two special issues of the journal *Critical Sociology* explored the precarity of migrants in Russia, China and South Africa.¹⁷ In fact, recent research is not confined by the Global North-South distinction. Senses (2016), based on the Turkish context, finds that the experiences of migrant workers, as the precariat, belong to a category in between North and South.

Existing literature has identified key drivers, patterns and forms of precarisation in different contexts, but the question remains how to understand current forms of state and non-state social protections as responses to precarisation. Alberti et al. (2018) call for more robust and empirical work to understand how to “fight against these emergent processes of precarisation” (p. 453) by focusing on struggles against precarity inside and outside the workplace. Some researchers have provided preliminary answers. For example, Musson (2014) focuses on transient migrant workers in the Ontario tobacco industry, revealing that the commodification of labour produces counter-movements or resistance from workers. Potter and Hamilton (2014) examine precarious employment and the responses to it in the mushroom industry in Northern Ireland. In the Global Southern context, Zolniski (2018) takes farmworkers in northern Mexico as an example, finding that in order to fight for labour’s civil and political rights, workers have developed individual, family, and collective resistance strategies as anti-precarity measures. These scientific inquiries resonate with Waite’s early suggestion of the duality of precarity: representing “both a condition and a possible rallying point for resistance” (2009, p. 412).

¹⁶ More articles in the special issue can be retrieved from: <https://journals.sagepub.com/toc/absb/57/3>; and <https://journals.sagepub.com/toc/absb/57/4>

¹⁷ More articles can be retrieved from: <https://journals.sagepub.com/toc/crsb/42/7-8>.

In this light, there is a parallel with Polanyi's theory of double movement. In a Polanyian perspective, "precarity operates in labour markets through the market proponents' attempts to disembed the economy from the rest of society" (Ozkiziltan, 2020, p. 6). Another great appeal of the concept of precarity is that it invokes "a capacity for agency" (Schierup and Jorgensen, 2017, p. 4). Kalleberg notices a "pendulum" swing between flexibility and security (2011, p. 25), while Standing (2014) shows a shift from the embedding to the disembedding of markets. Shukaitis argues that, "Precarity is most useful not as a concept for mapping out new class categories for integrating them into a new institutional politics, but as a tool for intervening in the shaping of new struggles" (2013, p. 658). Schierup and Jorgensen use the label of "Politics of Precarity", which includes not only "precarity of labour, livelihoods and citizenship" (2017, p. 4) but also resistance against neoliberal capitalism. Paret and Gleeson similarly point out that one lens for studying the precarity-migration-agency nexus is "the collective action approach" (2016, p. 284), which, they argue, needs to be developed further.

In summary, there are two main limitations to the existing research on precarity. Firstly, as discussed in Section 2.3.1, more attention has been paid to precarity inside the workplace rather than outside it. Put differently, existing research concentrates on a single dimension and fails to reveal the complex, multi-layered nature of the precarious experience. This perspective misses the heterogeneity and fails to define broader conditions outside the work and employment place (Armano et al., 2017). Secondly, informed by Polanyi's double movement, a reactionary movement against precarious condition has not been given the emphasis it deserves. As Rizzo and Atzeni argue, there is "an excessive pessimism about the possibilities for struggles for rights at work in informalized labour markets and an excessive focus on trade unions as the only vehicle for workers' organization" (2020, p. 1126). This research aims to fill these two gaps by discussing Shanghai delivery drivers' multifaceted precarity and their response to it. As rural-urban migrant workers in Shanghai, delivery drivers face disadvantages in almost every aspect of their everyday lives. Under China's authoritarian regime, labour unions

and large-scale collective actions are rare. To understand the drivers' protective responses, before reviewing the literature on China's resistance in Section 2.4.3, two conceptual frameworks on resistance in the Global South will be introduced in Section 2.4.1 and 2.4.2.

2.4 Resistance: everyday resistance and Bayat's quiet encroachment

To understand Shanghai delivery drivers' self-protection movement, in this section I situate it within the existing literature on resistance and labour agency from informal workers outside the context of the Global North. Polanyi's counter-movement provides insights into resistance to marketisation and commodification in nineteenth-century capitalism in England. However, workers in informal employment outside the Global North exhibit an alternative form of resistance. As Lata et al. find of informal street vendors in Dhaka, "overt or collective resistance is not possible due to prevailing political and cultural arrangements" (2019, p. 143), and "resistance and rebellion are too costly for the poor" (2019, p. 149). This section will review in further detail the characteristics of social resistance in China (Section 2.4.3), and discuss two researchers, namely James Scott and Asef Bayat, who capture the facets of resistance by informal workers in the Global South. Scott's book *Weapons of the Weak* (1985) is based on his study of Malaysian farmers; Bayat focuses on the urban poor in Arab and Muslim societies in the Middle East. Related to Scott's everyday resistance, O'Brien and Li (2006) find that rightful resistance is one of the weapons deployed by Chinese farmers in rural areas. Although there is now a growing literature that recognises the everyday resistance practices from informal workers outside the cities of the Global North, it mainly concerns street vendors (Turner and Schoenberger, 2012; Crossa, 2009, 2013). Also, "there are only limited examples of researchers applying Bayat's framework in other geographical contexts" (Gillespie, 2017, p. 977). Hence, this research expands the scope of labour agency literature by examining labour resistance in the platform economy in the context of Shanghai delivery drivers, and its impact on their work conditions.

2.4.1 Scott's everyday forms of resistance

Compared to “the open defiance that dominates the study of peasant and working-class politics” (p. 32), Scott argues that Malaysian farmers’ practice represents an everyday resistance. In the preface to his *Weapons of the Weak: Everyday Forms of Peasant Resistance* (1985), Scott writes that it is a “simple fact that most subordinate classes throughout most of history have rarely been afforded the luxury of open, organized, political activity” (p. xv), and that peasant rebellions and peasant revolutions are “few and far between” (p. xvi). Alternatively, taking the form of “passive noncompliance, subtle sabotage, evasion, and deception” (p. 31), everyday forms of peasant resistance are “the ordinary weapons of relatively powerless groups” (p. xvi). In the Malaysian village he observed, Scott shows that the relatively powerless group – peasants – resisted the ongoing “Green Revolution” by “foot dragging, dissimulation, desertion, false compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so on” (p. xvi). Scott argues that subordinate groups favoured these everyday techniques over open insurrection, especially in contexts where rebellion is too dangerous, or where there are constraints on the ability of some people to take open, formal action. Scott asserts that everyday resistance is more effective than open struggle: “persistent practice of everyday forms of resistance underwritten by a subculture of complicity can achieve many, if not all, of the results aimed at by social movements” (Scott, 1987, p. 422). In his later articles, Scott also interchangeably calls this informal and non-organised resistance “infra politics”.

Scott’s concept of everyday resistance is distinguished from the outright collective defiance which was widely popularised in previous resistance literature. Everyday techniques are “small scale”, “relatively safe”, “typically avoid any direct symbolic confrontation with authority or with elite norms” (Scott, 1985, p. 29), and “require little or no formal coordination” (Scott, 1985, p. 35). Scott writes,

Where everyday resistance most strikingly departs from other forms of resistance is in its implicit disavowal of public and symbolic goals. Where institutionalized politics is formal, overt, concerned with systematic, de jure change, everyday

resistance is informal, often covert, and concerned largely with immediate, de facto gains. (1985, p. 33)

According to Scott, such techniques of resistance are well adapted to the particular characteristics of the peasantry, who are diversified, scattered across the countryside, lacking discipline and leadership (Scott, 1985, p. 35). Scott concludes that, “this is a social movement with no formal organisation, no formal leaders, no manifestoes, no dues, no name, and no banner” (Scott, 1985, p. 35). The everyday resistance is a spontaneous, non-hierarchical and loosely organised resistance that is typically hidden, disguised and individual.

Undoubtedly, the concept of “everyday resistance” provides a new approach to understanding peasant resistance, and sheds light on resistance studies and subaltern studies (Sivaramakrishnan, 2005). Previous resistance literature has used a too-narrow definition, only noticing subordinate politics when it became open and organised, such as peasant uprisings. The much larger field of informal subtle politics has been missed out. In this sense, Scott pushes resistance research forward by moving from organised resistance/social movements to more individual forms of resistance. Joseph calls Scott’s work “the most visible and polished statement of what now constitutes a vital current in peasant studies” (1990, p. 26). Holmes notes that Scott’s 1985 text *Weapons of the Weak* is regarded as “a landmark text in resistance studies” (2007, p. 185).

Since the 1980s, the everyday politics of resistance has grown into a major field of social study (Isaacman, 1990). More researchers have paid attention to highlighting the often ignored or misinterpreted subtleties of political reactions to injustice. The detail and depth of the ways in which seemingly weak classes use material and symbolic acts to counter the claims of dominant groups has been revealed. The concept of everyday resistance has received increasing attention in different disciplines such as anthropology, cultural studies, geography, political science, and women’s studies

(Bayat, 2000). For instance, Ben Kerkvliet (1990)'s everyday politics closely mirrors Scott's everyday forms of resistance.¹⁸

In the 1990s, Scott's work also influenced labour geography, which emerged as a critique of the passive approaches to labour agency in the Marxian-inspired economic geography literature of the 1970s.¹⁹ An influential approach is Katz's (2004) distinction between *resilience*, *reworking* and *resistance* strategies as three everyday practices of workers, based on her study of rural Sudan and New York City. Although there is not sufficient space here to engage with the debate in labour geography at length, it should be noted that the two latest advancements compared to the early foundation phase (see Hastings, 2016, p. 309). First, since labour is embedded in wider societal structures, labour's everyday agency therefore needs to be reconnected to broader social contexts. As Coe and Jordhus-Lier point out, "Workers are complex beings, with multiple identities that go far beyond the workplace" (2011, p. 218). Second, compared to a prime focus on trade unions and "success stories" (Lier, 2007, p. 829), scholars are calling for a "history from below" approach (Featherstone and Griffin, 2016) and small-scale geographies. McDowell advocates that "working at small scale, collecting narratives, listening to workers" will provide labour geography with "rich detail to support arguments about, inter alia, new gender regimes . . . or new form of capitalism, if these are identifiable" (2015, pp. 18-19).

Although subtle and diffused forms of resistance are widely recognised and increasingly popular, the term "everyday resistance" has lost its meaning as it has been overextended by studies (Holmes, 2007). Critics argue that this concept has been

¹⁸ According to Kerkvliet's definitions (2009, p. 232), the "key to 'everyday politics' differences from official and advocacy politics is it involves little or no organization, is usually low profile and private behaviour, and is done by people who probably do not regard their actions as political".

¹⁹ The distinction between the "geography of labour" and "labour geography" should be noted. Neethi proposes that "while the geography of labour incorporates labour as rather peripheral to explanations of the geography of capitalism, labour geography focuses principally on the activities of working class people and an attempt to understand the geography of capitalism from their perspective" (2011, p. 974),

Studies on the geography of labour tend to be more descriptive of labour... and lend themselves more easily to quantitative analysis. Those focusing upon labour geography tend towards a more active incorporation of labour, look for causality rather than pattern in explanation, more frequently use case studies of particular situations, and use qualitative research methodologies. (2011, p. 975).

applied to trivial and mundane practices (Fletcher, 2001) such as tattooing, music videos, psychic mediums (Ortner, 1995; Brown, 1996), consumption/shopping (Fiske, 1989), and to specific categories such as gay/queer people (Myslik, 1996; Campbell, 2004) and Palestinian women (Richter-Devroe, 2013). Scholars use this concept in different research areas although they may not talk about the same thing. In other words, there is a lack of critical thinking over what constitutes resistance and the specific social contexts behind this concept. A clear problem with the concept of everyday resistance is that it risks labeling too many other expressions as resistance (Vinhagen and Johansson, 2013). Korovkin notes the concept “is little more than an umbrella for phenomena that are superficially similar yet substantially different” (2000, p. 20). Without much precision, the concept of resistance is today used in a multitude of ways (Hollander and Einwohner, 2004).

Based on this, two main critiques of Scott’s concept of everyday resistance are reviewed here. Firstly, Scott has been criticised for overemphasising the differences between two main forms: everyday resistance and public resistance. Gutmann suggests that Scott’s theory is a “conservative one. It does not expect or explain change” (1993, p. 87). Gutmann further points out that the binary perception of resistance leads to a backward tendency in academia. “As Scott stresses in all his work since *Weapons of the Weak*, scholars following this framework must choose between covert and overt forms of subaltern politics” (1993, p. 76); and “given the current widespread ideological pessimism, taking this dangerous dualism literally would drown overt resistance and rebellion in intellectual despair” (1993, p. 77). Due to the widening disparities between everyday resistance and open confrontation raised by Scott, some distinctive characteristics of the everyday resistance concept have also been challenged. Gutmann (1993) questions why everyday forms of resistance need necessarily be “hidden”; in Latin America, he argues, it cannot be concluded that everyday resistance is always covert. Similarly, Gupta (2001) finds that poor peasants and agricultural labourers are not engaged in the individual, covert or clandestine small-scale acts that form what Scott calls “hidden transcripts”, but instead in mass, large-scale and overt revolt. Using

thirty-four case studies in conservation projects, Holmes (2007) also argues that rather than finding resistance in more subtle and hidden acts such as slander, more overt acts such as marches and petitions should also be highlighted.

A related critique is that the relationship of these two forms of resistance is not clearly explained in Scott's analysis. In his book, Scott only mentions that:

Individual acts of foot dragging and evasion, often reinforced by a venerable popular culture of resistance, and multiplied many-thousand fold, may, in the end, make an utter shambles of the policies dreamed up by their would be superiors in the capital.
(1985, p. 8)

In his metaphor, the microscopic growth on barrier reefs against “the ship of state [eventually] runs aground” (1989, p. 20). In this sense, Scott may indicate that everyday forms of peasant resistance may “lay the groundwork” for substantial social change. However, the relationship between explicit and implicit forms of resistance is still unclear.

To fill this gap, critics have reminded us that a neat dichotomy should be avoided, and have shown the interlinkage and nexus between different forms of resistance. Focusing on mobilisation by poor peasants in rural Bangladesh during the parliamentary election of 1986, Adnan (2007) explains why and under what circumstances powerless groups are able to go beyond forms of everyday resistance or avoidance protest, engaging in open, undisguised confrontations with dominant groups. Using two cases in Cambodia, Lilja et al. find that “organized resistance could encourage everyday resistance” (2017, p. 52). In a piece of theoretical research, Vinthagen and Johansson argue that “everyday resistance constitutes an initial, off-stage, or later stage activity in relation to other more sustained, organised and conventional political forms of resistance” (2013, p. 9). They further argue that considering the complexity of (at least) four fundamental sociological dimensions of everyday resistance (repertoires, relationships, spatialisation and temporalisation), everyday resistance is “*heterogeneous and contingent* due to

changing contexts and situations” (Johansson and Vinthagen, 2016, p. 418, emphasis in the original). In this sense, everyday resistance is only one of many types of small-scale or individual resistance practices, and it goes on between or alongside dramatic resistance events.

The second main critique is that Scott’s analysis of everyday forms of resistance is based on his understanding of class relationships. Scott notes that his study is about “local class relations” (1985, p. xix). Influenced by Marxist historians, Scott’s explanation is still confined in terms of class analysis and accepts social consciousness. Basically, his argument for everyday resistance rests on two unsolid presumptions: firstly, that peasants recognise and accept their structural inferiority; and secondly, that peasants are aware of the risks of outright confrontation so they avoid open, collective actions and prefer everyday resistance. In other words, Scott indicates that resistance is a political and rational action. However, this assumption is challenged by later resistance literature because it simplifies the ideas of peasants as arising neatly from their class position. For instance, Sivaramakrishnan (2005) doubts that peasants always know fully who their oppressors are, or the nature of their oppression. Brosius (1997) points out that in complex scenarios, the subordinate groups cannot fully recognise the hidden relationships that determine their exploitation. Gutmann directly points out Scott’s problem of class consciousness: “the notion that economic class position determines social consciousness overlooks important life experiences other than economic ones” (1993, p. 78). Similarly, Fletcher (2001) states that Scott’s framework does not account for why some resist while others do not even though they are in similar situations.

2.4.2 Critique of everyday resistance and Bayat’s quiet encroachment

Building on Scott’s work, Bayat (2000) proposes an alternative outlook – a quiet encroachment of the ordinary – to examine the activism of marginalised groups in the cities of the Global South. Bayat sees the unresolved questions as: “how do the urban grassroots respond to their marginalization and exclusion?” (2000, p. 533); and “how [do] these growing urban poor in the Third World respond to the larger social process

that affect their lives?” (2000, p. 535). He claims that although Scott’s everyday forms of resistance transcend the “passive poor”, “surviving poor”, “political poor” model, and reveals the everyday politics of micro-existence, it is insufficient to account for the dynamic interactions and ongoing activities of “the urban poor in the Third World” (1997b, p. 56). In this sense, the biggest value of the “quiet encroachment of the ordinary” is that it assesses the politics of urban marginals in the developing world. Bayat highlights the poor and “informal” people that live in unauthorised urban neighbourhoods and engage in the unofficial economy (for example, the street vendors, squatters, and unemployed or underemployed), in other words, the most repressed people in the “Third World”.²⁰

Demonstrating non-movements in Arab and Muslim societies in the Middle East, Bayat argues that their type of struggle may best be described as “a quiet encroachment of the ordinary”, which means “a silent, patient, protracted, and pervasive advancement of ordinary people on the propertied and powerful” (1997b, p. 57). It is a “non-collective but prolonged direct action by individuals and families to acquire the basic necessities of their lives in a quiet and unassuming illegal fashion” (2000, p. 536). Compared to Scott, a more flexible, small-scale activism is acknowledged within authoritarian social structures. In particular, Bayat’s “quiet encroachment of the ordinary” overcomes the shortcomings of Scott’s everyday resistance (and other prevailing perspectives such as “passive poor”, “political poor”, “surviving poor”) in the following two ways.

Firstly, Bayat (1997a, 1997b, 1997c, 2000) claims that the struggles of marginalised groups should not only be described as hidden, quiet, defensive, and individualistic as Scott argues. Instead, the struggles of the urban poor are also proactive and surreptitiously offensive. They are not necessarily disguised or non-collective or informally organised. Alternatively, informal groups are flexible and can adapt to circumstances – the urban poor and lowest of classes (e.g., unemployed, slum-dwellers) regularly do, in fact, also employ public and collective resistance, Bayat argues. They

²⁰ The term “Third World” is dated, but it is Bayat’s original word. It is more common nowadays to refer to the Global South.

may engage in collective, open and highly audible campaigns as part of a general expression of popular discontent, although they often “deliberately avoid collective effort, large-scale operations, commotion and publicity” (Bayat, 1997b, p. 58). Bayat explains that they participate in street demonstrations or riots only, in Tarrow’s term, if the “structure of opportunities” is available for them: for instance, “when these methods enjoy a reasonable currency and legitimacy, and when they are mobilized by outside leaders” (1997b, p. 59). Bayat describes the quiet encroachment as a “dialectic of individual and collective action” (1997b, p. 66), marked by “quiet, largely atomized and prolonged mobilization with episodic collective action” (1997b, p. 57).

Secondly, Bayat takes issue with Scott’s argument that there is consciousness, intention or even a class motive to the acts. Scott suggests that resistance is “any act” by a subordinate class that is “intended” to “mitigate or deny claims... by superordinate classes” “or to advance its own claims” (Scott quoted in Bayat 2000, p. 542). However, Bayat draws attention to the meaning and intent of the actors: are everyday acts intended to effect social or political change? In Bayat’s understanding, the resistance “will always have some kind of effect”, but it often starts “without much political meaning attached to it” (1997a, p. 7). Whether they are social movements or everyday resistance, the acts are related to “the purpose of creating a more self-regulated and dignified life”: “these actors carry out their activities not as a deliberate political act; rather, they are driven by the force of necessity – the necessity to survive and improve a dignified life” (Bayat, 2000, p. 547). “Scott’s implicit subscription to rational choice theory”, according to Bayat, “would overlook the complexity of motives behind this type of struggle” (1997a, p. 6). For Bayat, the motivations of resistance are not Scott’s class consciousness, but “to survive hardships and better their lives” (1997b, p. 57). Therefore, resistance is a particular kind of act of necessity without political intent or effect.

In summary, the arguments put forwards by Scott and Bayat differ mainly on two points. First, on the link between everyday resistance and organised resistance, in the words of Lilja et al. (2017, p. 44), Scott shows “*linear development dynamics*, in which everyday

resistance might transform into large scale, collective and organized resistance”, while Bayat demonstrates:

Oscillation dynamics, in which everyday forms of resistance (‘quiet encroachment’) and collectively organized resistance (sudden large mobilizations in which ‘passive networks’ are temporarily activated) might be utilized in different times and spaces, depending on what is feasible. (Lilja et al., 2017, p. 44, emphasis original)

Second, on the intention of resistance, differing from Scott’s class consciousness, Bayat’s observation of the urban poor finds that they are motivated by “the force of necessity – the necessity to survive and live a dignified life” (Bayat, 1997b, p. 58).

Scott’s concept of everyday resistance has been widely applied to informal workers in the context of the Global South. However, “there is a lack of research that develops Bayat’s pioneering framework by exploring its applicability for understanding political agency in different geographical contexts” (Gillespie, 2017, p. 975) and in various working types. Examples of applying everyday resistance in the Global South have often referred to struggles by street vendors against the authorities: for instance, Turner (2012)’s research in Vietnam and Crossa (2009; 2013)’s research in Mexico. However, only limited numbers of researchers have tried to apply the concept to other types of informal workers; moreover Bayat’s framework is less well understood in other Global Southern contexts beyond the Middle East. Noteworthy exceptions can be seen in the following five studies: Hayes-Conroy et al. (2020) use quiet encroachment as a tool for interrogating the politics of youth- and community-based groups in urban Colombia; Gillespie (2017) draws on quiet encroachment to analyse the political agency of street hawkers and squatters in the sub-Saharan African city of Accra, Ghana; Magure (2015) argues that urban subalterns secure their livelihoods through repertoires of quiet encroachment during economic crisis; Hackenbroch and Hossain (2012) discuss the idea that everyday practices in the context of access to public spaces and water supply in Dhaka, Bangladesh, can be framed by the “organized encroachment of the powerful”; and Johnson (2005) scrutinises Bayat’s theory to reflect on the episodic mobilisation of

“people on the margins” in Jamaica. As Gillespie points out, later research needs to address “recent calls to examine how urban theory can travel from place to place – not just from north to south... but between different southern contexts” (2017, p. 975). Therefore, in this research, Shanghai delivery drivers, and their activism and resistance strategies, are the connection between my interest in the resistance of informal workers, and in the context of the Global South. At the same time, Scott and Bayat provide conceptual frameworks within which the relations between everyday resistance and organised resistance, and the intention of resistance can be studied in other similar contexts.

2.4.3 Resistance in China

Building on Scott’s *Weapons of the Weak*, O’Brien (1996; 2002) and O’Brien and Li (2006) find that protest in China is rightful resistance: protestors appeal for support to the central government and deploy “the policies, laws and commitments of the state to combat local officials who were ignoring those policies, laws and commitments” (O’Brien, 2013, p. 1051). Rightful resistance has a certain affinity with Scott’s everyday resistance. These two forms of defiance are both “opportunistic and measured and... they almost always lack the organizational resources and collective consciousness” (O’Brien, 1996, p. 34). In the context of rural China, rightful resistance, although noisy, public and open, is more effective than everyday resistance (O’Brien, 2013). Although rightful resistance is criticised for “being overly rationalist, state-centric and caught in ‘developmental thinking’” (O’Brien, 2013, p. 1051), it provides “theoretical and methodological tools and solid findings that will encourage comparisons” (Chen, 2009, p. 178), and it has been applied to other similar countries such as Vietnam, India and Brazil (Kerkvliet, 2014; Schock, 2015).

The popularity of rightful resistance stems from the “weak legal position” of citizens who stage resistance under an authoritarian regime (Cai, 2008b, p. 25). “Compared with governments in democracies, authoritarian governments are supposed to be more sensitive to popular resistance and therefore more likely to use suppression” (Cai, 2008b, p. 24). This is why protest in China is “cellular”, relatively small, disorganised,

dispersed and short-lived (Cheng, 2013; Johnston and Zhang, 2020). The mobilisation of collective action is mainly achieved through pre-existing social ties in similar villages, factories, residential compounds and ethnic identities (as well as increasingly in online space) (Steinhardt and Wu, 2015; Lu and Tao, 2017). For instance, in urban areas, resistance usually occurs because of housing demolition carried out by governments to promote urban renewal or city construction; in rural areas, peasant resistance is often in response to tax collection and the occupation of their farmland. Labour protests, especially from laid-off workers in state-owned enterprises (SOEs), factory workers and construction workers, are also widely documented, such as the serial suicides and strikes by Foxconn workers from 2009, a strike at the Nanhai Honda car plant in 2010. In addition, environmental protests against major economic development projects have occurred all over China (Deng and Yang, 2013). Examples include the Xiamen “PX Incident” in 2007 and the Guangdong Panyu protests against a waste project in 2009. This means that protestors, claiming for individual interests rather than public goods, have very rarely joined forces across social and geographical boundaries. Put differently, because of the fragmentation in workers’ identities, locations and employment relations, it is hard to lead to large-scale or even national struggles.

In the context of China, fragmentation is not only found among protestors, but also in the bureaucracy. China’s authoritarianism is widely conceptualised as a bargained authoritarianism (Lee and Zhang, 2013) or fragmented authoritarianism (Mertha, 2009) that can create opportunities for social protest. Minorities, religious groups, veterans and petitioners are more likely to target central rather than local authorities, manifesting thereby an “upward targeting” strategy (Chen and Cai, 2021). The central government is more concerned with the regime’s legitimacy and stability, and thus more tolerant of social protest. Local governments in China are responsible for handling most of the instances of resistance, and suppression is the common mode of response (Cai, 2008a; 2008b). Recent research on resource conflicts, as a particular type of social conflict, shows that the central government tends to use redistribution rather than repression to

defuse social unrest (Zhan, 2021). Nevertheless, researchers also find that since 2013, Xi Jinping is “pursuing a more consolidated, top-down approach to repression than his predecessor” (Fu and Distelhorst, 2018, p. 121), and “opportunities for contentious participation—defined as disruptive behavior ranging from grass-roots advocacy to outright protests—have been severely restricted” (Fu and Distelhorst, 2018, p. 101).

2.5 Conclusion: building on Polanyi’s double movement

This literature review has introduced and defined the key theories and concepts. Obviously, Polanyi’s double movement theory, the concept of precarity, Scott’s everyday resistance, Bayat’s quiet encroachment and O’Brien’s rightful resistance are closely connected. Alberti et al. (2018)’s recent call to understand how to “fight against these emergent processes of precarization” (p. 453) closely mirrors Polanyi’s counter-movement and resistance literature. Polanyi’s counter-movement, Scott’s everyday form of resistance, Bayat’s quiet encroachment of the ordinary and O’Brien’s rightful resistance, as master theories of resistance, all reflect on attempts to resist the change in living conditions caused by globalisation and marketisation, but they deal with different targets in different ways. Polanyi’s self-protection movement aims at “market forces”; Scott deals with “ideologies and public transcripts” (Chin and Mittelman, 1997, p. 34); Bayat focuses on “the propertied and powerful” (Bayat, 1997b, p. 57) or dominant groups; and O’Brien concentrates on the malfeasance of local governments. Also, different forms of resistance are presented: collective politics (e.g., cooperative movements, factory movements and trade unionism) from workers in nineteenth-century England in Polanyi’s *Great Transformation* (1944); informal and non-organised everyday practice from Malaysian farmers in Scott’s *Weapons of the Weak* (1985); “non-collective but prolonged direct action” (2000, p. 536) from marginalised people in Bayat’s observations on Muslim Arab societies in the Middle East; and skillful use of the language of power from peasants in O’Brien’s observations in rural China. Situating this thesis within the existing literature on precarity, resistance and labour agency of informal workers beyond the context of the Global North, I have laid the

groundwork for establishing my contribution to platform-worker literature in future chapters.

The overlaps and tensions between these concepts and theories provide fruitful and productive perspectives on understanding the vulnerability and resistance of platform workers in contemporary times. Polanyi's double movement serves as a theoretical framework, providing an overarching and broad perspective. The conceptual frameworks derived from relevant concepts (i.e. precarity, everyday resistance, quiet encroachment and rightful resistance) are of limited and specific scope. "Conceptual and theoretical frameworks both represent an integrated understanding of issues within a given field of study, which enables the researcher to address a specific research problem" (Imenda, 2014, p. 189). However, there are some differences between them: a theoretical framework is the application of a whole theory or part of one to "offer an explanation of an event, or shed some light on a particular phenomenon or research problem" (Imenda, 2014, p. 189). A conceptual framework consists of concepts that are placed within a logical and sequential design; it is based on specific concepts and propositions, and derived from empirical observation and intuition. In this research, Polanyi's theoretical framework is an excellent way for us to rethink the double movement today and to revitalise it as a valid and useful theory. The literature on precarity and the rich and diverse concepts of resistance, serving as conceptual framework and limiting to Global South context, offer a set of overlapping perspectives for understanding platform workers' everyday lived experiences and livelihood strategies.

Building on Polanyi's double movement theory, this thesis will first examine the application of both gradational embeddedness and always embeddedness approaches in the online food delivery industry in Chapter 6. When explaining the precarity of delivery drivers, I follow the "beyond employment" approach (Vosko, 2011), to investigate what kind of precarious conditions drivers face both inside and outside the workplace. Their rural hukou status and the specifics of platform work can add theoretically to Polanyi's argument and the existing literature on precarity. Delivery

drivers' resistance, another equally important movement from Polanyi's perspective, will be explained in Chapter 7. Two forms of resistance in Scott's argument, everyday resistance and public resistance, will be both investigated. Because of the similarities between Shanghai delivery drivers and the urban poor in the Middle East, Bayat's quiet encroachment, as one influential critique of Scott's everyday resistance, will also be used, especially his two main arguments that are different from Scott's: the relationship between organised resistance and everyday resistance, and the intention of resistance. Before taking these ideas forward to Chapters 6 and 7, the multiple identities of the research subjects – Shanghai food delivery drivers – will be situated and explored in Chapter 3, the research methodology will be explained in Chapter 4, and the mechanism of the online food delivery industry will be discussed in Chapter 5.

Chapter 3: Situating delivery drivers: platform workers globally and migrant workers in China

3.1 Introduction

In this chapter, I seek to provide contextual information on migrant delivery drivers in Shanghai. I situate them by clarifying their two distinctive identities: as platform workers and as migrant workers in informal employment in China. Subsequent sections briefly review relevant the literature on the platform economy, platform workers globally, and migrant workers in China.

Section 3.2 proposes that the emergence of delivery drivers in China is in line with other types of platform workers across the globe, such as Uber drivers, and freelancers on Amazon's Mechanical Turk (AMT) and Upwork platforms. Although there are variations in different countries and platforms, low-skilled platform workers share two main common characteristics: ambiguous employment status, whether they are employees or "independent contractors", and algorithmic management as a form of soft control from the platforms. At the same time, platform workers resist the digital constraints limiting their autonomy. In Section 3.2.3, I summarise three research gaps within the literature on the platform economy and platform workers, which will be discussed in Chapter 5, 6 and 7.

Section 3.3 suggests that in the context of China, most delivery drivers are rural–urban migrant workers, and can only choose informal settlements as their living locations and informal employment in the labour market. The urban village (*chengzhongcun*), a unique form of informal housing in China, has dominated the existing literature on migrants' settlements in Chinese cities. In addition to geographic segregation, the hukou system further leads to social exclusion. Since most migrant workers are in informal employment in China, existing research has focused on factory workers, construction workers and vendors; but workers in the app-based service delivery industry, a new type of work in the era of the platform economy, have been neglected.

3.2 Platform workers on digital labour platforms in a global context

3.2.1 Emergence of the platform economy and platform workers

With the initial powerful information technology (IT) transformation of services that has emerged with the internet, digital platforms are digitising value-creating human activities. These digital platforms, such as Google, Facebook and Uber, are redefining and reorganising existing jobs, and flexible, mobile, outsourced, part-time, “networked” and other nonstandard work arrangements are increasing (Rainie and Wellman, 2012; Huws, 2013). An “end of employment” is predicted (Sundararajan, 2016, pp. 122), with increased fluidity, innovation and creativity in employment models. Compared with its near synonyms of “sharing/collaborative economy”, “gig economy” or “on-demand economy”,²¹ the more neutral term “platform economy” or “digital platform economy” will be used in this thesis. Accordingly, digital workers/labour or platform workers/labour as used in this thesis means people working for these platforms, but it excludes people who have indirect labour relations with the platforms, such as people who find employment via platforms (e.g. LinkedIn, Jobs.ac.uk), or employees who interact with their employer or customers via online platforms (Lepanjuuri et al., 2018).

Although there is no clear definition of the platform economy, the common feature of all digital labour platforms is that they coordinate service transactions, linking demand with its supply in an algorithmic way (Pesole et al., 2018). For instance, Montalban et al. (2019, p. 510) define the platform economy as “economic activities where tangible or intangible resources are exchanged between providers and users by the way of centralised electronic platforms”.

Existing literature has reviewed the preconditions of the platform economy (Woodcock and Graham, 2019). It is obvious that the emergence of the platform economy is propelled by exciting new technologies – algorithms, databases and cloud computing – as the foundations. As Kenney and Zysman (2016, p. 61) note, digital platforms are

²¹ Other terms may have subtle implications. “Sharing economy” originally referred to “amateur or noncommercial transactions” (Parker et al., 2016). “Gig economy” indicates “potential fragmentation of work and breakdown of labour relations” (Pesole et al., 2018). For instance, Lepanjuuri et al. (2018) define “gig economy” as “involving exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment by task basis” (Department for Business, Energy & Industrial Strategy Report).

complicated mixtures of software, hardware and networks, and each platform is an algorithm-enabled cyberplace connecting myriad activities with supply (providers) and demand (users), from consumption and leisure to services and manufacturing. The software and hardware make up the digital infrastructure, including computers, smartphones, GPS, data centres, software packages and, in particular, predictive analytics tools (Shestakofsky, 2017). The collection, storage, analysis, transmission and sharing of data are based on the application of an array of machine learning algorithms (Muller, 2020), and these algorithms move to “cloud space”, where they can be easily accessed and operated (Kushida, 2015; Kenney and Zysman, 2015).

Apart from the technology advancement, the platform economy is largely shaped by broader institutional contexts, and has risen within neoliberal circles as a response to economic, political and social restructuring (Kalleberg, 2011; Zwick, 2018). Scholars have viewed this shift as integral to economic downturns and labour market restructuring (Green, 2004; Schor, 2016). On the one hand, during a period of high unemployment, workers with limited bargaining leverage resort to platform work to fill in the gaps in their income (Friedman, 2014; Vallas, 2019); on the other hand, responding to accumulating pressures, firms aim to save costs and subsequently produce profit, by tapping into markets of temporary labour (Vallas and Schor, 2020). Therefore, the idea of flexibility is sold to both the firm seeking workers and the employee seeking work (Baber, 2019). As Vallas argues, in many cases, the growth of the platform workforce coincides with the broader problems of wage stagnation and weakening provisions for career mobility; accordingly, the state of the conventional labour market has an important effect on the supply of platform workers: “the weaker the economy, the greater the size of the platform labour supply” (2019, p. 51). Interviews with Uber drivers in Canada and US also find that economic restructuring and the loss of stable employment opportunities makes driving as a freelancer more attractive for some workers (Zwick and Spicer, 2019).

Scholars have begun to construct typologies of platform workers (Frenken and Schor, 2017; Kuhn and Maleki, 2017). According to whether the digital services are delivered

locally or remotely (Wood et al., 2019b), they are divided into two types. Local/face-to-face/place-based platform work means the worker is physically present; such work includes food delivery (e.g., Deliveroo, Uber Eats, Grubhub, Instacart, Postmates), couriership (e.g., CitySprint, AnyVan, AmazonFlex), transport (e.g., Lyft, Uber), manual labour (e.g., TaskRabbit, Hand) and medical care (e.g., Heal, Pager). Remote platform work means the work is globally dispersed, and transacted and finished online, for instance, software programming (e.g., Amazon Mechanical Turk), business services (e.g., Freelancer, Fiverr, Upwork, PeoplePerHour), clerical and data entry, sales and marketing support, writing and translation. In addition, based on skill and complexity levels, platform workers are divided into high-skilled (e.g., designer, translator) and low-skilled (e.g., driver, courier) categories; according to the kind of product being produced, they are divided into platform-mediated workers and platform-mediated content creators (e.g., Youtubers) (Kenney and Zysman, 2019b).

Apart from the variations across different platforms, a small group of scholars has paid attention to the heterogeneity within a single platform. Drawing on the different motivations and lived experiences of Uber drivers in Canada, Peticca-Harris et al. (2018) provide insights into three groups of Uber drivers – part-time drivers, full-time non-professional drivers and full-time professional drivers. Their findings refine the previous classification of full-time and part-time drivers (Dubal, 2017; Hall and Krueger, 2018; Hua and Ray, 2018). From a different perspective, Holtum et al. (2021)’s research on Uber drivers in Australia finds that migrant drivers and non-migrant drivers have different work experiences and motivations for joining the industry. Schor et al. (2020) further argue that workers’ satisfaction, autonomy and earnings vary significantly according to their economic dependency on the platforms. Similarly, Dunn (2020) argues that five categories of workers– “searchers”, “lifers”, “short-timers”, “long-rangers” and “dabblers”–exhibit important differences in characteristics, motivations, and perceptions of job quality. Based on the existing research, this study aims to explore the heterogeneity of food delivery drivers in Shanghai–place-based/face-to-face and low-skilled platform workers – by investigating

their various living and working experiences both across and within platform(s).

3.2.2 Dominant approaches to platform workers

Within sociology, there are two dominant approaches to understanding platform labour, and how the platforms influence their living conditions (Schor et al., 2020; Vallas and Schor, 2020). The first camp focuses on the ambiguous employment status of platform labour and criticises the “independent contractor” (Rogers, 2016). The platform companies, represented by Deliveroo, position themselves as technology companies or digital marketplaces in the business of connecting people, rather than as delivery companies. Using this status, the platforms tend to classify platform workers as “independent contractors” rather than “employees”. Their argument is that those working via their apps choose when and where to work, and invest in their own equipment (e.g., a car or bike) to set up in operation. Since the workers are legally redefined as independent contractors, they must cover their own operating costs, handle their own accounting and taxes, and provide their own insurance (Vallas, 2019). However, because potential costs such as benefits or unemployment insurance are avoided, a bulk of the business risk is shifted to workers (Isaac, 2014), and they are deprived of employment protections such as minimum wages and sick pay (Katta et al., 2020).

A significant amount of literature has criticised this as a misclassification, and argued this is a deliberate attempt by businesses to bypass labour standards (Burns, 2017). De Stefano (2016), for instance, has argued that platforms undermine the standard employment relationship through fragmented work and increased casualisation. An exploitative “grey area” is created where companies can avoid the costs associated with employees (Bailey, 2016; Gurran, 2017). Prassl and Risak (2016) further doubt that platform employment represents a genuinely novel form of work, deserving of its own legal status and regulatory apparatus. Considering the undermining of security and the according precarities, platform employment is not seen as something fundamentally new (Collier et al., 2017; van Doorn, 2017; Rahman and Thelen, 2019); rather, it is seen as a part of the wider category of “non-standard employment” (Kalleberg, 2000).

Because employment status is key to accessing social security, scholars have called for a clarification of the employment status of platform workers. They argue that independent contractors should be endowed with the same labour protections as their employee counterparts, or at least that they should have some basic employee entitlements, such as the right to organise and bargain collectively, if the minimum wage cannot be guaranteed (Harris and Krueger, 2015). However, it is complicated to define when they can be considered to be truly independent contractors (Kenney and Zysman, 2019b). In theory, independent contractors should be truly independent in that they can largely set the terms of their employment including pay, hours and the manner in which they complete tasks (Green, 2019). Actually, most current platforms both in China and worldwide can dictate to their “workers” how long they have to work and the way that they perform their work. A survey in Europe found that the labour market status of platform workers remains unclear, even to themselves (Pesole et al., 2018).

Recently, some scholars have also pointed out that the debate should step beyond the classification of whether platform workers are or should be considered employees (De Stefano, 2015). As Cherry (2016) stresses, the real question is not whether the workers fall into a particular doctrinal category of “employee” or “independent contractor”, as the current legal cases have structured the question. Rather, the question is whether the platform economy moves us into a sustainable and desirable future of work. Focusing on the livelihoods and dignity of low-wage workers, van Doorn et al. (2020) further argue that granting platform workers employee status itself will have only limited impact if we fail to recognise the employees involved – platform labour is predominantly migrant labour. These discussions thus indicate that debates about the future of the platform workers should not be narrowly focused on issues regarding misclassification.

Emphasising the role of digital technology, the second camp argues that algorithmic control is the crucial factor in workers’ experiences. Unlike labour control in the assembly line or in other traditional workplaces, platform workers face “algorithmic management” as soft control via techniques such as assignment algorithms, surge price

algorithms, ratings and ranking systems (Rahman, 2016; Robinson, 2017; Griesbach et al., 2019). Automatic order assignment, and attempts to influence workers' behaviour through pop-ups, reminders and prompts are classic examples of algorithmic management (van Doorn, 2017). The *Economist* (2015, p. 63) labels this process “digital Taylorism”: a modern-day version of “scientific management”, in which technology is used “to break complex jobs down into simple ones; measure everything that workers do; and link pay to performance, giving bonuses to high-achievers and sacking sluggards”.²² Similarly, Wood et al. (2019a, pp. 61-62) point out that:

This Taylorist informational control and discipline involves subjecting work tasks to detailed digital measurements and statistical analyses of individual worker performance. Underperforming workers face intense supervisory pressure and discipline on the basis of remote covert monitoring of their work.

Platform researchers have made similar arguments. Taking drivers on ride-hailing apps as examples, researchers find that every driver's act is constantly traced, monitored and appraised under “the harsh light of customer satisfaction” as the supervisory power (Aloisi, 2016, p. 662). In summary, their main argument is that algorithms now fully manage workers, thus empowering platform firms to an ever greater extent.

Ethnographic and quantitative analyses focusing on control and surveillance by an algorithmically-mediated system in Uber point to another new issue: information and power asymmetries between platforms and drivers (Codagnone et al., 2016; Heeks, 2017). Chen et al. (2015) find that, unlike eBay and Airbnb where the supply of goods is transparent, “Uber does not provide data about supply and demand, and the pricing algorithm is opaque and clearly manipulated” (p. 13). In other words, Uber's surging price does not reliably reflect the real situation of peak demand. Their findings are expanded by van Doorn and Badger (2020), who question the fairness and transparency of data and “the unequal distribution of opportunities for exploiting proprietary data

²² See: *The Economist*. 10 September, 2015. *Digital Taylorism. a Modern Version of “Scientific Management” Threatens to Dehumanise the Workplace*. Available from: <https://www.economist.com/business/2015/09/10/digital-taylorism> Accessed on: 19 September 2022

assets” (p. 3) in food delivery platforms. They argue that platforms “capture all the value of the data produced by gig workers”, and it becomes possible “to convert data into money” (Sadowski, 2020, p. 572), because data-rich platform companies can achieve competitive advantages by “creating data-driven cost efficiencies, cross-industry synergies, and new markets” (van Doorn and Badger, 2020, p. 3). In other words, the wealth of data is useful for platforms to specify work rules and accumulate capital – for instance, by stipulating the proportion of jobs that workers must accept, how much of their time they must make available, and the rating levels they are expected to achieve (Robinson, 2017). Because of the “black box” in an algorithmically-mediated system, it is difficult to know whether platforms are accountable for the data outcome; the effect is that the labour process is more legible to employers than to employees (Calo and Rosenblat, 2017; Fourcade and Healy, 2017), representing a form of “platform authoritarianism” (Ajunwa, 2018) and dynamic exploitation (Shapiro, 2020).

In addition, there is a growing literature on workers’ resistance to the platforms’ mastery of algorithms (Shapiro, 2018; Ivanova et al., 2018; Lehdonvirta, 2018; Barratt et al., 2020). In 2019, contributors to a special issue of *Partecipazione e Conflitto* discussed the activation and self-representation of platform workers.²³ Empirical studies have begun to find that workers can resort to collective actions, acting back on the technologies they confront (Irani and Silberman, 2013; Gupta et al., 2014; Lehdonvirta, 2016). For instance, a grassroots movement focusing on claiming “technological sovereignty” and new modes of digital development in urban life has been organised in Barcelona (Lynch, 2020); in October 2016, cycle couriers working for German food delivery company Foodora protested for better working conditions in northern Italy (Tassinari and Maccarrone, 2017). However, a major barrier to collective organisation among platform workers is that they are hyper-fragmented, individualised and anonymised (Wood et al., 2018), especially the case with remote platform workers.

²³ *Partecipazione e Conflitto* 12: 3 (2019), special issue on “Working as a platform: Labour needs, activation and representativeness in the era of digital transformation” (papers in English). See: <http://sibaese.unisalento.it/index.php/paco/issue/view/1685> Accessed on: 19 September 2022

Compared with challenging or confronting employers openly such as through strikes, demonstrations and protests, platform workers have developed various informal forms of resistance. One important way is through internet-based communities such as online forums and social media. Lee et al. (2015), who interviewed drivers from both Uber and Lyft, find that in online forums drivers support and share information and social tactics with each other to resist or game the rigid restrictions imposed by algorithm-assigned work. Focusing on remote online workers in six Asian and African countries, Wood et al. (2018) find that freelancers use online communication networks to obtain labour market opportunities and information, which can “reduce social isolation, maintain professional norms, provide support and advice, and create feelings of community” (p. 103). The importance of internet-based communities also applies to platform workers in China. For instance, in Beijing, food delivery drivers organised themselves through a collective organisation called Driver Alliance and several influential WeChat groups, founded by a driver named Xiong Yan. Although the Driver Alliance group was closed by the authorities, similar groups exist in China’s other big cities. They provide mutual cooperation and collaboration for drivers, so that they can help each other with house renting and repair of their battery-powered motorbikes.²⁴ Also, as the Driver Alliance in Beijing shows, they can provide online space to mobilise protests.

In addition, workers have adopted a variety of sophisticated informal practices and tools to address the digital constraints limiting their autonomy. Drawing from Scott (1990)’s notion of hidden transcripts, Anwar and Graham (2020) demonstrate remote workers’ resistance in Africa. Facing various constraints on one of the world’s biggest gig economy platforms, they can exercise agency to earn and sustain their livelihoods in the gig economy through sharing computers and accounts, buying reviews on platforms, and leaving negative feedback and low ratings if clients harass them. Re-examining Petriglieri et al. (2019)’s personal holding environment framework within the context

²⁴ See report about Xiong’s story and his accounts on these WeChat groups: <http://www.sixthtone.com/news/1006914/can-delivery-drivers-break-their-silence>. *Can Delivery Drivers Break Their Silence?* Accessed on: 19 September 2022

of online freelancers from the Upwork platform, Sutherland et al. (2020) show that remote workers develop platform literacy, which is the know-how to work with algorithms and procedures by adopting creative strategies (e.g., building reputation and relationship with clients). Chen (2018)'s study of Didi (the Chinese equivalent of Uber) drivers in China finds that 40% of them use digital strategies such as bots or owning multiple phones to subvert the algorithm. In summary, research on ride-hail drivers and remote workers shows that they are not passive receivers of algorithm controls; on the contrary, they have multiple ways of interacting with the algorithms and carve out zones of autonomy.

Returning to the question of how the platforms affect labour conditions, existing studies have not provided a universal answer (Schor, 2014). Some observers look favourably on the opportunities that platforms can afford workers, and argue that the platform economy provides employment opportunities to workers who are excluded from the formal labour market. As discussed in Section 2.2.1, most platform workers are introduced to the market in the context of high unemployment and the slow recovery of the mainstream job market. As Schor (2014, p. 9) highlights, "Working conditions and protections are already being eroded, real wages are declining" during an economic depression. Fabo et al. (2017) suggest that platform-based work arrangements "could benefit particularly discouraged and disadvantaged workers by offering them the possibility to work remotely" (p. 165). Zwick and Spicer (2019)'s study of Uber drivers finds that Uber may cause precarious employment, but it is also a tool for workers to survive economic precarity by filling their income gaps.

Critics, on the other hand, regard the platform economy as the architect of an increasingly precarious labour force (Cherry, 2016; Zawacki, 2017). As discussed before, the misclassification of labour status and algorithmic controls have been widely seen as playing a central role in degrading work conditions. Terms such as "24–7 electronic sweatshops" and "assembly line in the head" (Terranova, 2000) are used to describe platform workers' experiences – they struggle to make ends meet, face risks to their health and safety, and resent intrusive surveillance of their work performance

(Funnell, 2016). Based on a multi-year investigation with platform workers in sub-Saharan Africa and Southeast Asia, scholars from the Oxford Internet Institute (OII) have shown that the idea of freedom and flexibility in platform work is embedded in neoliberal thinking, which masks the quite common features of long, unsociable and irregular working hours, low income, and high stress (Anwar and Graham, 2021). Although there are important and tangible benefits to having a range of workers, there is also a range of risks and costs that impact on the livelihoods of platform workers, such as social isolation, lack of work–life balance, discrimination, predatory intermediaries, overwork, sleep deprivation and exhaustion (Graham et al., 2017).

To combat these dark sides of the platform economy, researchers further argue that a wider range of regulatory responses is needed to remedy the nearly completely laissez-faire state of platforms (Fabo et al., 2017). In 2017, the second and third issues of *Transfer: European Review of Labour and Research* discussed extending a regulatory framework to wider groups of workers.²⁵ Although the European Commission's Communication on the Collaborative Economy (2016)²⁶ and European Union competition rules play a crucial role in protecting remote platform workers across borders, local markets should be considered at the same time. Donini et al. (2017), writing about Italy, France, and Spain, argue that labour legislation should take into account different types of platform workers. Setting out different scenarios based on the existing literature, Pulkka (2017) discusses the role of an unconditional basic income in improving workers' bargaining power. Apart from policy and institutional protections, researchers have also paid attention to other organisations such as social partners (Ilsoe, 2017), trade unions (Soderqvist, 2017; Tassinari and Maccarrone, 2017), and platform cooperativism (Scholz, 2014).²⁷

²⁵ See: <https://journals.sagepub.com/toc/trsa/23/2>; <https://journals.sagepub.com/toc/trsa/23/3>. Accessed on: 19 September 2022

²⁶ See: <https://www.eumonitor.eu/9353000/1/i9vvik7m1c3gyxp/vkbkcwzb2sxn> *European agenda for the collaborative economy* Accessed on: 19 September 2022

²⁷ See: <http://platformcoop.net/>, a movement growing around the world. Scholz, T. 2014, December 5. *Platform cooperativism vs. the sharing economy*. Retrieved from: <https://platformjpcoop.wordpress.com/2017/08/01/scholz-trebor-platform-cooperativism-vs-the-sharing-economy-medium-com-december-5-2014/> Accessed on: 19 September 2022

In Sections 3.2.1 and 3.2.2, I have briefly reviewed the definition, characteristics, preconditions and typologies of the platform economy, and two dominant approaches (employment status and the role of algorithmic control) to understanding the situation of platform workers. Before moving on to a consideration of Shanghai delivery drivers and their status as migrant workers in China, in the following section I review the research gaps in work on the platform economy and platform workers.

3.2.3 Research gaps: the lopsided nature of current research

The rapid development and growth of the platform economy has provoked insightful scholarly discussions; however, some questions have yet to receive sufficient attention in the literature. As we have seen, a growing body of literature has analysed the preconditions, definition and patterns of the platform economy, and the employment status, experiences and labour protection of platform workers. Notably, the Berkeley Roundtable on the International Economy (BRIE) is undertaking an ongoing analysis of the implications of the platform economy on economic growth, market competition, job creation, and the relationships between industry, society and government.²⁸ Researchers from the Fairwork project, coordinated by the OII and the Berlin Social Science Centre, evaluate the working conditions of platform workers in twenty-five countries, including how these workers have been affected by COVID-19.²⁹ In addition, a small body of qualitative case studies has shed light on the labour process, labour control, the digitalisation of labour and the labour counter-movement. For instance, Veen et al. (2020)'s study of Deliveroo and UberEATS platforms shows multifaceted labour process controls on workers, which involve more than algorithmic management, and the workers' responses to the new forms of work organisation; Tassinari and Maccarrone (2020) discuss two cases of protest and mobilisation among gig economy couriers in Italy and the UK. However, much still remains unknown within the existing research terrain. For instance, for the labour counter-movement, what are the conditions and limits of collective action? What is the relationship between protests and informal practices? These questions are only starting to be explored (Tassinari and Maccarrone,

²⁸ See: <https://brie.berkeley.edu/>

²⁹ See: <https://fair.work/en/fw/homepage/>.

2020). Reflecting the instability of the platform economy, Vallas and Schor (2020) point out that four themes in sociological research need particular attention: the relation between the conventional and platform economies, the process of algorithmic design, the prospects for collective action, and alternative approaches to improving labour conditions.

As yet, food delivery drivers in China, as one typical type of platform worker, are understudied in the current literature. Only a handful of articles have discussed the platform economy in China and the livelihoods of platform workers there. Kloet et al. (2019) propose three different vectors – infrastructure, governance and practices – to analyse the platformisation of Chinese society. Taking ride-hailing and food-delivery services as examples, Chen (2020, p. 154) contextualises the “framework and rationale behind the governmental promotion of the platform economy in the state’s long-term efforts to be part of the global digital capitalism”. Recent interventions in the livelihoods of platform workers in China especially focus on ride-hailing and food-delivery services as two of the fastest-growing sectors in China’s platform economy; these include Qi and Li (2020)’s examination of DiDi drivers in Nanjing, research by Sun (2019), Sun et al. (2021) and Sun and Zhao (2022) on food delivery drivers in Beijing as well as Huang (2022)’s research on food delivery drivers in Beijing. Only a few researchers have interested themselves in the activism and collective action from DiDi drivers and food delivery drivers (Chen, 2018; Liu and Friedman, 2021). A more nuanced and micro-narrative observation can be found in Lei (2021)’s research in Chongqing. Lei analyses the technological, legal and organisational dimensions of labour control and management, the variable relationships between the three dimensions and labour contention in China’s food-delivery platform economy. In terms of Chinese-language literature on gig platform workers in China, two articles published in the leading journal *Sociological Studies* (Shehuixue yanjiu) focus on food delivery drivers in Beijing and an unnamed provincial city in the middle of China respectively (Chen, 2020; Li and Jiang, 2020). Although the above literature provides important references for this research, studies exploring the livelihoods of platform workers in

China are few in number, and there has yet to be a systematic investigation of the platform economy in China.

The literature examined above has laid solid theoretical foundations. However, this research proposes that studies of platform work have been lopsided in at least three ways. First, in terms of research location, most research explicitly focuses on high-income countries, principally the UK, the US and France (Wood et al., 2018) with notable exceptions that have concerned themselves with digital labourers from low and middle-income countries – for example, D’Cruz and Noronha (2016)’s work in India, Wood et al. (2019a, 2019b)’s research on remote platform workers in Southeast Asia and Sub-Saharan Africa and Anwar and Graham (2020; 2021)’s study of remote gig work in African countries. Future research should expand the geographic scope of the platform workers it focuses on. Second, in terms of research subject, too much attention has been paid to Uber drivers and low-skilled remote workers. As Schor et al. (2020) argue, there is an “Uber-centricity” in previous research: “much of the interview and ethnographic data of in-person platform labour comes from ride-hailing, and Uber in particular” (p. 2). In terms of remote digital work, existing research has mainly focused on low-skilled work, while a subset of platform workers – other types of local/face-to-face workers and high-skilled online workers – has little known about them (Sutherland et al., 2020). To fill these two gaps, Chapters 6 and 7 will focus on food delivery drivers in China, as low-skilled and in-person platform workers in a middle-income country.

Third, in terms of the platforms’ management and operation, there is an abundance of research on the role of technology (in particular algorithmic control), yet much less on the value creation strategies and internal organisation of these platforms. The bulk of the literature has discussed the significant impacts of new technologies and warned against “technological determinism” (Kenney and Zysman, 2016) while neglecting how the digital market is internally organised (Oncini et al., 2020) and has financially evolved. A small group of researchers has tried to fill this gap. For instance, building on the concept of the regime of accumulation, Montalban et al. (2019) discuss the fundraising strategies of platforms; Kenney and Zysman (2019a) examine the dynamic

financial environment for unicorn firms; Oncini et al. (2020) demonstrate the organisation of food e-commerce in the Italian context. Nevertheless, a systematic depiction of the networks and ecosystems of the platforms is still largely missing. Therefore, research on the platform economy is necessary to “bring together social, economic, and technological research in order to provide a more holistic understanding” because it is “a sphere of technologies, workers, consumers, altruistic participants, governors, and developers” (Sutherland and Jarrahi, 2018, p. 338). In this research, Chapter 5 aims to contribute to the ongoing discussion on the organisation and financialisation of the platform economy by discussing the relationships, operation and management of the two dominant food-ordering platforms in China, Meituan and Eleme.

3.3 Rural–urban migrant workers in China

In addition to being platform workers, Shanghai delivery drivers are also migrant workers. The term, “rural–urban migrant workers (*nongmingong*)”, has a specific meaning in China and refers to all industrial and service workers with rural hukou. These labourers take up jobs in cities; however, for the most part they are denied urban entitlements and they are not considered urban workers (Chan, 2010a), despite the government’s ongoing attempts to change the situation. Although migrant workers are a heterogeneous group, most of them are often seen as poor and uneducated, “selling their cheap labour only by taking lowly-paid jobs that are dirty, difficult, dangerous”, the so-called 3-D jobs (Ma and Xiang, 1998, p. 547). While an economic miracle has happened in China, thanks significantly to the low labour cost of migrants, a migrant labour regime also emerged, “characterized by low wages, manual work, poor work conditions, and other features that appeal to industrial and services employers and enable the penetration of global capitalist modes of production” (Fan, 2004, p. 284). Compared to international migrants, China’s internal rural migrants are greatly influenced by institutional constraints and cultural norms, specifically the hukou system and their hometown ties (Zhao and Jin, 2020). Existing literature on rural–urban migrant workers in China has tended to concentrate on three main themes: living

conditions, social integration and working conditions. The following three subsections will elaborate on each area, and these three themes will also be discussed in Chapter 6.

3.3.1 Living conditions: informal settlements and *chengzhongcun*

Most research on migrant workers' living conditions concerns their housing conditions and analyses their unsatisfactory living environments in big cities, although there is a difference between various regions (Niu and Zhao, 2018). Generally speaking, many migrant workers are forced to choose informal settlements, “illegal housing developments or land occupations that are without formal consent of landowners or approval by public authorities in land use planning or building standards” (Liu and Wong, 2018, p. 161). For instance, migrants employed in construction and in refurbishment and internal decoration work usually find themselves living on construction sites; production-line workers usually live in multistorey dormitories. In Huang and Yi (2015)'s study in Beijing, young and single male migrant workers rent basements that then become an invisible migrant enclave. In predominantly rental housing, tenancy informality in terms of the absence of formal written contracts is also widespread (Wu, 2016).

The emergence and growth of urban villages or *chengzhongcun*, a unique type of informal settlement in China, has been extensively documented in the literature.³⁰ The widespread phenomenon of the urban village, found especially in peri-urban areas of large metropolises, is deeply rooted in the dichotomy of the rural–urban land system and excessive urban sprawl (Wu et al., 2013). According to Chinese land administration law, urban land is owned by the state, while rural land is collectively owned by villagers. This determines that land conversion from agriculture (collective ownership) to urban land (state ownership) should be planned and involve the land being requisitioned by the government. However, from the beginning of the 1980s, with rapid industrialisation and urbanisation, planned urban land gradually “besieges rural villages in the peri-

³⁰ *Chengzhongcun* literally means “village in the city,” and can also be translated as “village amid the city” or “village encircled by the city”. However, villages-in-the-city are almost exclusively migrant enclaves (Chung, 2010); in this thesis, the usage of the term “urban village” differs from the planning concept influenced by Jane Jacobs (1961), which describes urban conditions in Western cities.

urban areas without integrating them into formal urban development” (Wong et al., p. 597). During this process, peri-urban peasants have taken advantage of the anomaly by constructing informal houses to lease out to low-income migrant workers (Liu and Wong, 2018; Kan, 2019). Because of the ambiguous property rights of villagers, they compete to attract rural migrants working in nearby enterprises by offering cheap housing and services (Zhao and Webster, 2011). Urban villages are thus characterised by high density, low quality and a lack of public goods (Liu et al., 2010).

Scholars have studied these migrant enclaves in big cities. These include Zhejiang village in Beijing, formed by migrants from Wenzhou in Zhejiang Province who run family-oriented garment production and distribution operations (Xiang, 2005; Zhang, 2014); Beijing’s Xinjiang village formed by migrants from the Xinjiang-Uygur autonomous region (Baranovitch, 2003); and urban villages in the Pearl River Delta region, especially in Shenzhen (Hao et al., 2011; Zhang, 2011; Wang, 2013; Liu et al., 2018) and Guangzhou (Zhou, 2014; Li et al., 2015).

The existing literature has also concerned itself with the driving forces and influences on urban villages of migrant workers. Wu points out that this informal housing is related to unique institutional factors, “particularly the circulating nature of migration, the existing household registration system, and the transitioning state of the urban housing market” (2002, p. 90). When they migrate to big cities, migrant workers tend to settle in a particular urban village according to their bonds with fellow migrants and *laoxiang* or *tongxiang* (hometown peers). Obviously, this sort of unplanned settlement reinforces rural–urban inequalities, and marginalises migrants in cities spatially, economically, socially and politically. Buckingham and Chan (2018) refer to this as “one city, two systems”. On the other hand, urban villages, as an important and transitional stage of urbanisation, can provide affordable housing and jobs for low-income populations during rapid urbanisation and offer a quick way for rural people to adapt to urban life (Wang et al., 2009, 2010; Liu et al., 2010).

The existing literature on migrant settlements in Chinese cities is dominated by studies

of conventional informal housing in urban villages, while new types of informal housing have rarely been studied (Zhao, 2017). Especially after 2017, when a lethal fire killed nine people in Beijing Daxing and drew worldwide attention, local governments launched a citywide campaign of redevelopment and demolition of illegal buildings, including *chengzhongcun*.³¹ Migrant workers were forced out into other impoverished areas or back to their rural hometowns. Looming demolition, there and elsewhere, has impacted on the lived experiences of migrant workers, including their social mobility and educational and occupational trajectories (Li and Xiong, 2018); however, these changes in their living conditions are underexplored. This study aims to fill this gap by investigating migrant workers' settlement patterns and living conditions in the context of the widespread demolition of urban villages, especially in and around Shanghai. The housing and living conditions of Shanghai delivery drivers will be examined in Section 6.4.1.

3.3.2 Social integration: hukou segregation

The term “integration”, although overused and fuzzy, is used here in relation to migrants’ “participation in different life domains of a receiving society” (Grzymala-Kazłowska, 2016, p. 1126), and the extent to which migrants are able to “achieve their needs and fulfil their interests” in the new city (Anisef and Lanphier, 2003, p. 5). The definition of migrants’ integration is often complex and multidimensional. Bosswick and Heckmann’s (2006) definition broadly covers four areas: institutional rights and social status in the host society, cultural adaptation, social networks in the host society, and sense of identity. In the context of China, scholars mainly conceptualise integration as having five dimensions: psychological, identification, cultural, social and economic. Wang and Fan (2012) examine three forms of integration of migrant workers in Wuhan, China: economic integration (disparity between migrants’ income and urban employees’

³¹ See news reports from *People’s Daily Online* and *Global Times*: <http://world.people.com.cn/n1/2017/1127/c1002-29668419.html>; https://www.sohu.com/a/206737527_419351. 北京大兴 11·18 火灾 “三合一” 现场首次曝光 [Beijing Daxing 11.18 fire “three-in-one” scene was exposed for the first time]; 大兴火灾：临时推迟清退让租户找住处，结果悲剧发生 [Daxing Fire: Temporary postponement of clearance to allow tenants to find accommodation, but tragedy occurred]. Accessed on: 19 September 2022

income), social/cultural adaptation (local dialect, relationships with local people), and identity integration (identification as urban residents). Their conclusion is that the degree of integration of China's migrant workers is relatively low, and human capital is important for migrants' economic and identity integration. Similarly, drawing on data from a questionnaire survey of new-generation migrants in Shanghai in 2012, Chen and Wang (2017) find that education, income and interaction with local urban residents are crucial for their social integration. Using 2013 data on migrant workers' in eight cities in China, Yang (2015) finds that social integration lags behind cultural, psychological and identity integration. Based on three types of migrant enclave in Shenzhen, Yang et al. (2020) find that hometown-based, industry-dependent and mixed enclaves have different characteristics in terms of social relations and community and economic integration.

Existing literature has pointed out that migrant workers' social exclusion and segregation comes as a result of the hukou (household registration) system. Under this system, each citizen is required to register in only one place of official or permanent residence, such as a city, town or village. Those registering in villages form the agricultural population, and they are expected to be largely self-sufficient, based on their agricultural work. Citizens with urban hukou have access to state or employer-subsidised benefits, including job opportunities, housing security, urban-based social assistance, and public school services (Chan, 2010b). Since its implementation in the late 1950s as a core institution of the planned economy, the hukou system has been interwoven with the distribution of state-provided goods, welfare and entitlements. Therefore, rural migrant workers, living as second-class citizens in urban areas, are not eligible for most formal jobs, housing, public education and healthcare in cities, although they have greatly contributed to China's economic development (Li et al., 2015). Most migrant workers tend to consider working in urban areas as a temporary way to gain a livelihood, rather than a permanent settlement. The overwhelming majority express their intention to return to their rural hometowns, where they have familiar social networks and usable farmland when they are old, but they also travel

back to their hometowns for the Spring Festival (Chan, 2010a; Li, 2014). In other words, most migrant workers travel frequently between their rural hometowns and big cities. This circular geographic movement further undermines their integration into urban society, and reinforces their “outsider” identity in urban China (Wang and Fan, 2012; Tao et al., 2015; Du et al., 2018).

Responding to this segmentation, barriers to applying for hukou conversion have been gradually eased; major cities such as Beijing, Shanghai, Guangzhou, Shenzhen and Dongguan have reformed the hukou system.³² For instance, from 1994 to 2000, after purchasing a commodity house or investing in the city, migrants in Shanghai, Guangzhou and Shenzhen could apply for “blueprint” (*lanyin*) hukou, a quasi-urban hukou, and then convert to local urban hukou (Wong and Huen, 1998). This policy was abolished soon after its introduction because it disrupted the real estate market. Since the 2000s, one of the latest changes in these big cities is the “points system” (*jifen zhidu*), which allows qualified migrants to become urban residents or at least share in some of the benefits of urban citizenship.³³ However, the threshold for obtaining urban hukou is still extremely high for most migrants. Currently, in Shanghai, recent graduates from top 100 universities in the world can apply for a Shanghai hukou after paying six months of Shanghai social insurance and tax. Other than this, migrants can only apply for a Shanghai hukou if they satisfy the following conditions at the same time: (a) having a Shanghai residence card for over seven years; (b) paying Shanghai social insurance and tax for over seven years; (c) having at least a mid-level professional title or technical certificate issued by the state, which must also be commensurate with his/her position; and (d) being without a police record.³⁴ The specifics and extent of the reforms vary greatly from one place to another, but in most places the efficacy is questionable. Based on Dongguan’s case, Guo and Liang (2017) argue that this system

³² See Zhou et al. (2022)’s summary of the four stages of gradual reform to hukou.

³³ Earlier, migrants could also convert their hukou status from agricultural to non-agricultural, and change their place of hukou registration (from a village to a town or city). In the 1970s and 1980s, the main channels for hukou status change were through becoming a permanent employee in a state-owned enterprise (*zhaogong*), being displaced because of land expropriation (*zhengdi*), being promoted to an administrative position (*zhaogan*) and joining the army (*canjun*) (Chan and Buckingham, 2008, pp. 590–591).

³⁴ See Zhang and Wang (2010), detailing the rating system to apply for a Shanghai hukou, and the qualifications for the Shanghai hukou and residence card.

brings “greater inclusion but differentiated exclusion”. Chan and O’Brien (2019) characterise this strategy as “deflecting migrant workers”, neither meeting them nor denying them outright in healthcare and education. They point out that this practice may expose new axes of inequality in the long term. In summary, these hukou reform initiatives only provide limited and competitive channels for talented and wealthy migrants, permitting only the best educated to attain urban registration status (Wu and Treiman, 2007), and allowing only very successful migrants to obtain urban hukou by purchasing apartments in the city (Zhang and Wang, 2010). Therefore, the reforms do little to break down China’s significant rural–urban divide at the general level (Chan and Buckingham, 2008; Li et al., 2010; Chan, 2019).

3.3.3 Working conditions: informal employment

With limited education, qualifications and vocational skills, the majority of rural migrant workers are engaged in informal employment in China.³⁵ Although the definition of “informal work” in the context of China is slightly different from the International Labour Organisation (ILO)’s definition, a key defining characteristic of informal employment is the lack of policy protection (Chen, 2007). Whether they are temporary workers, part-time workers, outsourced workers in the formal sector, informal workers in household-based enterprises or self-employed, they are usually not protected by labour legislation or social security schemes. As Tilly et al. (2013, p. 77) point out, rural migrant workers in China, one of the major populations that make up the informal economy’s worker population, “have suffered from exploitative conditions of informal employment: low and unpaid wages, excessive overtime, no contracts, poor working conditions, exclusion from official trade union structures and lack of labour rights and social security protection.”

According to China’s National Bureau of Statistics in 2016, 80.2% of migrant workers do not have long-term contracts (of one year and more) with their employers. According to the Ministry of Human Resources and Social Security of China, only 17% of migrant workers participated in the unemployment scheme and 22% participated in the

³⁵ According to Zhou (2013), the percentage of rural migrant workers in informal employment was 84.3% in 2005.

healthcare scheme in urban areas in 2017.³⁶

Researchers have investigated the differing working conditions of informally employed migrant workers' working conditions under informal employment; because of their insecure jobs and unstable incomes that are not regulated or protected by existing legal or regulatory frameworks, the concept of precarity can also be used to understand their uncertain working conditions and their responses to it.³⁷ Before the mid-2000s, migrant workers flocked to factories in industrial cities manufacturing for export, and most of them were young, single and living temporarily in cities (Unger and Siu, 2019). Focusing on the Pearl River Delta, research by Pun (2012) revealed factory women workers' low wages, long working hours, high production intensity and work pressure. In Foxconn's factories in mainland China, migrant workers' working and living conditions are blurred under the dormitory labour regime (Pun and Chan, 2012), which has the potential to nurture working class labour agency (Pun and Smith, 2007).

With the expanding labour shortages and the partial relaxation of restrictions on migration, older, married men have tended to settle in cities near their hometowns with their families, and take other informal jobs, such as in the construction industry, home renovation industry (Guang, 2005), taxi industry, domestic service industry and sanitation work (Zhang and Friedman, 2019). These workers are not as powerless as they were in previous decades, and they strive for higher pay and better working conditions. For instance, for migrant construction workers, Pun and Lu (2010) argue that a culture of violence (e.g., individual and collective fighting, damaging buildings, bodily abuse and suicidal behaviour) is common. Drawing on an in-depth ethnographic study of informal construction jobs, Swider (2015a) provides a diverse picture: with different degrees of precarity from employers and the state, dramatic protest action plays different roles in three employment configurations – mediated, embedded and

³⁶ Data source: <https://www.piie.com/research/piie-charts/many-migrant-workers-are-excluded-chinas-social-programs>. *Many Migrant Workers Are Excluded from China's Social Programs*. Accessed on: 19 September 2022

³⁷ It should be noted that not all informal employment is precarious; among those that would not be considered precarious are high-value-adding freelancers working in information technologies, creative industries and finance. See: Zhou (2013); Swider (2017).

individualised.

In addition to factory workers and construction workers employed as contract or outsourced workers, other occupations with a high concentration of migrants are those in the self-employed sector, especially vendors in the urban informal economy, both fixed and mobile street and market vendors.³⁸ Research findings on vendors' working conditions in China show similar patterns to those in cities beyond the Global North. In addition to having limited access to social entitlements and economic rights, they have to face urban clean-up campaigns and crackdown projects from city management officers (*chengguan*) (Hanser, 2016). Previous studies have shown that vendors resort to various tactics to minimise risks in response to the precarity that they confront. Swider (2015b)'s empirical research in Beijing, Guangzhou and Wuhan indicates that migrant vendors make a living both through suffering under the "corrupt" urban management officers (*chengguan*) and protesting. Huang's (2014) investigation of Guangzhou's street vendors reveals they have developed a flexible, individualised and small-scale activism to maintain their livelihoods, including everyday nonviolence (e.g., escaping and bribing the powerful), and episodic violence (e.g., confronting the powerful).

Compared to factories, construction sites and the traditional service industry (e.g., domestic service, streetside vending), which attracted migrant workers during the urbanisation and industrialisation process, a more popular informal job choice for low-paid migrant workers today is in app-based transport services, for example as couriers and drivers for ride-hailing companies. Because, in part, of the low barriers to entry, flexible working time and relatively high income, in 2018, for the first time, more migrant workers took up jobs in services than in manufacturing.³⁹ After the outbreak of COVID-19 at the beginning of 2020, more and more migrant workers found gig

³⁸ Since street vendors are not regulated or licensed, there are no reliable statistics or surveys on the total number of vendors in China (Swider, 2015b).

³⁹ Data source: April 4, 2020. *Economist*. The gig economy: visible and vocal. pp. 48–49. <https://www.economist.com/china/2020/04/03/delivery-apps-have-transformed-urban-life-in-china>. Accessed on: 19 September 2022

work with platforms and apps because so many had lost jobs as a result of the economic crisis caused by the pandemic.

In summary, the previous literature on informal workers in China has paid more attention to self-employed workers, construction workers and factory workers, and discussed their labour agency. However, the existing research on the app-based service delivery industry is inadequate. As discussed in Section 3.2, unemployed and underemployed workers find jobs through platforms, and in China, surplus workers deliver services in cities through various platforms and apps, such as becoming Didi drivers, couriers, on-call cleaners and babysitters. However, as Swider points out, within Chinese labour and labour politics studies, “informal precarious workers have remained largely invisible and are absent in most analyses” (2017, p. 19). “Given ongoing changes in the world of work that affect both developing and industrialized countries, it is time to bring the notions of informal and precarious work together” (Siegmann and Schiphorst, 2016, p. 112). In 2020, a special issue of the journal *Review of Radical Political Economics* explored informal and precarious work in Poland, India and the US; six case studies from the themed issue of the *International Journal of Comparative Sociology* in 2020 are explored, discussing informal workers’ different degrees of precarity and worker activism in various contexts.⁴⁰ My research, focusing on delivery drivers in Shanghai, aims to contribute to the ongoing debate on informal and precarious work by discussing the three dimensions of precarity as discussed in this section: living conditions in the context of the demolition of urban villages, social integration under hukou reform, and the working conditions of informal workers in the app-based service delivery industry. The research findings in Chapter 6 will benefit future research on migrant workers and informal workers both in China and in other similar contexts.

3.4 Conclusion

In this chapter, I reviewed the general literature on platform workers and found that it focuses primarily on high-income countries, Uber drivers, remote platform workers and

⁴⁰ See the issue: <https://journals.sagepub.com/toc/rtpa/52/3>; <https://journals.sagepub.com/toc/cosa/61/2-3>.

the role of technology, while other types of place-based platform workers in low- and middle-income countries, and the ecosystem of the platforms in which workers are embedded, are under analysed. My review of the literature indicated that, as platform workers, they share common characteristics with other platform workers in across the globe. As rural-to-urban migrant workers in China, they have limited access to formal job opportunities, formal housing, urban social insurance and medical care. Current research on migrant workers in China is devoted to the exploration of three major themes: living conditions, social integration and working conditions. However, the new dynamics within these themes that result from the demolition of *chengzhongcun*, the reform of the hukou system and the popularity of informal employment remain marginal to the overall field in Chinese studies. This study deals with the lacunae in the current literature on platform workers both globally and among migrant workers in China by examining the livelihoods and livelihood strategies of Shanghai delivery drivers. Here, their identity as rural–urban migrant workers is emphasised because, as Lee points out, “the content and meanings of informality and precarity cannot be fixed as some objective universally applicable indicators but are always relational and relative, culture- and context-dependent” (2017, p. 156). In other words, delivery drivers, whose work is unstable and who are disadvantaged in China, might be considered a part of the secure, formal labour market in other parts of the world. Specifically, focusing on migrant delivery drivers in Shanghai, this study aims critically to examine their engagement in the platform economy (Chapter 5), their lived everyday experiences as both platform workers and migrant workers (Chapter 6) and their responses to precarity (Chapter 7). The research findings in Chapters 5, 6 and 7 will empirically benefit future research on the platform economy, place-based platform workers beyond the Global North, and migrant and informal workers in China and more globally.

Moreover, the existing literature on both platform workers globally and migrant workers in China has shown that, on one hand, they face different kinds of precarity (e.g., algorithmic controls, the hukou system in China), while on the other hand, they

know how to protect themselves by mobilising various resources (e.g., collective action in the Global North, village and kin-based relational networks in China). Migrant workers in informal employment in China have been assumed to lack the organisational power to mitigate the precarity of their lives. However, empirical research on factory workers, vendors and app-based food delivery drivers finds that they have at times resorted to collective actions to obtain control over the labour process (Swider, 2015b; Pun, 2020; Liu and Freidman, 2021). In this sense, there are some similarities here between migrant workers in China and industrial workers in nineteenth-century England: while an increasing number of migrant workers flood into the informal economy in cities and leave their rural land in search of social security and subsistence, they are on the one hand embedded in a self-regulating market, while on the other hand resisting the precarity that comes from commodification in the workplace and social segregation in everyday life. Focusing on migrant delivery drivers in Shanghai and drawing on Polanyi's thought as discussed in Chapter 2, this study contributes a Chinese perspective and experience to the general scholarship on Polanyi's double movement, and thus broadens and enriches this body of literature with China-specific empirical analysis. After explaining the mechanism of the online food delivery industry in Chapter 5, two questions will be examined in Chapter 6 and 7. Firstly, what kind of precarious conditions do migrant delivery drivers face in the context of China? Secondly, why and how do they resist, and to what extent does their organised or everyday resistance mitigate some of the risks inherent in precarity? Before applying the key theory and concepts introduced in Chapter 2 to the empirical chapters (Chapters 5, 6, and 7), issues concerning the research methods I used for this research will be explained in Chapter 4.

Chapter 4: Methodology

4.1 Introduction

This chapter provides an overview of the methodological approach used in this research. As introduced in Chapter 1, although researchers are interested in platform workers in China, a full survey investigating their livelihoods is still rare, especially in an English-language scholarly format. Focusing on food delivery drivers using multiple platforms, this research explores their living and working conditions, and their livelihood strategies in Shanghai. According to Somekh and Lewin (2005), a research methodology is both the process of gathering information as well as the principles, theories and values that support the research approach. The methods utilised in this research are fundamentally qualitative methods that aid analysis at micro scales. The use of such qualitative methods in this project encourages participants to be active and part of the research process. The methods also enable the participants to share their stories individually or as a group.

During two periods of fieldwork in Shanghai, I conducted 210 survey questionnaires (69 online and 141 face to face), 50 in-depth individual interviews with different stakeholders in the online food delivery industry, and nine group discussions (five face to face and four online). This was supplemented by collecting secondary data from government policy documents, the census, media reports and other non-academic reports, and observing and reflecting on delivery drivers' daily work and lives. Pilot surveys in the first two weeks helped me improve the questionnaire and interview questions, and gain a general understanding of delivery drivers' working conditions.

This chapter is structured as follows. After reviewing the research questions and fieldwork task in Section 4.2, the research area and initial access to it will be introduced in Section 4.3. This is followed by a discussion of the data collection and analysis, highlighting the secondary data sources, survey questionnaire, in-depth interviews, group discussions and observation. Ethics and researcher positionality will be explained in Section 4.5. Finally, I present a summary of the chapter.

4.2 Research questions and fieldwork

In order to explore my research questions (see Chapter 1.3), I focused on Shanghai food delivery drivers to conduct this research. Drivers from various platforms were included, but most of them worked for the two biggest platforms, Eleme and Meituan (this point will be explained in Chapter 5). For each research question, I designed a specific fieldwork task and data collection methods (as listed in Table 4.1). A detailed description of the actual methods used in the data collection process is presented in Section 4.4.

Research questions	Fieldwork task	Data collection methods
- How do the online food delivery platforms emerge, develop, operate and thrive in Shanghai? - How do these platforms manage migrant food delivery drivers?	- Investigate the functions and relationships between different stakeholders: governments, platforms, restaurants, delivery drivers and customers. - Investigate the delivery drivers' roles and participation in the online food delivery industry - Investigate how delivery drivers are managed in the online food delivery industry.	Secondary data (e.g., newspaper articles, government policy documents) Survey questionnaire Individual interviews Group discussions
- As platform workers, what kind of work conditions do food delivery drivers experience? - As rural–urban migrant workers in Shanghai, what kind of precarious conditions do they face beyond	- Examine the precarity that delivery drivers are facing during the labour process, especially new types of insecurity as digital labour - Examine and analyse the extent to which delivery drivers are exploited and commoditised. - Examine other vulnerabilities related to their work (e.g. the basic social security schemes, livelihood sustainability, the superfluity/fungibility of this sector), especially as migrant workers in Shanghai.	Individual interviews Survey questionnaire Group discussions Observation Secondary data (e.g. newspaper articles) Photographs

the workplace?		
How do migrant food delivery drivers in Shanghai protect themselves when dealing with precarity?	- Explore delivery drivers' different forms of self-protection (e.g., protest, protection offered by the state, and by NGOs, labour unions and online social networks) and their effectiveness. - Explore the negotiating strategies that migrant food delivery workers have adopted to tackle the precarity and vulnerability of their work. - Explore their bargaining processes with other actors (e.g., customers, employers, restaurants).	Individual interviews Group discussions Observation Survey questionnaire Secondary data (e.g. newspaper articles)

Table 4.1 Summary of research questions, fieldwork tasks and data collection methods. Source: author.

4.3 Study area and access to fieldwork

This project uses a case-study approach to examine the everyday lived experiences and livelihood strategies of platform workers. Yin (1984) defines case-study research as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context” (p. 23). The case study is useful for understanding an individual, group, episode, process, community, society or any other unit of social life (Theodorson and Theodorson, 1969). Although the use of case studies can be questioned in terms of establishing reliability and generalisation based on a smaller number of cases, it is still popular among social scientists (Soy, 1997).

As Soy (1997) argues, with careful planning and detailed study of real issues and problems, the use of case studies can be successful in a research process. The labour processes and agency of Shanghai delivery drivers present a social process which can be well studied through a case study. The drivers are disadvantaged people facing precarious working conditions, but they are also resourceful people with agency aimed at changing their working environment. Like other complex social phenomena, the

activities of delivery drivers call for methods that allow thorough and detailed study and analysis of their livelihoods.

To produce more reliable forms of knowledge, I chose five locations in different districts in Shanghai, as shown in Figure 4.1. As introduced in Chapter 1, most customers and online food orders are concentrated within the Shanghai Outer Ring Road, and more especially within the Shanghai Inner Ring Road. Therefore, I spent more time investigating locations within the Shanghai Inner Ring Road, namely at Points A and B. Below, I will introduce each location in terms of their degree of prosperity, the principal characteristics of customers of the online food delivery business, commercial activities, and transportation. The differences between these five locations allowed me to develop a more in-depth and diverse picture of delivery drivers' daily lives. The five locations chosen also helped me access more potential research participants.



Figure 4.1 Study areas in Shanghai. Source: author.

Point A is in Jingan District. Located in the very centre of the city, around Jingan temple, the number of orders in this area is the highest and the drivers are the busiest. Usually, drivers pick up food in big and high-end shopping malls and then deliver it to white-collar workers in nearby offices. This area has very convenient transportation, but

drivers working in this area have to face stricter traffic rules and more traffic lights.

Point B is in Putuo District and straddles the Inner Ring Road. It is close to a big shopping mall (Global Harbour), two university campuses (East China University of Political Science and Law, and East China Normal University) and many “old” gated communities (built before 2000). The drivers’ main customers are university students and residents of nearby gated compounds. As a residential area with a relatively long history, this area has convenient transportation links but very busy roads.

Point C is in Zhangjiang, Pudong District. Relatively far from the city centre, this area is famous for the number of technology companies with offices there (e.g., Baidu). Drivers deliver mainly to busy computer programmers either at their places of work or in their living quarters in gated compounds. This area has two medium-sized shopping malls.

Point D is in Xinzhuang, Minhang District. As a transportation and business centre in the city suburbs, this area has several big shopping malls, as well as vibrant small businesses (e.g., hairdressers and massage parlours) and factories. It is more liveable for migrants because of the relatively low house rents and newer facilities compared to the city centre.

Point E is in Pujiang, Minhang District. It is very far from the city centre but has good access to the centre (metro line 8). Nearby are two university campuses (the suburban campuses of Shanghai Jiao Tong University and East China Normal University) and factories. The drivers’ main customers are university students and factory workers. The number of orders is the lowest, but drivers living in this area usually have other sources of income (e.g., working as security staff in factories, working for other platforms) and enjoy the lowest house rents.

I identified entry points and potential research participants through both online and face-to-face methods. This hybrid method was also used when conducting survey questionnaires and group discussions (this will be explained in Section 4.4.2 and 4.4.4);

a similar method can be found in other research on food delivery drivers in China -- see Sun et al. (2021), Lei (2021), and Liu and Friedman (2021). This hybrid approach was used in the fieldwork mainly for two reasons. Firstly, in the online groups, it was easier to follow the drivers' ideas and collect data at any time of day since the drivers' timetables were flexible and they also communicated with each other online during the middle of the night. Usually conducted during the drivers' rest time (2 p.m. to 5 p.m.), the in-depth face-to-face discussions gave drivers a chance to provide more detailed information which they were too busy to explain in the online groups. Secondly, through the online communities, the researcher could easily understand their common problems when delivering food and their homogeneous characteristics. This is because drivers tended to follow rather than challenge others' opinions in the groups because of peer pressure. The offline method was suitable for focusing on personal concerns and life stories, and the drivers' heterogeneous experiences.

For platform workers who are mobile and fragmented, online groups and internet forums play an important part in their lives (Wood et al., 2018). In China, most delivery drivers are actively engaged in social media, especially WeChat and QQ, two popular online chatting platforms, and Weibo, the Chinese equivalent to Twitter. Therefore, before conducting my fieldwork in Shanghai, I joined three QQ and two WeChat groups online. At the time of joining in these online groups, I introduced myself as a student planning to become a food delivery driver. After searching for the keyword "Shanghai delivery driver" in Baidu Tieba, an online communication platform and exchange community in China, to find groups that had recently been set up, and then scanning the QR code, I successfully joined the two WeChat groups. An easier point of entry was searching for "Shanghai delivery driver" on QQ. As shown in the left-hand screenshot in Figure 4.2, several groups appeared, with the group name, the number of current group members, the maximum number of group members, their location and a brief introduction of the group. To communicate with more drivers, I chose to join in groups with more than 100 members. For instance, the right-hand screenshot in Figure 4.2 shows one QQ group I joined: with 269 group members, this group aimed to exchange

information and protect the labour rights of delivery drivers from five different platforms in Shanghai. After joining, I interacted with group members, engaged in their everyday online discussions and tried to build trust with them. When chatting with them in the groups, I identified some active and experienced food delivery drivers. After establishing a rapport with them online, I asked them about their working areas (for example, which restaurants they frequented) and met them there. I had been worried that these drivers would be reluctant to meet me or talk with me, but actually, most of them were friendly and approachable. At the first meeting, I asked them only simple questions, and sought their help to introduce me to more food delivery drivers and WeChat or QQ groups for potential interviewees. For instance, I made the acquaintance of D1101 this way, and he later introduced me to his friends, relatives and hometown peers by inviting me to join in a WeChat group that he managed.

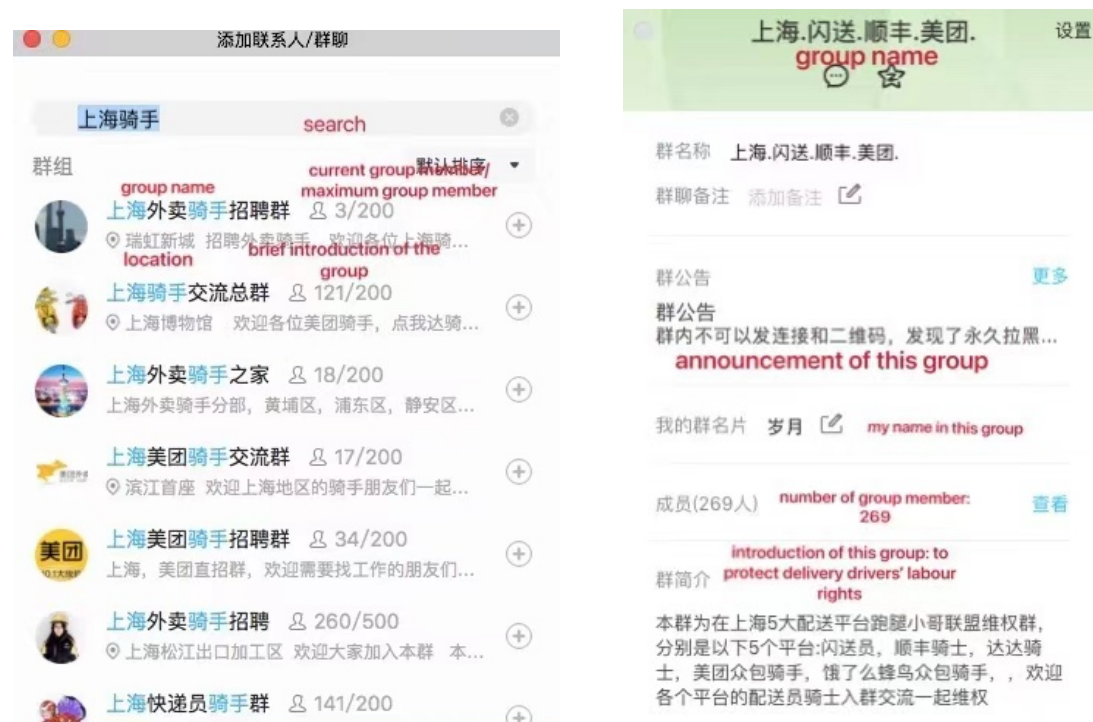


Figure 4.2 Screenshot of search for “Shanghai delivery driver” on QQ (left) and information on one QQ group I joined (right). Source: author.

The second method of entry was through face-to-face contact. I identified some small restaurants and food courts in the above five study areas. These restaurants offer food

delivery services and include shared tables and seats in a common dining area (see Figure 4.3). Usually, eating a meal in these restaurants only costs 15 to 25 yuan. Because of the relatively low price and the common dining area, drivers frequent these areas to eat lunch and rest during the afternoon (usually 2 p.m. to 5 p.m.). By visiting these restaurants on a regular basis and sometimes eating there, I tried to build trust and develop friendships with the delivery drivers. Most drivers were willing to share their life stories with me, even though some of them only had a one-hour break. If they were very busy, I just asked them where and when I could find more potential research participants. For instance, I interviewed D1130 in two different locations because in the first interview in Global Harbour, he introduced me to another bigger food court in Putuo District. When I visited the latter location several weeks later, I met D1130 again and he introduced me to three friends who were eating lunch with him.



Figure 4.3 Food courts in Shanghai. Source: author.

More participants were selected and recruited through a snowballing sampling procedure. In this research, the participants were selected from hundreds of migrant food delivery drivers in Shanghai. Because of the characteristics of this population, it is difficult to use a probability sampling technique as migrant delivery drivers have to shuttle around the city every day. I therefore used an online questionnaire survey combined with the qualitative snowballing purposive sampling procedure. The advantages of snowballing are that, firstly, I could draw on the research participants' social networks (friends, relatives, colleagues and other delivery drivers from the same

native place) – interviewees were asked to refer others as potential participants and help me recruit as many delivery drivers as possible. This saved research time by allowing me to locate other participants with ease. Secondly, participants recruited through snowballing and purposive sampling could meet my selection criteria for in-depth interviews, allowing both for the recruitment of research participants of the target groups in a more time-effective way as well as for the exploration of individual experiences and gaining a rich understanding of the livelihoods of migrant delivery drivers. Thirdly, it encouraged respondents to participate in the research because they sometimes wanted to maintain the trust and loyalty that had been bestowed on them by the person who recommended them. Snowballing therefore was a useful process for identifying respondents for this research because delivery drivers are closely linked together through their social networks. These networks are suitable for recruiting participants because drivers know friends, relatives and other drivers from their villages or hometown areas who are also engaged in the food delivery industry.

4.4 Data collection and analysis

In order to address my research questions, which concerns the lived experiences and livelihood strategies of migrant delivery drivers in Shanghai, this study adopted qualitative research methods, comprising in-depth interviews, observations, focus groups and documentary research, to collect fieldwork data in two different periods of time: from the start of October 2019 to mid-January 2020, and from April 2020 to May 2020. This is because, in February and March 2020, my fieldwork was suspended by COVID-19, which greatly impacted on everyone's daily lives in 2020. I had returned to my own hometown for the Chinese New Year (on 25 January 2020) and was unable to return to Shanghai until the end of March. When I managed to return to my study area, I focused on drivers' experiences, reactions and livelihood strategies during the peak of the COVID-19 pandemic. This was because this pandemic hurt vulnerable groups the most and exacerbated "pre-existing health, social and income disparities" (Che et al., 2020, p. 1). In other words, the outbreak and peak of COVID-19 occurred in a very short period of time (compared with in other countries); however, it had a

profound influence on the drivers' livelihoods. The extensive fieldwork allowed me to intimately interact with and closely observe the migrant delivery drivers in Shanghai, thus generating rich, deep, detailed microscopic data. This enabled me to analyse, interpret and present the data from the perspectives of the subjects of the study, specifically the platform workers, as well as to shed light on the changes in the online food delivery industry in China that have shaped delivery drivers' working experiences.

4.4.1 Secondary data sources

Before and during the fieldwork, I did desk research to gather information about migrant delivery drivers' working and living conditions, the influence of the government and markets, and migrant delivery drivers' reactions to issues around the protection of their labour rights. This was useful for providing historical context and background information on the research environment (Savin-Baden and Major, 2013). The information sources mainly included:

- a) both central and local governments' policy documents affecting delivery drivers' housing conditions, medical care, career choices, social insurance and even their hukou. For instance, in January 2021, the Ministry of Human Resources and Social Security clarified that delivery drivers should have access to vocational training and can be awarded status as role models if they make great contributions to the city, but they cannot be included in the current working injury insurance system provided by the government.⁴¹ In addition, I paid particular attention to how governments promote, regulate or restrict the development of the take-out food industry, for instance, through regulations from the Chinese Food and Drug Administration;⁴²

⁴¹ See: http://www.mohrss.gov.cn/xxgk2020/fdzdgknr/zhgl/jytabl/tadf/202101/t20210113_407557.html 人力资源社会保障部对政协十三届全国委员会第三次会议第 3391 号（社会管理类 287 号）提案的答复 [Reply of the Ministry of Human Resources and Social Security to the Proposal No. 3391 (No. 287 of Social Management) of the Third Session of the Thirteenth National Committee of the Chinese People's Political Consultative Conference] Accessed on: 19 September 2022

⁴² See a regulation published in 2017: http://www.gov.cn/gongbao/content/2018/content_5268787.htm 网络餐饮服务食品安全监督管理办法 [Measures for the Supervision and Administration of Food Safety in Online Catering Services] Accessed on: 19 September 2022

- b) the latest statistical reports on migrant workers and delivery drivers across all of China and in Shanghai, such as research reports from the National Bureau of Statistics and from the Shanghai Bureau of Statistics;⁴³
- c) reliable media reports about migrant delivery drivers' current work conditions and their collective actions. For instance, in 2020, one report in the online magazine *Renwu* (People) entitled "Delivery drivers: trapped in the system" vividly described their short delivery times, conflicts with restaurants and customers, the discrimination they encountered in big shopping malls and their limited access to social insurance. This report sparked heated discussion in China, and customers started to pay attention to delivery drivers' vulnerable working conditions.⁴⁴ On collective action, *China Labour Bulletin* has traced platform workers' protests in China since 2015.⁴⁵ Besides these, I also subscribed to one influential academic WeChat account, Sociology Community (*shehui xueshe*), in which migrant delivery drivers in Beijing were interviewed.⁴⁶ I also searched English-language reports on low-skilled platform workers in China in international publications such as *The Economist*, *Time* and *The Independent*, and in English-language publications in China such as *Sixth Tone* and *Technode*, a blog that traces the latest technology and sharing-economy news in China; and
- d) updated academic and non-academic reports about migrant delivery

⁴³ 2019 report from National Bureau of Statistics: http://www.stats.gov.cn/tjsj/zxfb/202004/t20200430_1742724.html 2019 年农民工监测调查报告 [2019 Migrant Workers Monitoring Survey Report]; reports from Shanghai Bureau of Statistics: <http://ss.shanghai.gov.cn/service/tjj/search?q=%E5%86%9C%E6%B0%91%E5%B7%A5> 上海市统计局 [Shanghai Bureau of Statistics]. Accessed on: 19 September 2022

⁴⁴ See *Renwu*'s report: <https://mp.weixin.qq.com/s/Mes1RqIOdp48CMw4pXTwXw> 外卖骑手，困在系统里 [Delivery drivers: trapped in the system] Accessed on: 19 September 2022

⁴⁵ See *China Labour Bulletin*: <https://clb.org.hk/zh-hans>

⁴⁶ See an interview: https://mp.weixin.qq.com/s/wAOfGQVmcjQhRfLa_iQpQg 平台内外的外送江湖骑手联盟 [Delivery drivers' alliance, both inside and outside their working platforms] Accessed on: 19 September 2022

drivers' living conditions. iiMedia Research, a leading data mining and analysis institute in China, has published the number of customers and market size of the online food delivery industry in China every year since 2011.⁴⁷ In 2018, CBN Data published a report on the age, hometown, gender, income, working hours and career choices of couriers (but not food delivery drivers) in China.⁴⁸ Zheng Guanghuai, a professor at Central China Normal University, conducted fieldwork on couriers and delivery drivers in Wuhan, and published his report in the Chinese online news portal *The Paper*.⁴⁹

4.4.2 Survey questionnaire

As a form of structured interview, the questionnaire survey in this research aimed to explore the demographic and socioeconomic characteristics of delivery drivers, their satisfaction with the platforms, and related issues. The questionnaire was composed of three parts: (1) the background of delivery drivers including their demographic characteristics; (2) their current work, for example the platforms for which they work, the type of work they do, their working hours and income; and (3) their social protection – labour unions, social insurance, support from platforms and individuals (see Appendix A for the full questionnaire). While the structured questionnaire only allowed them to select a response from the predetermined responses provided, at the end of the survey, respondents had the opportunity to elaborate on questions that they felt needed to be explained further. It took participants ten minutes on average to finish the survey questionnaire.

In the first period of fieldwork, a pilot survey questionnaire was conducted with 69 drivers. The pilot study took the form of an online survey, with the link to the electronic

⁴⁷ See some reports: <https://www.iimedia.cn/c400/64223.html> 2018-2019 中国在线外卖行业研究报告 [2018-2019 China Online Food Delivery Industry Research Report] Accessed on: 19 September 2022

⁴⁸ See the CBN Data reports: <https://www.cbndata.com/report/983/detail?isReading=report&page=7> 2018 年快递员群体洞察报告 [2018 Courier Group Investigation Report] Accessed on: 19 September 2022

⁴⁹ See Zheng's report: <https://baijiahao.baidu.com/s?id=1662568739213501265&wfr=spider&for=pc> 武汉市快递员外卖员群体调查：平台工人与“下载劳动” [Group survey of couriers and delivery workers in Wuhan: platform workers and “download labor”] Accessed on: 19 September 2022

questionnaire posted in the QQ and WeChat groups. Since the number of people in each group was 400 to 500, I selected one WeChat group and one QQ group to deliver the questionnaire to, and planned to get 100 to 150 respondents. This is because members of those two groups were more active and had a closer relationship with the researcher. The online survey had three advantages in this research: it was cost and time efficient in terms of reduced costs for travel and data transcription; it provided participants with time and space flexibility that allowed them more time to consider and respond to the request for information (Nicholas et al., 2010); and it was suitable when the target population (migrant delivery drivers) were constantly on the move while at the same time frequently accessed and used the internet for work.

After two weeks, during which the preliminary online survey was administered, the pilot study provided useful feedback. Firstly, the initial stage of the survey generated a lot of anxiety among the drivers because they thought the research was led by the platforms or the government. Some participants filled in the questionnaire but their answers were self-contradictory. Secondly, it was inconvenient for respondents, when they did not fully understand the survey questions, to pause filling the form, ask me questions in the group, and then return to filling in the form. Thirdly, since the online survey was accessible for everyone at any time, some respondents shared the questionnaire with their friends after finishing it. Although this allowed me access to more potential research participants, it was likely to cause a problem: information homogenisation. A group of respondents from the same province and of similar age finished the survey in a short period at around the same time.

To overcome these problems, the questionnaire survey was administrated face-to-face at the five selected research sites during the second period of fieldwork. After slightly revising the survey questions, the questionnaire was distributed to delivery drivers in restaurants and food courts during their rest time (usually 2 p.m. to 5 p.m.). Through repeated visits to the restaurants and food courts that they frequented, I developed a good relationship with the drivers. Participants were more likely to share accurate information when they regarded me as their friend, rather than a market investigator

from a platform or the government, as they had assumed before. Therefore, during each survey administration, I began with an informal introduction and a brief explanation of the purpose of the project as well as the statement of confidentiality. The letter of consent was read as a way of seeking permission to engage in the survey. For some older and uneducated drivers who were not fully literate, I read and explained each question and clicked the answer for them. For some younger drivers who preferred to use mobile phones to finish the questionnaire, I shared the link with them by adding their WeChat accounts. In other words, some surveys were finished online but the respondents and researcher were face to face during the process. The advantage of this was that I could help the participants if they had any questions. To avoid participants sharing the questionnaire link with more drivers, I used the “Stop visiting the survey questionnaire” function when each respondent finished the survey, and opened the link again when I found the next face-to-face respondent. A total of 141 face-to-face surveys were conducted, and the demographic characteristics of all respondents (both online and offline) are summarised in Table 4.2, Table 4.3, Table 4.4, Table 4.5 and Table 4.6 including their age, gender, education level, hometown province, work platform and number of working years.⁵⁰

It should be noted that, during my fieldwork in Shanghai, almost all participants were male (as shown in Table 4.2) and all of them were migrants from other provinces (as shown in Table 4.4). Before starting the fieldwork, I had expected to find one or two who were not migrants. As it happens, all the participants in the fieldwork were migrants from other provinces.⁵¹ This is very similar to Van Doorn and Vijay’s research on platform workers in Berlin, Amsterdam and New York: “While the research did not start out with a focus on migrant labour... it became apparent that a large share of the gig workers in these cities was migrants” (2021, p. 7), whether they were in countries of the Global North or in countries of the Global South (Schaupp, 2021). As regards

⁵⁰ The data was analysed after cleaning missing information and self-contradicting information. The total number of valid samples was 197. This point will be explained in Section 4.4.6.

⁵¹ Here, “migrants” means people whose hukou is registered outside Shanghai, and “local people” means those whose hukou is registered in Shanghai.

gender, according to Meituan's survey on food delivery drivers in 2018, only 8% were female.⁵² Because so many food delivery drivers are men, they are usually called "takeaway lads" (*waimai xiaoge*). Two female drivers participated in my online survey; no female drivers were accessed during the face-to-face survey and interviews. Some male drivers said that they had met few female drivers; they said it was such arduous and tiring work that most women could not endure it.

Age/gender	Number of participants	Percentage
<18	0	0%
18–20	17	8.63%
21–30	110	55.84%
31–40	55	27.92%
41–50	12	6.09%
51–60	3	1.53%
Male	195	98.98%
Female	2	1.02%

Table 4.2 Questionnaire distribution by age and gender. Source: author.

⁵² Data source: <https://www.163.com/dy/article/GAKRK8LR051285HS.html> 女骑手：在这个 90%是男性的行业里奔命 [Female riders: Running for life in a 90% male industry] Accessed on: 19 September 2022

Education level	Number of participants	Percentage
Uneducated/undereducated	2	1.02%
Primary school	5	2.54%
Junior high school	81	41.12%
High school	59	29.95%
Technical school	9	4.57%
Technical secondary school	18	9.14%
Junior college	21	10.66%
University	2	1.02%

Table 4.3 Questionnaire distribution by education level. Source: author.

Hometown Province	Number of participants	Percentage
Henan Province	40	20.30%
Anhui Province	28	14.21%
Guangdong Province	19	9.64%
Hubei Province	15	7.61%
Zhejiang Province	13	6.60%
Jiangsu Province	10	5.08%
Jiangxi Province	11	5.58%
Guizhou Province	11	5.58%
Sichuan Province	8	4.06%
Hunan Province	6	3.05%
Gansu Province	5	2.54%
Hebei Province	5	2.54%
Shandong Province	5	2.54%
Fujian Province	4	2.03%
Chongqing	4	2.03%
Guangxi Province	3	1.52%
Helongjiang Province	3	1.52%
Yunan Province	2	1.02%
Liaoning Province	2	1.02%
Shaanxi Province	1	0.51%
Shanxi Province	1	0.51%
Nei Menggu Province	1	0.51%

Table 4.4 Questionnaire distribution by hometown province. Source: author.

Working platform/	Number of participants	Percentage
Meituan	85	43.15%
Eleme	91	46.19%
Shansong	2	1.02%
Dingdong	1	0.51%
Both Meituan and Eleme	13	6.60%
Other	5	2.54%

Table 4.5 Questionnaire distribution by working platform. Source: author.

Number of working years	Number of participants	Percentage
Less than six months	49	24.87%
Six months – one year	55	27.92%
One year – two years	37	18.78%
Two years – three years	29	14.72%
More than three years	27	13.71%

Table 4.6 Questionnaire distribution by number of working years. Source: author.

4.4.3 Individual interviews

“We are now living in an interview society” (Silverman and Atkinson, 1997) because of the extensive use of interviewing as a major technique to acquire information. An interview is not only a verbal exchange of information but also two or more people’s collaborative efforts (Fontana, 2002; Fontana and Frey, 2005). In this research, semi-structured interviews were used, which have some degree of pre-established questions but ensure some flexibility in the way questions are asked and answered (Hay, 2005). Conducting in-depth individual interviews with delivery drivers and other stakeholders in the online food delivery industry in China proved to be an effective way to generate the desired information in a detailed process.

Interviews were conducted with four types of actors – food delivery drivers, restaurant owners, managers of food courts and the managers of the stations where delivery drivers were registered – in order to gain an understanding of the necessary background and contextual information on the online food delivery industry in Shanghai. Interviews with delivery drivers covered the five selected study areas, as well as different platforms

and various types of work to obtain valid and reliable information. Interviews with restaurant owners and food court managers were only included in three research areas within the Shanghai Outer Ring Road – Points A, B and C. This was because the more prosperous the restaurant, the more online food orders it would have, and the more likely restaurant owners were to be familiar with the industry and with the drivers. This also explains why I interviewed fewer delivery drivers in Points D and E, which are located outside the Shanghai Outer Ring Road. Interviews with station managers covered the two biggest platforms in China – Meituan and Eleme. This is because these two dominant platforms have a management model that does not depend on location in Shanghai – it is the same everywhere (see Chapter 5). Usually, interviews were conducted during the afternoons (2 p.m. to 5 p.m.) because most interviewees were extremely busy during lunchtime (11 a.m. to 1 p.m.) and dinnertime (after 5 p.m.). Most of the interviews lasted between thirty minutes and one hour. In some cases, for instance when the interviewee was quite keen to talk about the issues, the interview would last for more than one hour. I chose their everyday working locations (e.g., restaurants and food courts) as interview locations in order to conduct the interview in a natural situation, like a normal conversation rather than a reactive process. Also, the interviewee did not have to travel to a specific location, which would have been difficult given their tight working schedule.

Interview questions were designed in line with the various types of interviewees. Interviews with restaurant owners focused on their relationships with the platforms, their attitudes to the online food delivery industry and their impressions of delivery drivers; interviews with managers of food courts focused on their roles, attitudes towards the delivery industry and their impressions of delivery drivers; interviews with station managers concerned their everyday work, their relationships with the platforms, and the management of delivery drivers. Interviews with delivery drivers were conducted during or after the face-to-face survey. After explaining the nature of this research and the confidentiality and anonymity of participants, I usually started by asking simple questions, such as about their recent working hours, working areas, and

feelings and reasons for choosing their jobs, and then moved on to their working experience as delivery drivers – interactions with customers, changes in the industry and related issues. In order to achieve the research aims and process the interviews smoothly, I left sensitive questions such as protests by drivers for a later stage when I felt the conversation was going well and they were willing to share more. Generally, all the individual interviews followed a similar procedure with few variations in each of them in terms of age, hometown, working platforms, and working type. When some drivers continued to complain about their past life experiences and how unfair they were, I reminded them of the main topic by asking them about their current work. Usually, one conversation led to another until they reached a “level of saturation” (Francis et al., 2010). The types and numbers of interviews are summarised in Table 4.7.

Type (number) of interviewee	Working area	Number interviewed
Delivery driver (41)	Point A	9
	Point B	17
	Point C	7
	Point D	6
	Point E	2
Restaurant owner (6)	Point A	2
	Point B	1
	Point C	3
Food court manager (1)	Point B	1
Station manager (2)	From Meituan	1
	From Eleme	1
Total number of interviewees		50

Table 4.7 Types and numbers of interviewees. Source: author.

4.4.4 Group discussions

The use of focus group discussions is popular in social science. According to Bedford and Burgess, focus group discussions are “a one-off meeting between four and eight individuals who are brought together to discuss a particular topic chosen by the researcher(s) who moderate or structure the discussion” (2001, p. 121). This method is

used in this study because it is ideal for geographers committed to effecting social change and empowering the researched (Morgan, 1997). This project largely draws on delivery drivers' experiences and their perceptions of their socioeconomic conditions. The focus group method calls for interaction between group members, which enables them to discuss and question different opinions and beliefs. In this way, one participant commenting on a statement in a group discussion can trigger a chain of responses (Hay, 2005). In addition, focus groups provided me with a context and the opportunity to directly observe the group process and interactions. As Frey and Fontana (1991) argue, in individual interviews respondents tell how they would or did behave in a particular social situation, but in focus group discussion, respondents react to each other, and their behaviour can be directly observed.

Unlike traditional focus group discussion conducted in a closed and quiet meeting room with recording equipment, the group discussions in my fieldwork, which would not qualify as focus groups, took a flexible and informal form. I pre-arranged themes before conducting each group discussion, but in practice I followed group members' interests and familiarity with one or several specific topic(s). The participants directed the flow of the discussion and challenged or confirmed each other's opinions. In this sense, the interviewees' conversations were more like their daily chat in a comfortable environment, rather than deliberate responses. In other words, I intended to conduct focus group discussions, but because the delivery drivers were very busy and more relaxed in their familiar environment, it was difficult to pre-arrange every theme and process and the number of participants in each group. All face-to-face group discussions were conducted in open and public spaces (restaurants and food courts), and other curious drivers joined in the discussion in some cases. Because of the fluidity, it was difficult to note an accurate number of participants. Although I chose four to five drivers for one group initially, sometimes, two to three later joiners stayed for only ten minutes and left to pick up orders, but their conversations were very useful and interesting. This point also applied to the four online group discussions.

Five face-to-face group discussions were conducted with delivery drivers from different

platforms and of various working types. Like the individual interviews, the group discussions were conducted during the afternoon (2 p.m. to 5 p.m.) in restaurants and food courts in business and shopping centres. Because the study area at Point E is relatively quiet and suburban, and drivers working in this area usually deliver orders in the city centre, I did not conduct group discussions in this research area. An additional group discussion was conducted when I participated in protests by Shansong drivers in front of the Shansong platform's office in Xuhui District in Shanghai. Unlike the four other group discussions, which focused on drivers' everyday lives, the theme of this group discussion centred on these drivers' dissatisfaction with the Shansong platform, their working experiences and their protest appeals. However, no matter which platform and who they were working for, the interviewees within each group were very familiar with each other. Some of them were roommates, friends, relatives or hometown peers. In fact, before conducting the group discussion, these drivers were eating lunch, smoking, talking or playing games together on their mobiles, and I just naturally joined in their conversation after obtaining consent, introducing myself, the purpose of my research and stating that their conversation would be treated with confidentiality and anonymity.

In the drivers' QQ and WeChat groups, I actively interacted with them online and closely observed their conversations. In some cases, their chats concentrated on one topic and drivers answered my questions clearly. For instance, on 20 September 2019, drivers for Meituan and Eleme had a heated discussion in their QQ group over how to make more money fast because, they said, they had debts to repay. During the National Day holiday week (1 October to 7 October), drivers complained about the fluctuating price they received for each order. Because group members use made-up names and are hard to trace, these online groups were also suitable for discussing sensitive topics such as collective actions, platform workers' labour rights and insurance, issues that the Shansong drivers were protesting about. Like the face-to-face group discussions, although I prepared interview questions and tried to organise discussions, I could not be sure how many drivers would participate or the length of time each online group

discussion would last. In some cases, when more and more group members joined in the conversation, expressed their opinions on a topic and shared their own experiences, the group discussion lasted for several days, with comments dispersed across their few free hours every day. In these online groups, it was difficult to calculate the exact number of drivers who participated. This was because almost all of the group members are anonymous, and they could not be recognised when one person have two or more accounts in the QQ and WeChat groups.⁵³ Put simply, I may have talked with the same person with different names in various QQ and WeChat groups. The interview code, time and location, interviewee's working platform and interview focus are summarised in Table 4.8.

⁵³ In these online groups, the group members can give themselves a name. In other words, they can choose to be anonymous or not.

Code	Interview time	Interview location	Platform	Interview focus
G1101	2019.9.20	Online (QQ group)	Eleme, Meituan	How to make more money
G1102	2019.10.1– 2019.10.7	Online (QQ group)	Eleme, Meituan	Different platforms and working types; the received price for each order
G1103	2019.10.23– 2019.10.24	Online (QQ and WeChat group)	Shansong	The protests in Beijing and Shanghai; their attitudes to Shansong platform
G1104	2019.10.24, 2019.10.30	188 Qinzhou North Road, Shansong's office building	Shansong	The aims of their protest
G1105	2019.11.1– 2019.11.5	Online (WeChat group)	Shansong	Whether their insurance could help them when they had an accident
G1106	2019.11.16	Point A	Eleme (freelancer)	Their working experiences
G1107	2019.11.18	Point C	Eleme (full-time)	The changes in this industry; the relationships between restaurants and platforms
G1108	2019.12.14	Point B	Eleme, Meituan, Shansong	Their attitudes to the platforms, customers and money; their housing conditions and rent
G1109	2020.1.10	Point D	Eleme, Meituan, Shansong	Their attitudes to the new schemes promoted by the platforms; their plans during the Spring Festival

Table 4.8 Summary of group discussions. Source: author.

4.4.5 Observation and reflections

This research project used observation and reflection methods as an added technique to capture participants' behaviour and body language during the interviews and group discussions. The observations were extended beyond the period of interviewing and lasted throughout the whole fieldwork period. Observation is the “fundamental base of all research methods” (Adler and Adler, 1994, p. 389). It illustrates the larger picture or context of the research in order to develop a holistic understanding of the phenomenon under study that is as accurate as possible.

At times, I just went to the above five study areas to observe delivery drivers. During lunchtime (11 a.m. to 1 p.m.), when drivers were extremely busy, drivers who did not directly interact with the researcher were observed from afar. It was convenient for me to observe their working practices and their relations with restaurant owners, other delivery drivers and customers. During the afternoons (2 p.m. to 5 p.m.), food courts were suitable for observing drivers in their leisure time and their various livelihood diversification activities. Specifically, when conducting observations, I focused on the following five aspects: a) participants (e.g., their flow of activity, how quickly they moved, what they were wearing); b) activities; c) interactions (e.g., both online and face-to-face interactions with other delivery drivers, their social relations); d) delivery of information (e.g., offline and online communication); and e) subtle factors (e.g., intonation, facial expressions, posture). During the interviews, while listening to participants' response to questions, I also watched for anything that could indicate boredom, anxiety or impatience (Savin-Baden and Major, 2013). These observations helped to supplement important contextual cues when considering their relevance and significance, particular in light of the research questions (Savin-Baden and Major, 2013).

In addition to this thorough observation, participant observation was used when I joined two protests by Shansong drivers in October 2019. Drivers protested in front of the Shansong platform's head office (188 Qinzhou North Road, Xuhui District) in Shanghai because of what they saw as the unfair order distribution between freelancers and full-

time drivers. Once I heard about the protest from the drivers' QQ and WeChat groups, I got permission to join in the protest from one of the organisers. Because of the political sensitivity of collective action in China, the two protests were more like sit-in demonstrations. The relatively quiet and peaceful setting provided the opportunity to chat with the protesters to better understand their case. Joining in these two protests offered the opportunity to observe drivers' behaviour, the solidarity between drivers, and their bargaining process with the platform. In this process, the researcher took part in whatever activity the respondents engaged in and my presence did not alter the natural behaviour of the researched. The reflections and observations were written up as field notes in the research process, and they provided a rich source of data for analysis.

4.4.6 Data analysis

Data analysis was an iterative process during which the researcher moved between collecting data, reviewing data and linking the data to concepts and theories identified in the framework (Tracy, 2012). This helped to test and verify the solidity of the theoretical framework and to increase the reliability of the research findings. Based on the types of quantitative data sources, information derived from both online and offline questionnaires was manually recorded into Excel and the analysis function was used to calculate the percentage of respondents choosing a specific answer. Before analysing data, I carefully checked each respondent's answers, and thirteen data entries were wiped off because of missing information and contradictory information. This process allowed me to evaluate the validity of the data and have a general description of participants' responses.

Based on the types of qualitative data sources, the methods used for qualitative analysis mainly comprise two categories. The first is document analysis. Policy documents were widely used to interpret the changes in the online food delivery industry and the government's attitudes to delivery drivers, especially during and after the peak of COVID-19, when some platform workers still delivered to quarantined people and medical staff. This was supplemented by an in-depth study of other sources of secondary data, such as media reports and non-academic reports. The second category

of analysis is conversation analysis. After finishing one interview and group discussion, I converted the oral recordings to text and wrote down my fresh impressions of the interviewees. Before June 2020, oral data from fifty individual interviews and nine group discussions was converted into a transcript in Chinese, word for word. In this process, some critical details appearing in different interviewees' words provoked thoughts on my part. In the rest of this thesis, interviewees will be referred to according to their codes: D for delivery drivers, R for restaurant owners, S for station managers, M for managers of food courts and G for group discussion. I used Note Youdao, a software for recording, editing, storing and classifying information, as a tool to help with data labelling, coding and categorising. In this software, each interviewee's main points were highlighted and pictures taken from study areas were attached. Notes of interviews were also used as the major material for analysis. By carefully reading each phrase, sentence and paragraph and extracting its meaning, categories were grouped thematically and sorted, firstly under different headings and then using different subheadings. Through this, I became more aware of the issues revealed by the data, improved the fit between the existing concepts and the qualitative data gathered, and refined my focus, which led me to identify main themes and evaluate the extent to which quotations addressed the research aims and gaps discussed in Chapter 2 and 3.

4.5 Ethics and researcher positionality

Reflecting on ethics and researcher positionality is an important part of the research process. Before my fieldwork could be carried out, the ethics of my research were reviewed by the Arts, Humanities and Cultures (AHC) Faculty Research Ethics Committee (application for ethical review reference: FAHC 18-104) and approved in September 2019, along with documents entitled "Ethical Review Form", "Participant Consent Form", "Participant Information Sheet", and "Risk Assessment Form". During my fieldwork in Shanghai, I strictly followed the main principles of ethical research, including integrity and transparency, informed consent, confidentiality and anonymity, voluntary participation free from coercion and avoidance of harm, as well as independence and impartiality of research. In this section, I present the three main

ethical considerations which were identified, some possible problems, and my positionality when researching the precarity and livelihood strategies of Shanghai delivery drivers.

First, it was essential that participation should be totally voluntary, which means that individuals were asked rather than coerced into participating. With this in mind, the study made sure participants were aware of the aims, process, benefits and risks of the research. To keep alignment with this ethical principle, an information sheet and a consent form were created and sent in advance to the prospective participants, whether online or face to face (see Appendix B for the information sheet and Appendix C for the consent form). Before conducting the survey questionnaire and interviews, I also explained the aims, process, benefits and any risks to the participants to make sure that they had a clear understanding of the research. If the participants changed their mind, they could withdraw from the study at any time. During the face-to-face questionnaire survey, interviews and group discussions, participants were able to terminate proceedings or miss out any questions as they felt appropriate at the time. When filling in the online questionnaire, they could simply close their web browser to exit.

However, one ethical problem arose when “observing” online chat rooms. When I joined the QQ and WeChat groups, I immediately introduced myself and explained how and why I joined the groups. Before conducting the online survey questionnaire or group discussions, I texted all members and mentioned what kind of questions they would be asked, how long it would take, the participation rewards and possible harms. Existing group members were aware of my role and the basic information about this research; however, the group members who joined the online chat rooms later than me did not know my identity nor that their conversations could be observed without their consent. If these later joiners had friends or acquaintances in the groups, they could be reminded that there was a researcher in their group. However, it was difficult to ensure that all group members were informed, especially during the four online group discussions. Since the group members were listed according to alphabetical order of their anonymous names, it was impossible for me to find and notify every late joiner. I

decided it would be too much of a disruption for the group members if I texted them about my identity and my research from time to time. I decided that there was no satisfactory way to resolve this ethical problem.

Second, rewarding participants and avoiding harm to them were important. Although the research was not expected to place participants at direct risk, there was a risk that they might become distressed during the interviews if they were recalling situations in which they felt unhappy. When talking about interviewees' working and living experiences, some of them may have had difficult or painful memories such as serious injuries when delivering orders or conflicts with customers and restaurant owners, and this could result in a range of negative feelings. Although this did not occur often, when it did, I redirected the conversation to more neutral ground.

Concerning the benefits for drivers for participating in the study, different forms of gifts were given to the respondents, according to the form of participation (online or face to face). After finishing the online survey questionnaire, respondents received CNY 10 yuan (approximately £1.20). This was achieved using the "send red envelope" function in the QQ and WeChat groups. When they clicked the red envelope at the end of the online survey, respondents could get the money, which could be transferred to their bank card later. The amount of money in each envelope was about what delivery drivers could earn from finishing one order. I felt it was appropriate that the drivers' time spent filling in the questionnaire should be compensated by cash. However, this did not work well when conducting the questionnaire survey, interviews and group discussions face to face. Some drivers were very happy to receive the cash if no one was looking at them, but if there were other drivers around, most drivers were too shy to receive the money because they did not want to "lose face" (*diu mianzi*). Therefore, I bought them snacks, soft drinks and cigarettes, which the drivers were generally glad to receive. At the same time, this made it easier to build a relaxing environment when respondents were eating, drinking or smoking. Usually, participants were compensated for their efforts, energy and time at the end of each survey questionnaire, interview or group discussion, but in some cases, gifts were given in the middle of face-to-face interviews and group

discussions to encourage the drivers to continue sharing more information.

Third, another important issue was the confidentiality of the research data, which is paramount when collecting, storing and publishing data. The individual interviews and face-to-face group discussions were both recorded with a digital recorder. Initially, some drivers were sceptical about having their stories recorded. I reassured them of the confidentiality of the information and made them aware that it was for academic purposes only. When participants signed the consent form, I suggested that they do so using their surnames so that their full names would not be visible, bearing in mind that there are relatively few Chinese family names. Any survey information collected online was done in a manner that complied with the directions of the Association of Internet Researchers and good practice guidelines provided by the University of Leeds. The survey tool I used was the largest online questionnaire platform in China using the social media WeChat and QQ platforms. As independent organisations, these platforms abide by the government's data protection regulations and laws, and guarantee the confidentiality of data through encryption. The online survey was conducted anonymously and respondents in the chatrooms used pseudonyms (as is normal practice), which means the participants' true identities were concealed. For the duration of the storage and analysis process, data collected from the fieldwork was securely managed on an encrypted laptop. In my thesis, participants are referred to using a code name rather their real name, and I myself coded the data. Specific personal information such as names, personal addresses and telephone numbers were removed from any written work.

During and after the fieldwork, I found it necessary to reflect upon the researcher's role and positionality, because the researcher's social position shapes and influences the orientation and dynamics of the research (Reyes, 2020). I acknowledge that I was an active participant in the interviews and group discussions (Holstein and Gubrium, 1995). I did not just interview or observe the participants but was myself a participant in the production and reproduction of knowledge. My positionality as a researcher with a college degree interacted with other personal circumstances such as being a frequent

customer of the online food delivery business and a short-term resident in Shanghai during the fieldwork. These circumstances helped me make some connections with the delivery drivers. When I was hearing about their working and living conditions, I shared my personal experiences such as high house rents and high prices in Shanghai. Some interviewees found common ground with me because their children were in university and they understood the stress of finishing a thesis (such as D1134). Using my experience to make connections made me feel like an insider, and it was a good way of reducing any power differentials that existed and creating an atmosphere of trust and openness between us. Although it is a male-dominated job, I did not feel any discomfort or discrimination because of my gender when doing interviews. However, there were times when I felt like an outsider. My university student status and limited work experience set me apart from the drivers. Some of them voiced concern about the actual effect of this research on their work and life: “Will our income increase because of your research?” and “I think it is really hard to change our circumstances only through your thesis” (G1107) were among the comments I heard. Although some participants questioned the practical meaning of this research, most drivers were very glad to talk with me and felt happy that others took an interest in their lives. In some cases, however, I could not fully relate to their experiences as people living on the margins, engaging in labour-intensive work to earn a livelihood and sometimes being exploited by platforms and discriminated against by customers who enjoy their services.

4.6 Conclusion

This chapter has described my methodological approach and the rationale for its use in this research. I employ a case-study approach to understand the precarious work conditions and livelihood strategies of migrant delivery drivers in Shanghai. Covering delivery drivers from the five selected research areas (referred to as Points A, B, C, D and E), this study aims to reflect the complex and heterogeneous working and living conditions of delivery drivers, which I see as representative of a broader context. Through an analysis of lived experiences and survival strategies, I refine my understanding of the research findings, both conceptually and empirically, about the

precarity and resistance of platform workers, and gain an understanding of the Polanyian double movement of delivery drivers in Shanghai.

After reiterating the research questions and aims of my fieldwork, this chapter introduced the reader to my five research areas in Shanghai and my access to fieldwork. Initial access to research participants was through both online and face-to-face methods. Repeated visits to restaurants and food courts which drivers frequented as well as active interaction with group members in the QQ and WeChat chat rooms proved to be effective ways to become acquainted with the drivers and generate quality data from the fieldwork. More participants were selected and recruited through a snowballing sampling procedure based on the drivers' social networks. The research questions informed the choice of methods of data collection, analysis and presentation of the data. In order to answer the research questions outlined in Section 4.2, secondary data, survey questionnaires, individual interviews, group discussions and observation contributed to the generation of the desired data. After gaining a basic understanding of historical and background information from secondary data derived from government policy documents, census, media reports and non-academic reports, the delivery drivers' individual experiences were generated from the questionnaire survey and in-depth interviews. The questionnaire survey provided accurate and descriptive information on subjects such as working hours and income, while the semi-structured interviews provided interpretive and detailed information on, for example, personal experiences and feelings. This was complemented by the group discussions, which empowered the participants to share their individual stories in a group setting and produced a synergistic effect by allowing drivers to comment on each others' experiences. Observation added insights from the researcher's perception of the delivery drivers' work processes, social networks and protests against the platforms.

Finally, this chapter concluded with a discussion of the research ethics and the positionality of the researcher in the fieldwork process. The ethical issues behind the "observation" of online chat rooms, participation rewards, data confidentiality and insider and/or outsider issues were all recognised in the fieldwork. Stating my

positionality and being conscious of making connections with the respondents are positive ways of conducting research. The methodological approach explained in this chapter was adopted to generate insights with regard to the research questions proposed in Chapter 1 and to the conceptual and theoretical framework illustrated in Chapter 2. The results are presented in Chapters 5, 6 and 7.

Chapter 5: The online food delivery industry: Emergence, development, and operation

5.1 Introduction

Digital platforms have become so prominent in how we live in cities – affecting transportation, community, work and markets (Bates, 2019). However, as Kenney and Zysman (2016, p. 63) note, we are unclear about their dynamics and directions. Although a growing body of work has demonstrated the different patterns of global digital labour platforms and their influence on the livelihoods of workers, most studies explicitly focus on high-income countries (Wood et al., 2018) and the role of technology. As reviewed in Section 3.2, the value-creation strategies and internal organisation of these platforms is underexplored. Therefore, this thesis contributes to our knowledge of the expanding geographic scope of platform workers by understanding in the Chinese context the employment status of food delivery drivers and the mechanisms of the online platforms they are working for. Based on interviews with different stakeholders in the online food delivery industry, including restaurant owners, different working types of delivery drivers and contractors, this chapter serves as the context and background for the next two chapters, and addresses the following research questions: How does the online food delivery industry, as one typical type of platform economy, survive and thrive in China? Who participates in this platform economy and on what terms? How do they distribute the benefits? How do the online food delivery platforms manage the delivery drivers?

The chapter is structured as follows. First, I situate the Shanghai food delivery drivers within the larger context of the rise of the platform economy in China and globally (Section 5.2). The emergence, development and changes in China's online food delivery industry are then presented. Next, after explaining the role and function of each stakeholder (i.e., governments, customers, platforms, contractors, restaurants and delivery drivers) in this industry, the operation of the business is illustrated (Section 5.3). The share of profits, the outsourcing to contractors and the employment status of the food delivery drivers are discussed. In Section 5.4, I compare two different working

types of the food delivery drivers – full-time and freelance – and their various management models and motivations. Finally, a summary of the chapter is presented (Section 5.5).

5.2 The emergence and development of the online food delivery industry

5.2.1 The rise of the platform economy in China and throughout the world

With the emerging platform economy, digital work is expanding. Although the number and aggregate size of the platform economy varies widely due to ambiguous categories and definitions,⁵⁴ the platform labour force has shown remarkable growth. Kuek et al. (2015) estimate that the global market for digital work was worth US\$4.4 billion in 2016, and that it is growing rapidly. The McKinsey Global Institute (2015) estimates that digital labour market platforms benefit 540 million individuals by increasing job-matching efficiency globally. An index measuring the use of online platforms shows that they are developing globally at an annual rate of 26% (Kässi and Lehdonvirta, 2018). In Britain, Lapanjuuri et al. (2018) find that 4.4% of adults (roughly 2.8 million people) worked in the gig economy in 2017 and suggest that 2.4% of adults did so at least monthly.

Thanks to the development of technology and the government's supportive policies, the past decade has also seen a bustling digital platform economy in China. The spread of online payment, the sophisticated new algorithms, and the application of big data, cloud storage and computing have improved the landscape for creating online marketplaces to match supply and demand. Synthesising multiple platforms such as e-commerce platforms (e.g. Yeation, Taobao), communication platforms (e.g. Tencent Weibo, WeChat), online food delivery platforms (e.g. Meituan, Eleme), car-pooling platforms (e.g. Autonavi), the three internet technology unicorns, referred to together as BAT (Baidu, Alibaba and Tencent), dominate China's platform economy, with other rising competitors such as Jingdong, Wangyi and Byte Dance. These platforms and apps have been thrust into the global limelight because of their business success and disputes with

⁵⁴ For instance, the estimate for the US found by Katz and Krueger (2019) is relatively low (0.5% of the labour force); the figure reported by the Pew Research Centre in 2015 is relatively high (8% of the working-age population).

international trading rivals. For instance, in July 2020 the US shut down TikTok, a hugely popular short video-sharing app owned by Bytedance, and in August 2020 it banned transactions on WeChat, the most commonly used social media platform, owned by Tencent.⁵⁵ These platforms and apps have transformed people's daily lives. For example, sitting in a shared car, when they see friends' recommendations of products from WeChat, customers can open hyperlinks for the products on Alibaba's main shopping site (Taobao or Tmall) and make payments with Alipay.

In 2016, Li Keqiang, China's premier, promoted what he called the "New Economies" (*xin jingji*), which include cloud computing, e-commerce, artificial intelligence, and the platform economy and internet economy.⁵⁶ Using technology to build an economy in which consumption can be more social, frugal and sustainable, this strategy aims to promote economic structure reform from relying on fixed-asset investment to developing an innovation-driven economy. China's leader Xi Jinping's new economic agenda in 2020 targeted technological advancements (e.g. Internet of Things, big data), innovation work and the domestic market growth.⁵⁷ Hi-tech companies and start-ups are given preferential taxation policies to mobilise their capacity for innovation and creativity.⁵⁸ The government's enthusiasm is partly due to the new job opportunities in the emerging economy. In 2018, the sharing platforms attracted 75 million people; more than 2.7 million people work using Meituan. Boosted by the favourable policies, the online food delivery industry, as one typical platform economy, has developed and become popular in China. The market size of this industry has increased from 21.68 billion yuan in 2011 to 664.62 billion yuan in 2020 (see Figure 5.1); in 2020, 419

⁵⁵ See related news reports: [https://technode.com/2020/08/11/techwar-trumps-WeChat-tiktok-ban-to-face-lawsuits/Trump's Wechat, Tiktok ban to face lawsuit](https://technode.com/2020/08/11/techwar-trumps-WeChat-tiktok-ban-to-face-lawsuits/Trump's%20Wechat,%20Tiktok%20ban%20to%20face%20lawsuit) Accessed on: 19 September 2022

⁵⁶ See related news reports: <http://www.chinanews.com/gn/2016/03-16/7799491.shtml> 李克强: 要发展“新经济” 促进中国经济转型 [Li Keqiang: To develop a “new economy” to promote China's economic transformation] Accessed on: 19 September 2022

⁵⁷ See related news reports: <https://www.scmp.com/economy/china-economy/article/3096941/chinas-new-economic-strategy-rely-domestic-market-not-closed> China's new economic strategy to rely on domestic market is not a closed-door policy, Beijing advisers say Accessed on: 19 September 2022

⁵⁸ See related news reports: <https://www.scmp.com/article/topics/invest-china/1727504/china-nurturing-start-ups-cash-incentives-boost-economy> China nurturing start-ups with cash incentives to boost economy; <https://www.china-briefing.com/news/tax-incentives-for-high-tech-companies-in-china/> Tax Incentives for High-tech Companies in China. Accessed on: 19 September 2022

million people used online food delivery apps, compared with 63 million people in 2011 (see Figure 5.2).

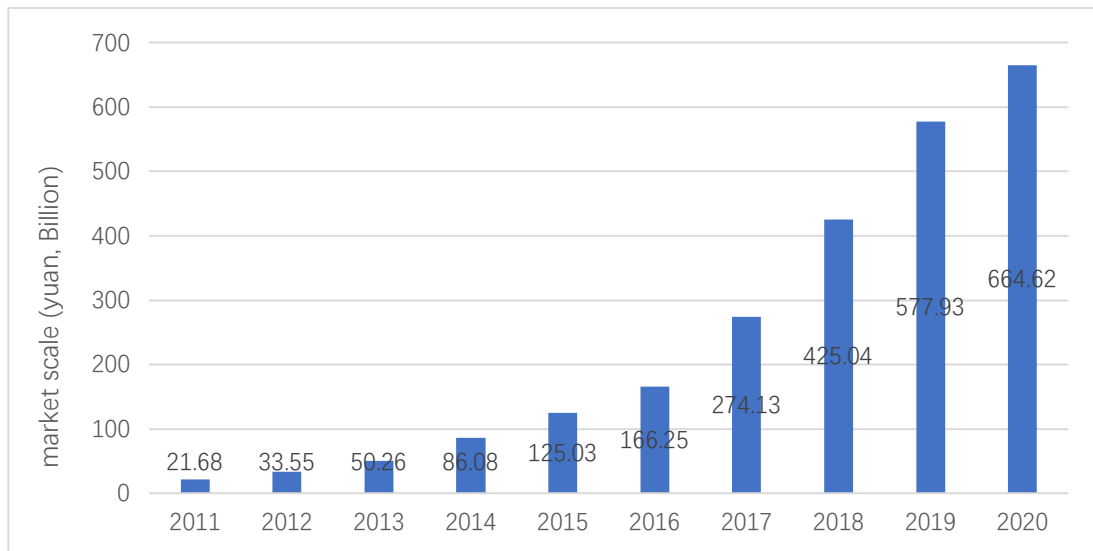


Figure 5.1 The growth of China's online food delivery market from 2011 to 2020. Data source: <https://www.chyxx.com/industry/202106/956697.html> 2020 年中国外卖行业发展现状及未来发展趋势分析 [Analysis of the development status and future development of China's food delivery industry in 2020] Accessed on: 19 September 2022

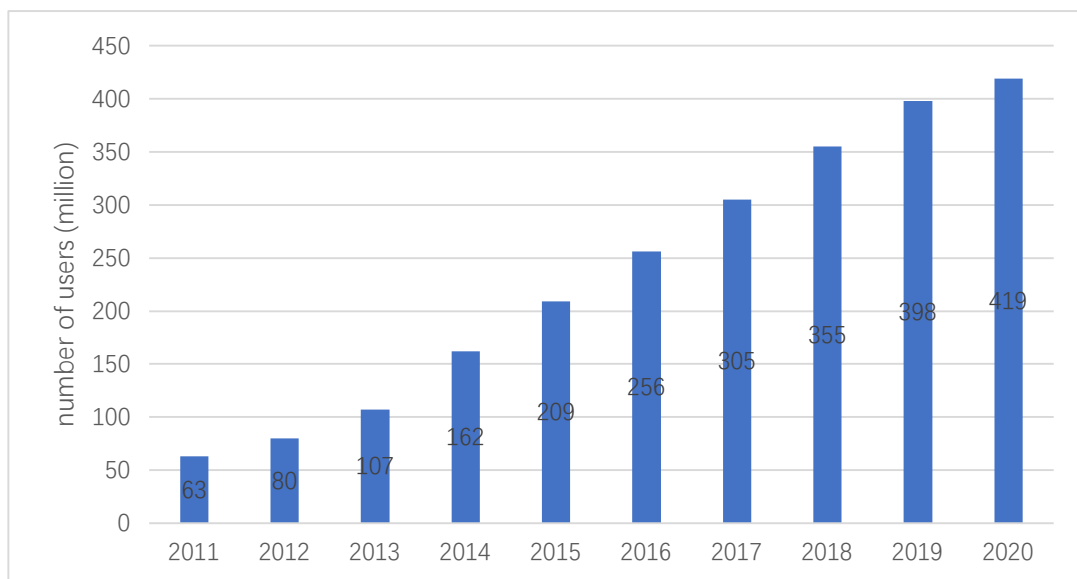


Figure 5.2 The number of people using online food delivery business (2011–2020). Data source: <https://www.iimedia.cn/c1061/77653.html> 2020 年外卖行业数据分析 [Data analysis of food delivery industry in 2020] Accessed on: 19 September 2022

It should be noted that after late January 2020, when the coronavirus outbreaks occurred and lockdown restrictions were imposed, consumers' demand for online marketplaces increased and the digital platform economy grew in importance. In Germany, a new app, called BlaBlaHelp, was developed to let people ask others to do grocery shopping for them. In Britain, people could use a no-contact pickup service from an app called Olio to share groceries and other items they no longer need with neighbours, and the sharing surged by about 50% for food and 200% for other things.⁵⁹ In China, food delivery drivers made a great contribution to keeping cities running during the coronavirus epidemic.⁶⁰ After all public transportation and residential communities had been locked down in Wuhan in late January, the drivers played a crucial role in providing vital supplies for residents. They delivered basic necessities (from rice, noodles and cooking oil to soap, tissues and disinfectant) to people in self-isolation and in hospital. For those staying housebound, delivery drivers were their only connection to the outside world, even if all deliveries were “contactless”. The delivery drivers in Wuhan felt that they were keeping the city alive. They were praised for showing a sense of responsibility and humanity and for giving people hope and encouragement. They were called “everyday life ferrymen” because of their lifeline services. COVID-19 also influenced the stakeholders' relationships in the platform economy; for instance, Uber announced the provision of limited paid sick leave to drivers (Katta et al., 2020), a phenomenon that needs much further study.

⁵⁹ Data source: *Economist*. June 6, 2020. *The sharing economy: what's mine is yours*. pp. 53–54.

⁶⁰ See related news reports: March 16, 2020. *Time*. <https://time.com/5803803/china-delivery-driver-ecommerce-covid19/> *These Delivery Drivers Are Risking Their Health to Keep China Running During the Coronavirus Epidemic*; February 27, 2020. *Independent*. <https://www.independent.co.uk/news/world/asia/coronavirus-china-food-delivery-motorbike-outbreak-symptoms-a9355171.html> *Coronavirus: How food delivery drivers manage to work in China despite virus outbreak* Accessed on: 19 September 2022

5.2.2 From multiple competitions to duopoly in China's online food delivery industry

Since 2011, various online food delivery platforms such as DiDi and Baidu have arisen, but the biggest two companies – Meituan and Eleme – came to dominate this industry after six years (2011–2017) of competition.⁶¹ In 2014, Baidu started its online food delivery business, and the competition between Meituan, Eleme and Baidu grew fierce. The delivery drivers describe that period as “the war between three countries” (*sanguo dazhan*, in reference to the classic Chinese romance) or “the war between red, yellow and blue” because of the colour of the drivers’ uniforms (see Figure 5.3). The competition between these platforms changed in 2017 when the food delivery arm of Baidu was acquired by Eleme.



Figure 5.3 Food delivery drivers from the three platforms all picking up orders in the same restaurant. From left to right: Eleme, Meituan and Baidu drivers. Source: https://www.sohu.com/a/118128822_115856 外卖三巨头混得怎样了？蓝队领先黄队随后红掉队 [How about the three biggest companies in the online food delivery industry? Blue takes first place, yellow takes second place, and red takes third place] Accessed on: 19 September 2022

The dominance of the giant duo was briefly challenged in 2018 when another new platform, DiDi, was founded in Wuxi, Jiangsu Province. Because of bad management,

⁶¹ DiDi, the Chinese Uber equivalent, is a ride-sharing platform. Baidu, the Chinese version of Google, provides a search engine service. Both these companies had also been undertaking online food delivery businesses.

DiDi only existed for several months. One interviewee, a food delivery who had worked on the DiDi platform, put it to me as follows:

DiDi Takeaway only existed for two months in Wuxi and collapsed in 2018. At that time, the advertisement was so hot: DiDi Takeaway was coming to Shanghai. However, this platform invested too much at the beginning, and provided a lot of money in subsidies to restaurants and customers. I heard that to attract more delivery drivers, the price of delivering one order was very high. Also, the platform spent money on advertising, to attract more customers and restaurants. To compete with Meituan and Eleme, customers only spent 1 yuan for a cup of milk tea. It would be strange if it did not go bankrupt! In fact, it died because of its own reasons, not competition from Meituan or Eleme. (D1103)

By the start of 2021, only Meituan and Eleme had survived and thrived in the cut-throat food delivery battle, and this mainly for two reasons: strong venture capital investment and advanced online-payment technology. In the initial period of this industry, these online platforms had to provide considerable subsidies to restaurants, drivers and customers. They had to burn a spectacular and growing amount of cash on sales and marketing. Meituan's financial statement data show that its online food delivery business was indeed loss-making before 2017, when the gross profit margin was only 8.1%, though it increased to 13.8% in 2018 and 18.7% in 2019.⁶² Interviewee D1120, who has worked with Meituan from 2013, talked about Meituan's huge subsidies to both restaurants and customers:

I do not know whether Meituan is making profits or not now, but when it started, this platform prepared 650 million yuan for the first eight months. However, after no more than four months, all the money had been spent. One Meituan station manager [see Section 5.3.1 on what is meant by station manager] told me so several years ago. The

⁶² Data source: <https://www.weiyangx.com/292845.html> 美团点评正式在港提交招股书：2017 年亏损 28.53 亿元 [Meituan Dianping officially submitted its prospectus in Hong Kong: a loss of 2.853 billion yuan in 2017] Accessed on: 19 September 2022

platform had to subsidise the restaurants and customers, and also pay delivery drivers' salaries. All of these things cost money! (D1120)

Therefore, small platforms were all but eliminated as a result of the subsidy competition, and only platforms with financial strength won out. From 2011 to 2018, Eleme and Meituan attracted millions of dollars from different investors (See Table 5.1). This is why in big cities such as Shanghai, where Eleme is headquartered, “it is really hard for small platforms to squeeze into Shanghai’s market; at least in the online food delivery aspect, almost all people are using Meituan or Eleme” (D1124).

Year	Eleme		Meituan	
	Capital	Investors	Capital	Investors
2010	/	/	\$12 million	Sequoia China
2011	Unverified sum in the millions of US dollars	GSR Ventures	\$50 million	Alibaba, Sequoia China, Northern Light Venture Capital, Huadeng International
2013	\$25 million	Matrix Partners China, GSR Ventures, Sequoia China		
2014	\$80 million	Dazhong Dianping	\$1 billion	China Asset Management Co.,Ltd., General Atlantic, Sequoia China, Alibaba
2015	\$350 million (Jan)	CITICPE, Tencent, JingDong, Dazhong Dianping, Sequoia China	/	

	\$630 million (Aug)	Hualian, CITICPE, Tencent, JingDong, Sequoia China		
2016	\$1.25 billion	Alibaba, Ant Financial	\$3.3 billion	Tencent, DST, Temasek, Baillie Gifford, Trustbridge Partners, Hillhouse Group, Capital Today, China International Capital Corporation Limited, Gaoda Capital, CPPIB, China Renaissance
2017	\$1 billion	Alibaba	\$4 billion	Tencent, Sequoia China, Coatue Management, Tiger, GIC, CPPIB, H Capital, The Priceline Group, Hundreds Capital, FountainVest Partners, China- United Arab Emirates Joint Investment Fund
2018	\$9.5 billion	Alibaba, Ant Financial	\$1.5 billion	Tencent, Oppenheimer, Dasarna, Lansdowne, China Chengtong Holdings Group Ltd.

Table 5.1 Eleme and Meituan's investors and investment amounts from 2011 to 2018. "/" means data is not available. Source: discussions from Baidu Tieba (https://tieba.baidu.com/p/5887348995?red_tag=1220914269) 美团融资过程 [Meituan Financing

Process]) and Sohu news reports (https://www.sohu.com/a/227777923_99937713 饿了么融资时间表 [Eleme Financing Schedule]) Accessed on: 19 September 2022.

Another reason for their success is that Eleme and Meituan have taken advantage of modern technologies: Eleme uses Alipay for online payment, and Meituan cooperates with WeChat for mobile payments. These convenient payment methods attract both customers and restaurants nowadays. Before 2014 when online payment emerged, the platforms were only used for ordering food online, and restaurants were responsible for delivering the food. Even though they recruited their own delivery teams later, Eleme and Meituan also experienced a period when the delivery drivers had to use cash offline. Talking about the improvements to the online food delivery industry from 2013, D1120 described the inconveniences at that time:

Before we used online payment, every delivery driver had 1,000 yuan every day to pay for the orders in advance. At that time, after the customers ordered food online, we went to the restaurants, paid for it and picked up the order, and then delivered it to the customers and got the money. But problems arose if the customers were not satisfied with the food and wanted a refund. Now the online payment technique has solved this problem. So we can see that this industry is becoming more standard and professional. It is improving. (D1120)

With financial and technical advantages, these two dynamic companies – Meituan with 65.1% market share and Eleme with 32.8% share in 2019⁶³ – are leading this industry and expanding their businesses after years of cash-burning. Most orders on these two platforms are delivering food, and drivers can finish several orders at the same time. Besides this, there are other personal services: delivering flowers, birthday cakes, medicine, etc. Meituan “same-city” business (*Meituan Tongcheng*) and Eleme “immediate-delivery” business (*Fengniao Miaosong*) also allow customers to order anything from any restaurant in Shanghai, no matter the delivery distance, but for a higher price (at least 16 yuan per order). Generally, the diverse delivery business

⁶³ Data source: <https://technode.com/2019/12/17/chinas-food-delivery-growth-slows-to-four-year-low-report/>.

enables customers to buy everything online from real markets, and also brings profits for the platforms.

It is worth noting that both Meituan and Eleme are each only one arm of their respective parent companies (see Figure 5.4). Meituan's food delivery business merged with the Dianping platform (a restaurant-review and booking platform similar to Yelp) in 2015. Nowadays, the Meituan Dianping company is evolving into a one-stop "super app" offering consumers more than thirty types of services, including in-door business (such as entertainment and dining), hotel and flight booking business, a bike-sharing business (Mobike) and a ride-hailing business. In 2019, 56% of Meituan's revenue is from food delivery, while 23% is from in-door business, hotel and tourism business, and 21% is from its new business (such as bike-sharing and ride-hailing business, online grocery delivery business).⁶⁴ Eleme's owner, Alibaba, is an online emporium with market capitalisation of nearly \$700 billion, the world's seventh-biggest listed company. To cater to market demands, these two powerhouses are also expanding into other areas, such as e-grocery delivery (e.g. Alibaba's Freshippo and Meituan's Maicai).



⁶⁴ Data source: <https://xueqiu.com/9963348609/145756351?page=4> 美团 2019 年财报: 日吸 2 亿元扭亏为盈背后, 商家正暗潮涌动 [Meituan's 2019 financial report: Behind the daily absorption of 200 million yuan to turn losses into profits, merchants are complaining] Accessed on: 20 September 2022

Figure 5.4 Screenshots of the home page of Meituan Dianping (left) and Alibaba's Alipay (right), showing the range of services offered by their parent companies. Source: <https://technode.com/2020/04/01/meituan-faces-challenge-from-alipay-on-its-home-turf/> *Meituan faces challenge from Alipay on its home turf* Accessed on: 20 September 2022

With their great financial strength, the food-delivery war between these two giant unicorn companies is intense, in terms of both the number of customers and the volume of orders.⁶⁵ More importantly, the rivalry between Meituan and Eleme is a proxy war between the mighty Meituan Dianping and well-capitalised Alibaba. However, the head-to-head competition between Meituan and Eleme is “unhealthy” because it is fuelled by subsidies, according to Eleme CEO Wang Lei.⁶⁶ To expand their market, in their early years the two platforms competed to offer huge amounts of money to restaurants, customers and delivery drivers. In July and August 2018, Wang also pledged that a year later there would be no more crazy subsidy wars, after offering one billion yuan in subsidies.⁶⁷

5.2.3 Recent developments and the impact of COVID-19

After the coronavirus outbreak in late January 2020, Meituan and Eleme faced mounting complaints from restaurants which accused the platforms of implementing excessive commission fees and exclusive partnership clauses. In February 2020, restaurant associations in Hebei, Guangdong, Shandong, and Sichuan Provinces and Chongqing city collectively called for Meituan and Eleme to lower the commission rates charged against the restaurants, saying that, “Most of the restaurants cannot endure them”.⁶⁸ A restaurant association in Guangdong also received several hundreds of

⁶⁵ The term “unicorn company” is taken from Kenney and Zysman (2018). Their definition of “unicorns” is venture capital-backed private firms that “have market capitalisations of over \$1 billion” (p. 36).

⁶⁶ See the news report in 2019: <https://cloud.tencent.com/developer/news/499726> 告别 5 毛钱的外卖，饿了么 CEO 王磊：外卖补贴大战已结束 [Say goodbye to the 50 cents takeout, Ele.me CEO Wang Lei: The takeaway subsidy war is over] Accessed on: 20 September 2022

⁶⁷ Source: <https://technode.com/2020/04/01/meituan-faces-challenge-from-alipay-on-its-home-turf/> *Meituan faces challenge from Alipay on its home turf* Accessed on: 20 September 2022

⁶⁸ See related news reports: http://www.acfic.org.cn/fgdt1/qiyejiazhisheng/202002/t20200218_156731.html 重庆市工商联（总商会）餐饮商会 1987 家会员企业关于请求美团点评、饿了么等平台公司减免佣金、共克时艰共同打赢疫情防控阻击战的公开呼吁信 [1987 member companies from restaurant associations in Chongqing requesting Meituan Dianping, Eleme and other platform companies to reduce commissions and overcome difficulties together to win the battle against the pandemic]; <https://dy.163.com/article/F6DH47BA0511A8PS.html> 全国餐饮联名举报：常常涨佣金的美团，为何这次犯了众怒 [Meituan, which often increases commissions, why complained

complaints directed at Meituan because of its exclusive partnership clauses. Restaurants argued the commission they paid to Meituan and Eleme should have been reduced by more than 5% during the pandemic. Meituan was also accused of monopolistic operation by the Sichuan restaurant association. Another accusation directed at the platform came from an online open letter published on April 10 addressed to Wang Xing, the CEO of Meituan.⁶⁹ In this letter, restaurant owners complained about high commission fees, which, they claimed, made for the bulk of the platforms' income.

It should be noted that discontent among small restaurant owners was already brewing in 2019, but the aggravated conflicts between the platforms and restaurants had not broken out before then because both parties were able to earn money from enough orders. Hit hard by the COVID-19 pandemic, the limited online food delivery business became life-saving for many restaurants because of the travel restrictions and consumers' insufficient confidence in offline consumption activities. However, the platforms also aimed to get a slice of the cake by raising the commission fees, even though restaurants faced high fixed costs (e.g. material, house renting and labour costs). Facing a business downturn, the majority of the restaurant interviewees said they could not get substantial assistance from the platforms. Generally, there were three main complaints from the restaurants:

- a) The restaurants feel exploited by the platforms because they have to pay more than 20% of their income as commission fee.
- b) The restaurants pay a lot towards the platforms' advertisements and promotion activities, yet the rules are dominated by the platforms.

by national restaurant associations this time]; <http://finance.sina.com.cn/stock/hkstock/ggscyd/2020-03-04/doc-iimxxstf6301898.shtml> 美团被举报疫情期间提价背后：佣金是最大收入来源 [Behind Meituan's increasing price during the pandemic: commissions are the biggest source of income] Accessed on: 20 September 2022

⁶⁹ See the open letter from a news report: <https://dy.163.com/article/F6809LPS05451X49.html> 一封致王兴的公开信揭开美团真相：商家不满，外卖小哥压力大 [An open letter to Wang Xing reveals the truth of Meituan: restaurants are dissatisfied, and the delivery drivers are under great pressure] Accessed on: 20 September 2022

- c) Because of the fierce competition between the two platforms, the restaurants face the dilemma of whether to cooperate exclusively with one platform; if they do not do so, the commission fee will be higher.

I discuss each of these complaints below.

a. High and rising commissions fees

My interviews with the restaurant owners found that the commission fee which they paid to the platforms was at least 20%; however, this number had been much lower in the previous five years. At the initial stage of the online food delivery business, the restaurants paid only 8% of their income for each delivery using the platforms. In 2016–2017, this number soared to 15%–16%, and then increased again to 20% after 2018. For some small restaurants, the high commission fees have almost eliminated their profit on each order. Although the exact amount of commission fee is based on the type, size and location of the restaurants, at least 4.5 yuan is paid to the platforms for each online order. According to Meituan's financial report, in the first quarter of 2020, the average commission fee from each order rose by 4.25%, from 5.97 yuan to 6.23 yuan, compared with the first quarter of 2019.⁷⁰

Besides this, restaurants have to pay higher commission fees during bad weather and midnight peak time (from 10 p.m. to 2 a.m.). Some interviewees said that their delivery areas are narrowed by the platforms during severe weather, and more money has to be paid if they apply to extend the distribution areas. For some restaurants cooking midnight snacks, they have to pay the platform an extra 0.6 yuan for each order from 10 p.m. to midnight, and an extra 1 yuan for each order from 10 p.m. to 2 a.m.. This is why many restaurants complain that even if they work hard until midnight, the income is still limited because a substantial portion of their income goes to the platforms.

⁷⁰ Data source: https://www.sohu.com/a/398640666_477212 美团一季度每单佣金同比上涨超 4% 有商家难忍高佣金建微信群送餐 [Meituan's commission fee from each order rose by more than 4% year-on-year, and some restaurants start to deliver food through their own Wechat groups because of this] Accessed on: 20 September 2022

b. More paid promotion schemes, fewer discounts from the platforms

Apart from the high commission fees, restaurants have to pay for advertisements to get higher rank and more exposure on the platforms. When opening the Meituan and Eleme apps, some restaurants with promotions and higher rank will be recommended to customers (see Figure 5.5). However, whether and where the restaurant's name appears on the first few pages of the app is decided by the money they have paid to the platforms. One restaurant owner said that previously his restaurant could appear on the first page in Meituan just because he had a close personal relationship with the marketing manager. However, nowadays, the advertisements on the apps must be paid for with money and "nothing is free". After paying an advertisement fee of 10,000 yuan per month to Meituan, the number of online orders in his restaurant doubled. Therefore, the budget for the advertisements and higher ranks has become a fixed expenditure for some restaurants, in order to get more orders.

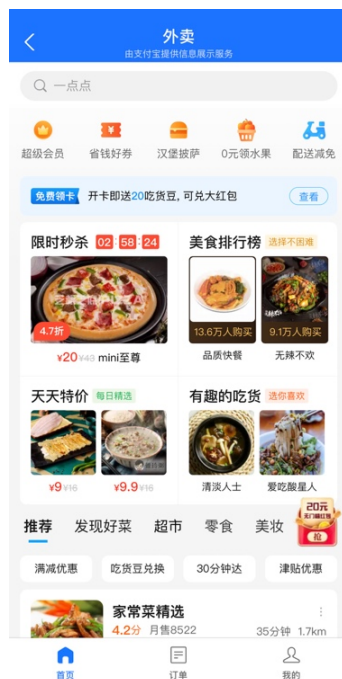


Figure 5.5 Screenshot from Eleme's homepage. On the left side, a pizza restaurant with promotions is advertised. On the right side, two restaurants are recommended, and it shows how many customers have consumed this food.

In order to get more exposure on the platforms, another way for the restaurants is joining in the promotion activities launched by the platforms. To induce customers to order more, some discounts are provided. For instance, 5 yuan is discounted if the total amount of the order is more than 30 yuan. At the initial stage of the online food delivery business, the discounts to customers, or most of the discounts, were paid by the platforms; however, nowadays, they are almost always paid by the restaurants. A delivery driver who had worked in a restaurant told me:

I used to manage a restaurant and I know this. Now all the discounts are paid by the restaurants, not the platforms, so Meituan and Eleme never lose money. For instance, a promotion is deducting 10 yuan if the order is more than 20 yuan. The platforms subsidised the restaurants for 5 yuan in the past, but now, all the 10 yuan is paid by the restaurants because the platforms' business is growing. Whether they are making money or not in these promotions is the restaurants' business. Eleme or Meituan never care about this. These platforms just transfer money from the left hand to the right hand. (G1109)

Interviews with two restaurant owners confirmed this point:

Apart from the commission fees, we sometimes pay for advertising on these apps. If you do not advertise, you cannot get many orders online. If you pay extra money to Eleme or Meituan, your restaurant will be recommended or shown on the first page. There are several hundred restaurants in these platforms, and it is really hard for customers to find your restaurant if the restaurant's name does not show on the first few pages. More money means more exposure. (R1103)

This is the "streaming war" in the internet era. The more money you give, the more frequently your ads appear. (R1101)

c. Competition between the two platforms also affects the restaurants

Both Eleme and Meituan look carefully at the supply side – the restaurants – and try to firmly bind them to their own platform. The loyalty of the restaurants helps them to

have lower commission fees and more resources (for example, online exposure). These favourable offers seem attractive to the restaurants. According to a restaurant owner, Meituan promised that the commission fee would always remain 20% if they cooperate exclusively with Meituan, and Eleme promised that a large loan and more free online advertisements would be provided if they cooperate exclusively with Eleme. On the receiving end of offers from both, one restaurant owner (R1104) told me that he is always on the alert – cooperating exclusively with one platform means offending the other, and losing customers from the other platform. He maintained that there are more risks to signing contracts with only one platform because all the customers and resources are manipulated by the platforms. He rejects exclusive cooperation, and so must accept orders from both platforms.

Exclusive cooperation causes conflicts between the platforms and restaurants. In March 2020, Eleme was accused by more than ten restaurants in Heilongjiang Province because of the 500 yuan as the exclusive cooperation deposit.⁷¹ This means that when they sign exclusive cooperation contracts with Eleme, the restaurants pay 500 yuan; if these restaurants cooperate with Meituan later, the money will not be refunded, and their online contract with Eleme will be closed by Eleme.

In the face of the power of the platforms, restaurants still use them for their online food delivery businesses. Small restaurants which can earn only limited profits from each online order pay more attention to the number of orders they receive. This is also the reason they use both platforms, paying for advertisements and promotions – to get more orders. In other words, this is a low-margin but high-volume business for restaurants. A restaurant owner said that maybe only 2 yuan could be earned from each online order, but it is another source of income, in addition to the income from meals served in the restaurant. For some new restaurants, online business can be regarded as a brand

⁷¹ See related news report: <https://baijiahao.baidu.com/s?id=1661392446407567090&wfr=spider&for=pc> 美团外卖涨佣困局：遭商家举报突然提高佣金垄断经营 [Dilemma of Meituan's increase of its commission fee in the takeaway industry: complained by restaurants to suddenly increase the commission and monopolisation] Accessed on: 20 September 2022

promotion channel. Busy white-collar workers in Shanghai usually order food online on working days, even though the price is higher, and then go to the restaurants on weekends if they like the food. Therefore, the restaurants use the online business to attract more customers and boost their physical economy.

Although the platforms officially say that they earn very marginal profits from each order, mounting criticism from restaurants suggest that they gain more profits than they claim to. According to Meituan's financial statements in 2019, the gross profit from its online food delivery industry was 10.23 billion yuan, and the total number of orders was 8.72 billion, and therefore the profit from each order was about 1.17 yuan across the year; in the fourth quarter of 2019, the gross profit from the online food delivery industry was 2.79 billion yuan, and the total number of orders was 2.51 billion, therefore the profit from each order was about 1.1 yuan.⁷² A take-out food association in Guangdong also argues that the percentage of the labour cost of the food delivery drivers as a proportion of the total income decreases gradually every year, but the rate of commission from restaurants increases gradually.⁷³ In other words, the strong profits of these platforms' online food delivery business are largely driven by commission revenue from the restaurants.

In summary, with the rise of the online food delivery industry in China, the conflicts between restaurants and platforms are deepening. The high commission fees weigh heavily on restaurants, which also pay for advertisements and promotions in the apps in order to get more orders. In this sense, restaurants using these platforms are “paying a tithe to the platform owners in order to use their scarce asset” (Srnicek, 2021, p. 38), and platform companies controlling the data “which enable targeted advertising build an online environment which they then rent to others for a fee” (Srnicek, 2021, p. 37).

⁷² Data source: <https://baijiahao.baidu.com/s?id=1664024845068040497&wfr=spider&for=pc> 外卖每单毛利约 1 元 美团用户增长乏力盈利能力能否持续 [The profit from each order in the online food delivery industry is about 1 yuan, whether Meituan can continue the profitability] Accessed on: 20 September 2022

⁷³ Data source: <http://www.yeexing.com/gprm/gphq/94839.html> 广东餐饮协会回应美团：佣金一直上涨外卖骑手成本逐年下降 [Guangdong Restaurant Association responded to Meituan: Commission fee has been rising, and the cost of the food delivery has fallen year by year] Accessed on: 20 September 2022

However, the platforms' monopolisation and growing profits have recently been greatly impacted by two factors recently. The first is Xi Jinping's crackdown on Alibaba, Meituan and other big tech companies. In March 2021, China's top antitrust regulator said it had issued fines to twelve Chinese companies for more than ten investment deals in the internet sector that were in violation of the Anti-Monopoly Law.⁷⁴ Nearly all of the fined companies are considered "big tech" in China, including Alibaba, Tencent, Didi Chuxing, Baidu, JD.com, ByteDance, Meituan, and Suning. In April 2021, Alibaba was fined 18.2 billion yuan by the State Administration for Market Regulation (SAMR) because of its monopolisation of the market.⁷⁵ Similarly, in October 2021, Meituan was fined 3.4 billion yuan.⁷⁶ The hefty penalty on Meituan and Eleme shows a strong anti-competitive position adopted by the from Chinese regulators, but imposes a significant financial burden on the platform companies. The second factor is the COVID-19 crisis, which hit both the supply and demand sides of Meituan and Eleme's business starting in since late January 2020. As a result of the severe lockdown in the first months of 2020, the in-store business of Meituan and Eleme almost stopped entirely. To improve their overall market performance, these platform companies began to rely more on their online delivery business, which was less impacted by this crisis. One emerging and rising business is online fresh food and grocery delivery (See Chapter 7.4.2). In February 2020, Meituan's online sales of fresh food – vegetables, fruit, seafood, and meats – jumped more than 200% year-on-year.⁷⁷ However, similar to restaurant delivery, grocery delivery is another subsidy-fueled battle for platform companies. Partly because of the additional expenses incurred opening its new businesses, in the whole year of 2021, Meituan lost 15.6 billion yuan. In conclusion,

⁷⁴ See: https://technode.com/2021/04/06/insights-antitrust-push-in-china-tech/Antitrust_push_in_China_tech Accessed on: 20 September 2022

⁷⁵ See: <https://baijiahao.baidu.com/s?id=1696616680670897919&wfr=spider&for=pc> 国家市场监督管理总局对阿里巴巴行政处罚决定书全文 [Full text of the decision of the State Administration for Market Regulation's penalty on Alibaba] Accessed on: 20 September 2022

⁷⁶ See: <https://technode.com/2021/10/08/meituan-fined-534-million-for-antitrust-violations/> Meituan fined \$534 million for antitrust violations Accessed on: 20 September 2022

⁷⁷ Data source: <https://technode.com/2020/02/27/covid-19-an-opportunity-for-e-commerce/> Covid-19, an opportunity for e-commerce Accessed on: 20 September 2022

Eleme and Meituan have suffered heavy blows both from the COVID-19 outbreak and from the crackdown by regulators.

5.3 The relationships and operation of the online food delivery platforms

5.3.1 The relationship between different stakeholders: who are beneficiaries?

Before explaining how this industry operates, this section will firstly introduce the function of each role and their relations with each other. There are six actors in the online food delivery business in China: central and local government(s), the online food delivery platforms, the contractors, the food delivery drivers, the restaurant owners and the customers.

The role of central and local government is to set industrial regulations and supervise the online food delivery platforms. However, both national and Shanghai regulations show that both levels of government have given widespread powers to these online food delivery platforms to supervise restaurants. As Cao argues, “China seems to have adopted a less stringent attitude towards digital platforms... Also, compared with other jurisdictions, China also has a relatively low number of legislative proposals in the area” (2020, p. 174). For instance, checks on food safety agreements, restaurants’ food business licenses, and the management of customers’ complaints about food quality are all undertaken by the online food delivery platforms, not food safety regulatory authorities.⁷⁸ This further contributes to the dominance of the two platforms in the food-ordering industry. Due to the novelty of their offered services, the platform companies can exploit gaps in the regulation framework and this can generate unfair competition (Montalban et al., 2019).

Customers ordering food online enjoy the convenience of the platform economy and have the right to comment on the delivery drivers’ services, which has a great influence

⁷⁸ See national and Shanghai regulations: http://www.gov.cn/gongbao/content/2018/content_5268787.htm 网络餐饮服务食品安全监督管理办法 [Measures for the Supervision and Administration of Food Safety in Online Catering Services], https://www.shanghai.gov.cn/nw42235/20200823/0001-42235_1267553.html 上海市网络餐饮服务监督管理办法 [Measures for the Supervision and Administration of Online Catering Services in Shanghai] Accessed on: 20 September 2022

on the drivers' income (this will be explained in Chapter 6). The restaurants are responsible for offering qualified food to customers before it is delivered. As long as they do not receive complaints from their customers, restaurant owners will receive their online business income every three working days, transferred to their bank accounts after the platforms have deducted 18%–23% as the commission fee. To attract more orders and promote their online business, the restaurants have to discount a lot for the customers in promotions. As noted in Section 5.2.3, the second complaint from the restaurants is that most discounts are paid by the restaurants and encouraged by the platforms.

After receiving the money from customers' online orders, the platforms are responsible for arranging and managing delivery drivers to finish the orders. In theory, the food delivery drivers are recruited, trained and managed by these platforms. However, my fieldwork in Shanghai found that various contractors (*waibao gongsi*, or *erbao gongsi*), acting as middlemen, play an important role in this process. The contractors are neither branch companies nor employees of Eleme or Meituan platform. They call themselves third-party companies (*disanfang gongsi*), responsible for undertaking Meituan or Eleme's delivery business and managing the delivery drivers as the platforms' franchisees. For instance, Quhuo Tech Company is one big third-party company, providing workforce management operations for Meituan and Eleme.⁷⁹

In Shanghai, big contractors compete in different districts. For instance, Jiangxi Fengniao, Wanxiang Wuliu, Anhui Chengzhong, Huarun, and Henan Province Zhonglian Co. Ltd. are five big contractors with stations in different districts in Shanghai, as shown in Figure 5.6. Here, the term “station” (*zhandian*) means both a small office, the workplace of the station manager, and a fixed delivery area within which the drivers affiliated with this station are expected to deliver. Normally, the

⁷⁹ See the company's introduction and news report: <https://www.quhuo.cn/#/>; https://t.cj.sina.com.cn/articles/view/5073804843/12e6c1e2b00100oyjy?cre=tianyi&mod=pcpager_fin&loc=6&r=9&rfunc=9&tj=none&tr=9 美团、饿了么的幕后合作者: 签约 4 万名外卖小哥, 年入 20 亿 [Behind-the-scenes collaborators of Meituan and Eleme: Signed contracts with 40,000 delivery guys, with an annual income of 2 billion yuan] Access on: 20 September 2022

delivery area has a radius of 6 km, and the number of drivers recruited in the station is based on the number of orders: areas with many orders need 80 to 100 drivers on average; areas with a moderate number of orders need 40 to 50 drivers at least. Once some small contractors exit this industry because of bad management or financial problems, big contractors with strong capital can bid for a new station in Shanghai and expand their business.

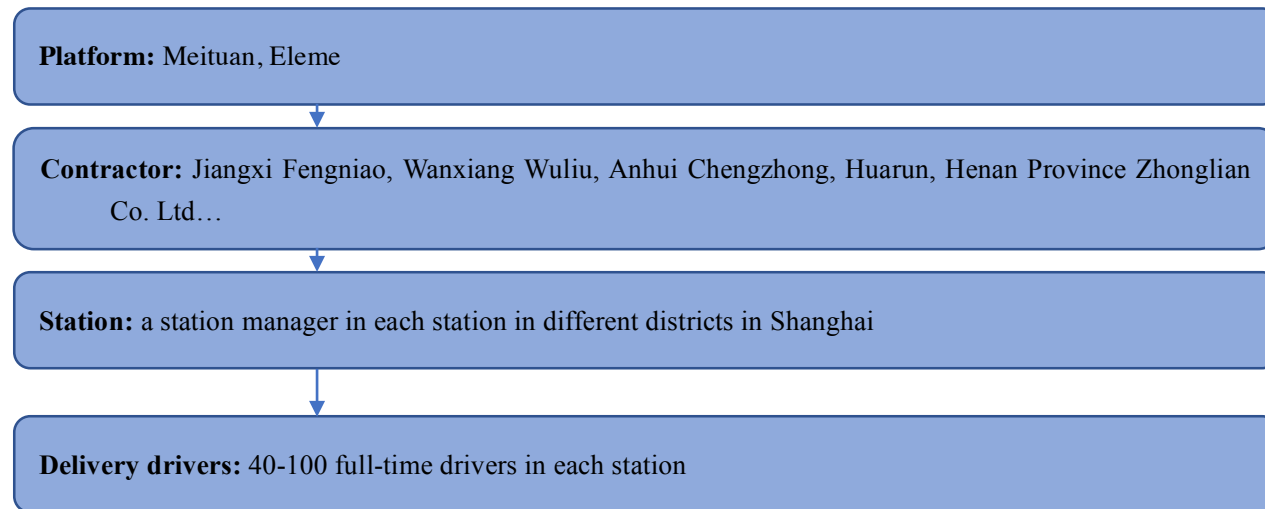


Figure 5.6 The hierarchy of platforms, contractors, stations and delivery drivers as discussed in this research. Source: author.

It is clear that the incentive for contractors to undertake Meituan or Eleme's delivery business is that a substantial portion of profits can be shared with the platforms. The contractors can earn money from the delivery drivers' income: Eleme promises 7 yuan per order but the contractors may only give the drivers 6 yuan per order, for instance. A contractor in Xiamen can earn 1.1 yuan from each order on average, and 1.7 yuan per order or even more than 2 yuan per order if its performance is rated as excellent.⁸⁰ My fieldwork in Shanghai also found that the amount of profit is decided based on the contractors' work performance – whether they have followed the work regulations set by the platforms, or whether they have managed the delivery drivers and finished delivery tasks well. A delivery driver who had previously worked as an assistant of a station manager for Eleme explained how the contractors make money:

Eleme and the contractors share the commission fees. For instance, of the 22% commission fees, either 12% is for Eleme, 10% is for the contractors, or the other way round. Eleme transfers the drivers' income to the contractors on the first of every month, and then the contractors pay us. Our income is decided by the contractors in some sense. The contractors make money from the price gap – just no more than 1 yuan for each order. But how many orders every day? How much can they earn every month? It is a big number. This year, some of Meituan's officers and contractors have been accused of bribes. Anyway, what we can see is that the price of each order is lower than before, and some contractors are becoming richer. (D1132)

It should be noted that only full-time delivery drivers are recruited and managed by contractors, while freelance delivery drivers are directly managed by their working platforms.⁸¹ Therefore, the relationships between these six actors can be summarised as in Figures 5.7 and 5.8. The profit distribution is summarised in Figure 5.9. The government empowers the platforms to supervise the restaurants. Restaurants are responsible for offering food and discounts to customers. At the same time, restaurants

⁸⁰ See news report: https://www.guancha.cn/ChanJing/2020_01_08_530852.shtml 从工厂到骑手的蓝领青年：活在千亿巨头的身影下 [Blue-collar youth from factories to riders: living under the shadow of billionaire giants] Accessed on: 20 september 2022

⁸¹ The difference between full-time and freelance delivery drivers will be introduced in Section 5.4.

have to pay 18% to 23% of their income to the platforms as commission fees. The food delivery drivers are responsible for delivering the order, and receive service comments from the customers. However, the recruitment, management and income payment of the full-time drivers are undertaken by different contractors, not the platforms they are working for. Managed by the platforms, the contractors have to improve their performances to get more profit share from the commission fees, and to expand their business to other districts in Shanghai.

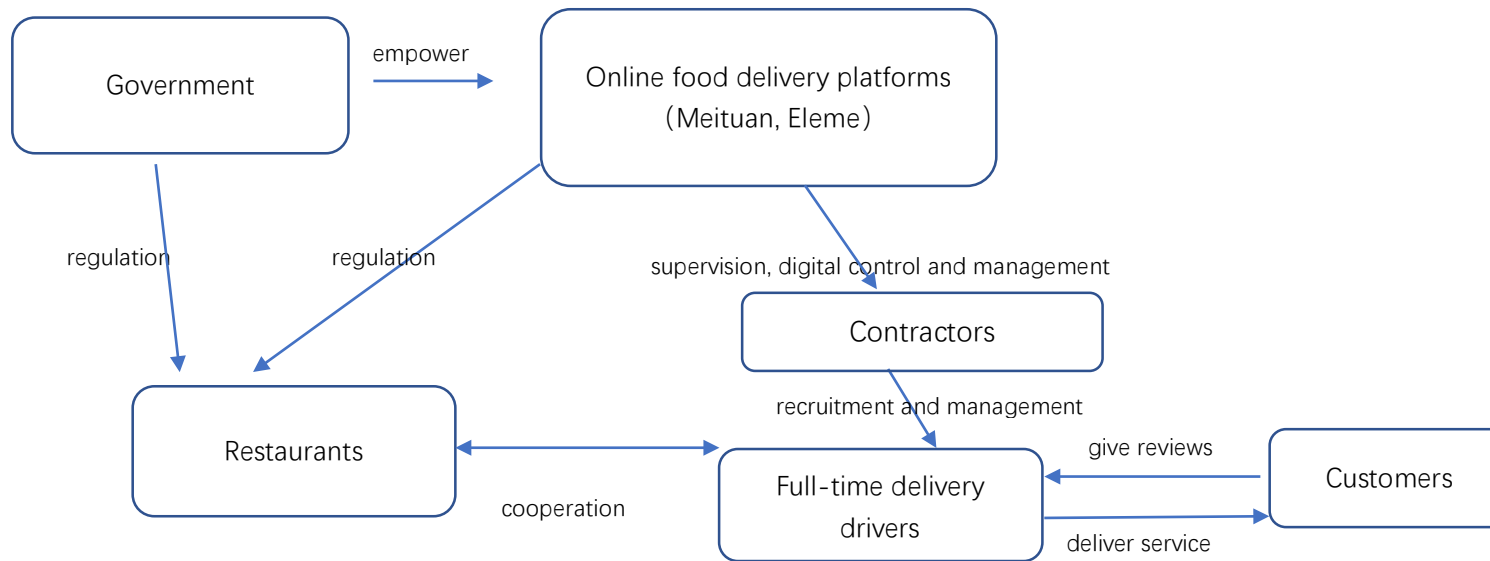


Figure 5.7 The roles of different stakeholders (full-time delivery drivers) and their relationships. Source: author.

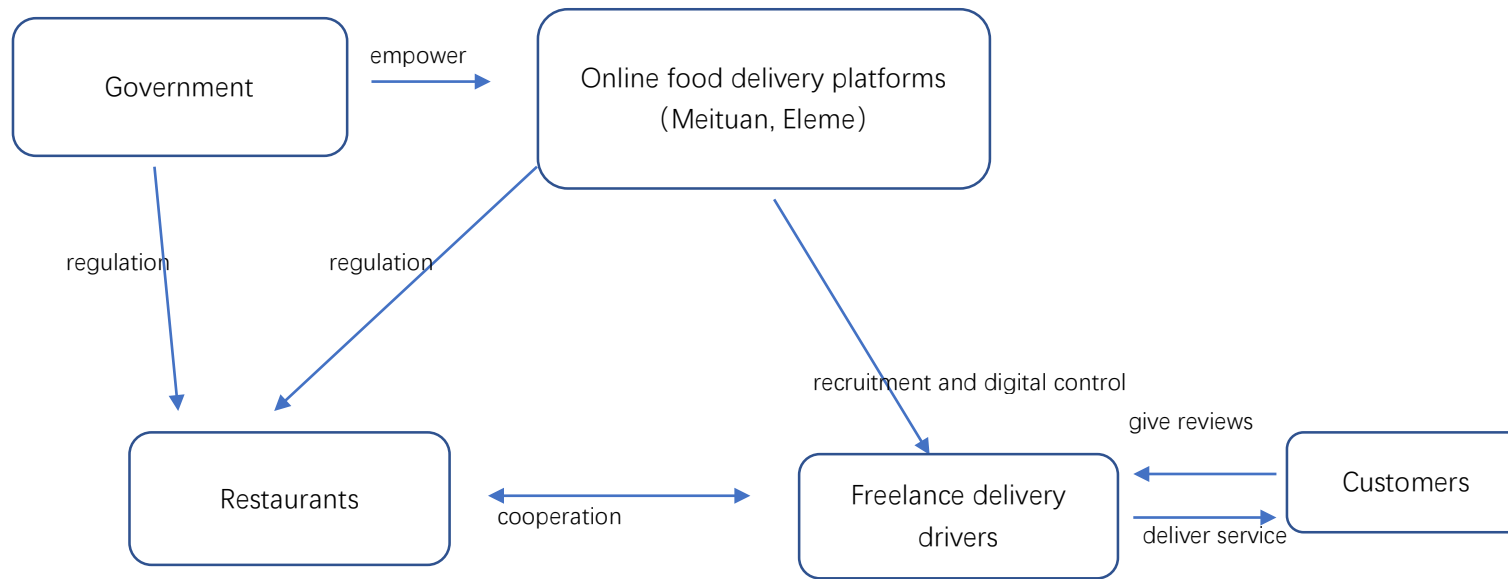


Figure 5.8 The roles of different stakeholders (freelance delivery drivers) and their relationships. Source: author.

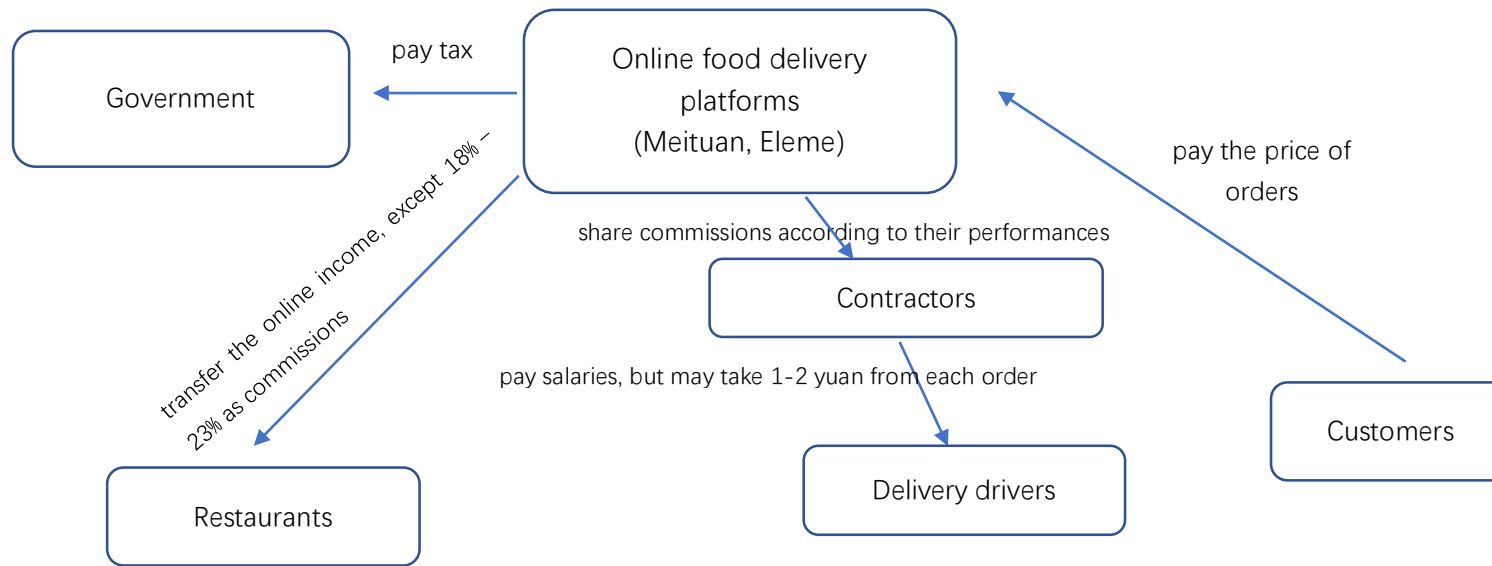


Figure 5.9 How profits flow in the online food delivery industry. Source: author.

To better understand how profits flow in this industry, I followed an Eleme order in a restaurant. In this order, the customer paid 32 yuan for the food, 1 yuan for the package fee and 2.3 yuan for the delivery fee. To attract more customers, this restaurant discounted this order by 10 yuan; this resulted in the customer only paying 25.3 yuan. An interview with the restaurant owner showed that the restaurant received 16 yuan because the remaining 9.3 yuan was Eleme's income. Of this 9.3 yuan, the delivery driver told me he could receive 5.3 yuan as his income (if he delivered on time and received no bad reviews from the customer). Therefore, 4 yuan is shared by Eleme and the contractors.

In summary, after the customer's payment, the platforms, contractors, restaurants and delivery drivers all take a share of the profits. When this industry had just started, the platforms lost money because of their subsidies to both restaurants and customers. But now, the platforms have enough orders and gain the largest share of the profits: only the restaurants provide discounts to customers. The platforms are the biggest beneficiaries in this industry and capture the largest interest at the expense of other market participants. Considering the duopolistic market dominance in China's online food delivery industry and these platform companies' funding regime (introduced in Section 5.2.2), the platform owners are able to appropriate a generous portion of the entire value created by all the users on the platforms (Kenney and Zysman, 2016). As Woodcock and Graham (2019, p. 117) warn in their book, the gig economy is "built by design to convenience consumers, to return profit to platforms and, ultimately, to disempower workers." An interview with a delivery driver and a group discussion also show this point:

It is a hard time for the restaurants. They can only follow the rules set by the two platforms, such as the [payment of] commission fees. I think they are bullied by these platforms and only a few restaurants can make a profit. The aim of all restaurants focusing on the online food delivery business is to have more orders. This is not the beginning [of the industry] when the platforms could accommodate the interests of the restaurants. It is the same for our delivery drivers. We can only follow the rules

of the two platforms. Now Eleme and Meituan have the final say on everything in this industry. (D1118)

I think only the platforms are the beneficiaries in this industry. Many restaurants complain that they cannot earn much from online orders because of the high commissions. As delivery drivers, we do not make much money. Most profits belong to the platforms and they are the capitalists. (G1109)

Tens of millions of orders are finished through these platforms every day and 20% of all the turnover belongs to the platforms as commission fees. However, how much do they pay towards the delivery drivers' income? How much do they pay for the restaurants' promotions? (G1109)

In order to understand fully the operation of the online food delivery industry, it is necessary to examine the role of the contractors and how they share profits with the platforms.

5.3.2 The role of contractors

The biggest change after outsourcing business to different contractors in 2018 is that the drivers are no longer employees of Meituan or Eleme: in their working platform, they do not have the same labour contracts, minimum income and social security as they had before. A delivery driver who worked for Meituan said that he had a 4,000 yuan minimum income every month from the platform and Shanghai's social insurance scheme in 2015.⁸² Interviewee D1119 told me his experience of this change:

In 2016, I was in a Meituan team. At that time, we worked directly for Meituan and we had the minimum income and social security. It changed in 2018, and after that I quit. At first, the contractors cheated us, saying that nothing would change, but they required us to terminate our labour contracts with Meituan voluntarily. But we were not volunteering! We had signed a three-year contract with Meituan, but only two years later, they asked us to resign because of personal reasons. I told them I have no

⁸² Delivery drivers' participation in Shanghai social insurance will be explained in Section 6.4.2.

reason to resign! We protested at their company's main door every day. We argued that we could terminate the contracts, but they should compensate us with a sum of money. At last, we got about 10,000 yuan for each person. After 1 March 2018, the contractors have been responsible for managing [us]. Of course, all the benefits -- the minimum income and social security -- are not guaranteed [any longer]. As far as I know, all the stations in Shanghai are managed by the contractors, not Eleme or Meituan's sub-companies. (D1119)

For the platforms, this change helped them transfer legal labour responsibilities and cut the labour cost brought by the growing number of delivery drivers. As explained in Section 3.2.2, positioning themselves as “technology companies” and “digital marketplaces” in the business of connecting people, rather than as delivery companies, platforms tend to classify drivers as “independent contractors” or “owner-operators” rather than “employees”, depriving them of employment protections (e.g. minimum wages, overtime provisions, unemployment compensation, paid sick leave, health insurance and retirement benefits) (Vallas, 2019; Katta et al., 2020). The drivers do not have any labour relationship with Meituan or Eleme. The only contract between drivers and platforms is an electronic informed consent form when they register an account on the apps, which clarifies the responsibilities and obligations of the platforms, contractors and drivers. Most drivers just quickly skim through it and click “agree” when they register. This consent form cannot guarantee the drivers any labour rights because it is not recognised in law. Because of the platforms' invisibility, most inexperienced and young drivers fail to tell the difference between their “contractors” and “platforms”, and have an ambiguous notion of “companies”. The drivers wear Meituan and Eleme's clothes and use their apps every day, but they are not the employees of the platforms. They can only sign contracts with contractors. Therefore, it is easy for the platforms to shrink their legal responsibilities when labour disputes happen, as D1126 pointed out:

Many delivery drivers sign a contract, but with the contractors. Now the process is: Meituan manages contractors, and contractors manage us. We do not have any

relationship with Meituan, and our salaries are paid by the contractors. We are just employees at one of Meituan's outsourcing stations. When you have labour disputes and go to the Bureau of Labour, the government officer asks you: who are you suing? If it is Meituan, then Meituan argues that the business has been outsourced and according to our contracts with the contractors, we are not responsible for this. We have paid your salaries and transferred the money to the contractors. If it is the contractor, then they argue that we are working for Meituan and you should blame Meituan. (D1126)

However, one issue for the platforms is how to manage and supervise their contractors and the stations, and accordingly, how to share profits with them. Interviews with the station managers found that they face strict performance management targets from the platforms. All the stations are divided by the platforms into five levels according to their scores: 90–100 points is the first level, 80–89 is the second level, 70–79 is the third level, 60–69 is the fourth level and below 60 is the fifth level. For every new day, each station under the different contractors starts with 100 points, and they will lose points if orders are late, complained about or cancelled by the customers, and if they receive bad feedback from customers. For instance, an order with bad feedback from customers leads to a deduction of 15 points. Every two weeks, the platforms examine the stations' points and levels, and then decide their corresponding income for that period.⁸³ Higher levels mean more income, but if the station is in the fifth level in four consecutive periods (i.e., two consecutive months), the platform will change to another contractor to run the station.

Under this performance management system, the contractors and their station managers are motivated to perform better, but also face a lot of pressure. Interviews with a contractor for Meituan (A1102) and one for Eleme (A1101) show this point:

⁸³ The assessments for different contractors in different areas are not the same, and Eleme and Meituan may slightly change them across months.

Every night, after finishing all the orders, I review how many orders are late or complained about, and summarise which aspects we should improve. The good performance must be maintained every day. In other word, the good performance can be ruined in one day and we must always keep attentive to our scores. The assessments from Eleme are very strict, and as contractors, we can be fired by Eleme at any time because of bad work performance. Eleme is our boss and we are also facing a lot of pressure, especially at the middle and end of the month. (A1101)

Now in this area [Zhangjiang area], there are two contractors and they are both responsible for managing the drivers. Meituan can decide to withdraw the contract with the contractor who does not perform well. (A1102)

When the delivery drivers are punished 50 yuan because of a complaint, they feel hard done by and depressed. But for us as the contractors, it means a survival problem. These platforms cannot kindly give us profits for no reason. As a station manager, the amount of my salary is based on our station's level, and we have to improve our level according to Meituan's assessment indicators. (A1102)

Because of the pressure from platforms and the competition between different contractors, changes in contractor and station manager are frequent and common. Some station managers may leave because of bad job performance or the bankruptcy of their contractors; some station managers may be promoted to better areas or even become the manager of one area because of their good performance. However, this fluidity also means fluidity and insecurity for the delivery drivers. For instance, one interviewee told me his experiences of tracing his income back because of the bankruptcy of one contractor and a change in station manager:

When I worked in a Huangpu site, the contractor went bankrupt and the boss fled. But they did not pay my salary. When I asked our station manager, he said he had no solution and gave me the location of the contractor. It was very far away, in Baoshan District. I went there alone and found the contractor's boss, asking for my salary directly. In fact, it was only 3,000 yuan. When I went there, he was eating lunch and

said, help me throw away the garbage, [then] I will give you [the money]. I did so and got the money immediately. It would be useless to contact the station manager in a case like this. He [the station manager] is just an employee of the contractor. Maybe he cannot get his own salary also! These station managers can be replaced easily: every two to three months you maybe have a new station manager. They are managed by the higher levels. In fact, they cannot earn much if performances are not good. Maybe their salaries are lower than mine, several thousand yuan, I think. Many station managers quit because of too much pressure from Meituan. (D1124)

Basically, the responsibility of station managers, as the employees of their contractors, is to manage drivers in place of Meituan or Eleme, to arrange orders, and to process complimentary and, bad from customers, as well as any accidents drivers might have had in their work. As a Meituan station manager said:

The orders are first distributed by the algorithm systems on the computer intelligently, and I can change the orders in some special circumstances. For instance, when a delivery driver has a traffic accident, I can arrange for another driver to finish the order. As a station manager, my job responsibility is to finish all the orders on our system, including dealing with some irregular orders. When the drivers receive complaints or bad feedback from customers, I will help them process the appeal on our system to minimise the punishment. (A1102)

Everyday, the full-time delivery drivers (see Section 5.4.1 below) need to participate in a morning meeting for 30 minutes, where their station managers will stress the points they should pay more attention to, for instance how to avoid being complained about by customers. The working regulations are stuck on the walls of their offices to remind the drivers.

To boost morale and encourage the drivers, the station managers write down the aims of each assessment period (every two weeks) and sign it (See Figure 5.10). In this sense, the full-time delivery drivers and their station managers form a cooperative relationship:

the station managers rely on the drivers to finish more orders so as to gain more profit from the platforms; meanwhile, the drivers depend on the station managers to deal with orders and with bad comments and complaints, and get paid by the station managers. Since they have contact with their station managers every working day, the delivery drivers also recognise that the station managers face strict management, and they transfer this pressure onto their employees – the drivers. For instance, delivery driver D1105 said:

Sometimes, I feel sympathy for our station manager. When we are delivering orders, he is looking at our locations in his computer. If he finds you are going to be late, he will call you and hurry you up. He is more anxious than us. If his working performance is bad this month, his income may be lower than mine, just a few thousand yuan! (D1105)

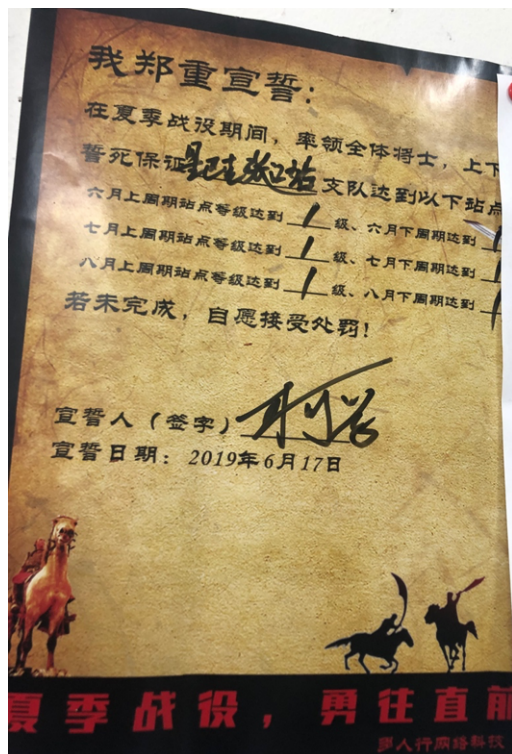


Figure 5.10 A pledge attached to a station's wall. In this notice, the station manager promises to reach the first level in the summer "battle" from June to August 2019. Source: author.

After explaining the roles of contractors and station managers, a remaining question is how delivery drivers are recruited and motivated by the station managers and platforms. Clarifying two different working types of delivery drivers, the next section will reveal their heterogeneous motivations for joining this industry, and the various work conditions the drivers face.

5.4 Management of the food delivery drivers

5.4.1 Management model: two different working types

Before entering the online food delivery industry, one decision the drivers have to make is choosing between the different working types. There are two different working types – full-time and freelancer⁸⁴ – with different management modes, advantages and disadvantages. Full-time drivers are based in one station and only responsible for delivering orders in a fixed area, normally within 6 km of the station. For instance, Figure 5.11 shows a station's territory in Xinzhuang, Minhang District. The full-time drivers' orders are distributed by the algorithm system automatically, and theoretically they have the privilege of getting more good orders than freelancers (e.g. delivering to nearby communities in buildings with lifts). However, they cannot freely reject the orders they have received more than three times a day, and they will be fined heavily if they deliver orders late, or receive bad comments or complaints from customers. This is because, as explained in Section 5.3.2, the station managers and contractors face strict assessments from platforms, and the full-time drivers working in a station have to follow those rules as the employees of the contractors. Also, as full-time workers, they face other regulations: at least eight working hours every day, twenty-eight working days a month, and a fixed price for each order (normally 6–8 yuan per order).

⁸⁴ Here, freelancer in Chinese is 众包(*zhongbao*).



Figure 5.11 Within the red lines is a station's territory in Xinzhuang, Minhang District. Source: Interviewee D1123.

Without restrictions from stations, the freelance drivers can work in any area in Shanghai and at any time they wish. Enjoying the flexibility of working areas and working time, they also lose the support from stations – all their orders have to be checked on their system from their smartphones. The algorithm system will recommend some nearby orders to the freelance drivers according to their locations, but the drivers can reject orders freely. Although the price of each order is based on the weather and delivery distance, normally the actual amount drivers can receive is relatively low, a minimum of 4.5 yuan per order. Compared with the monthly payment from stations for full-time drivers, freelance drivers can be paid every day – their income can be transferred from their apps to their bank accounts any time (at most once a day). The differences between the two working types are summarised in the following table (See Table 5.2).

	Full-time driver	Freelancer
Working time	At least 8 hours every day, 28 days a month	Flexible
Delivery area	Fixed, within 6 km based on the station	Any areas
Price of one order	Fixed, 6-8 yuan/order	Decided by the distance and weather conditions, the lowest rate is 4.5 yuan/order
Income payment	Paid by the station every month	Transferred from the apps to the bank card at any time (at most once a day)
Get orders by	Distributed by the system (<i>pai dan</i>)	Checking on the system (<i>qiang dan</i>)
Advantages	Likely to receive good orders; have the station's support	Freedom, outside control of station managers
Disadvantages	Can be fined easily if receive poor reviews or complaints from customers; cannot reject the distributed orders	Very hard to get good orders; the payment for one order is relatively low

Table 5.2 Comparison between full-time and freelance drivers. Source: author.

The different lives of full-time and freelance drivers' can be seen from the accounts of interviewees D1117 and D1123. D1117, a full-time driver working in a Zhangjiang station in Pudong District, described his work as follows:

I work from 10 [a.m.] to 8 [p.m.] every day. If I work more than twenty-eight days this month, I could get an extra 200 yuan. When I want to have a day off, I should ask our station manager for leave. For instance, I can have a rest day today, but our station manager might suddenly call me, saying there are too many orders this afternoon and I should work. Then, I must work. Even in the rain or typhoon days, I must deliver orders when needed. As long as I do not die, I should work; otherwise, our station manager will play tricks on me later. We do not have any allowances during the bad weather: the price of one order is 7.7 yuan. But if I finish more than 520 orders and work more than twenty-eight days this month, the price of one order

is 8.3 yuan. We can only transfer the orders we receive to others three times a day.

(D1117)

D1123, a freelance driver in Xinzhuang, Minhang District, compared his work with that of full-time drivers:

The good thing for full-time drivers is that they have the advantage of getting good orders – they can pick up orders within 1 km and deliver five to six orders at one time, but for us freelance drivers, [it's] maybe just three to four orders. The good orders are first distributed to the full-time drivers, and then to the freelance drivers. However, the full-time drivers are very careful [to avoid] bad feedback and complaints from customers. So when delivering food, the drivers' attitudes are very polite. Their motto is "the customer is king". But as freelance drivers, I do not care about this, because the freelance drivers are not managed by the stations or stations managers. I even know a freelance driver who shouts at the customers! The full-time drivers have fixed working hours, just like working in a factory. Freelance drivers can decide our own working time – open the app when I want to work and close it when I want to have a rest.

It should be noted that the drivers can transition between these two types freely. If freelance drivers want to become full-time drivers, they can sign up in any station; in fact, station managers also recruit or poach the best-performing freelance drivers. But normally, the transition is in the opposite direction: full-time drivers quit their stations and become freelancers. After finishing their compulsory eight hours working, or during bad weather, full-time drivers will re-log their apps and change their status to "freelancer" in their systems, starting to deliver orders as freelance drivers. Interviews with drivers revealed that, for most of them, choosing to be full-time in a station is a fast way to become familiar with this job and to gain some experience. In other words, they regard the full-time experience as a transitional or training period. For instance, D1106, who worked in a team at first for several months and then became a freelancer, explained his reasons for quitting the station:

Most drivers start this job by choosing the full-time type. After they become familiar with the rules and routes, they quit their station and become freelancers. This is why the turnover rate is high in the stations. Full-time drivers have no choice but to work during rainy days. Besides, the full-time drivers are not employees of Eleme or Meituan. They do not have social insurance but face a lot of regulations and supervision in the station. Full-time drivers have to participate in the morning meetings every day. Being late or absent means being fined 50 yuan. It is meaningless to have the meeting every day, and I can earn more by delivering orders during that time. When I worked in the stations, about 40 drivers quit. Most of them were angry about unreasonable punishments, strict working hours and rigid rules, so they decided to become freelancers outside of the stations. Besides, the full-time drivers do not have any flexibility during bad weather. Therefore, I know a lot of full-time drivers who choose the freelancer type on their apps on rainy nights because of the extra flexibility. (D1106)

Here, “freelancer” and “full-time” do not indicate the working hours – freelance drivers may work full-time and this job may be their only income source. In fact, my survey data shows that 71% of freelance drivers do not have another job (Question 19 in my survey), and 30% work nine to twelve hours every day, 23% work more than twelve hours every day (Question 16), and 85% work more than five days a week (Question 17). As D1103, a freelance driver, said: “In fact, we regard this job as full-time work. Our working type is freelancer, but the working time and workload are the same as for the full-time drivers”.

5.4.2 Different incentives for different working types

As explained in Section 5.4.1, compared with full-time drivers, the working flexibility is the biggest advantage for freelancers. It is attractive to the drivers, especially those young migrant workers who have factory-work experience and have to travel between Shanghai and their rural hometowns. First, the flexible working time attracts younger workers who would like to work fewer hours and enjoy life more. Existing literature has pointed out that the new generation of migrant workers is less willing to “eat

bitterness” (*chiku*) compared with their parents (Franceschini et al., 2016). In my survey data, 60% drivers were under 30 (Question 1). A young delivery driver (21 years old) told me:

For young people born after 1990, we like freedom. When I am down today, I can stay at home, sleeping, playing computer games, and such like. When I want to earn money, I will work hard. Can you find another job like this? Even if you have another job in the daytime, you can open the app and deliver orders during the evenings. You can work when you want to work; you can go home when you want to have a rest.
(D1131)

Second, the flexible working arrangements are favoured by migrant workers who experienced rigorous factory management and decided they did not like it. Data published in the *Economist* show that nearly one-third of Meituan’s delivery drivers were once factory hands.⁸⁵ Compared with their lived experiences in factories, most delivery drivers appreciate their work now. For instance, D1103 worked in a factory in Shanghai beforehand, and described his factory life as “being in a jail” and “robots in assembly lines”. He finds his life now much freer, more relaxed and less stressful because “no one is forcing you to work, and you do not have a boss in your work”. The working hours are flexible for delivery drivers; therefore, “when you want to have a rest, you do not have to report to your boss and look at his face”. This “better than what I was doing before” experience of drivers is similar to those in Zwick and Spicer’s study (2019) on Uber drivers in the US, which suggests that economic restructuring and a loss of stable employment opportunities makes driving as a freelancer more attractive for some workers.

Third, this working time flexibility is also suitable for migrant workers who have to go back to their hometowns from time to time. For instance, D1118, who had previously been a farmer in Henan Province, had to return to his rural hometown at least three

⁸⁵ See the report: *The Economist*. April 4, 2020. *The gig economy: visible and vocal*. pp. 48–49.
<https://www.economist.com/china/2020/04/03/delivery-apps-have-transformed-urban-life-in-china>

times a year. All his family worked the land in the countryside, but when they were sowing grain in the spring, harvesting grain in the autumn and celebrating the Spring Festival in the winter, D1118 had to go back Henan to reunite with them. D1101, from nearby Jiangsu Province, had a similar situation. His wife and three young children were in his hometown, just two hours by train from Shanghai. Therefore, when the family needed him or he missed them, D1101 could go back home freely without any restrictions. However, previously, when D1118 worked in a factory and D1101 was a salesperson in a real estate company, both of them said it was very difficult to apply to their bosses for leave, and this was very inconvenient.

Another aspect of the flexibility is reflected in their income. As noted in Section 5.4.1, the freelance drivers' income can be transferred from their apps to their bank accounts on a daily basis. This "pay as you go" method is described by the freelance drivers as "work today and get paid tomorrow". Instead of having to wait at least two weeks for their pay cheque, the workers can get their income whenever they want. Also, there is no ceiling to their income. Similar to the piece-rate wage system in factories, the principle is "more pay for more work". After finishing one order, how much the drivers can earn will be shown in their apps and the money can be transferred to their bank cards after finishing a day's work. The payment method and the lack of cap on the total amount are major benefits for low-wage drivers, who often live from pay-cheque to pay-cheque, and for drivers who have to pay debts. My fieldwork in Shanghai revealed that having debts was a common phenomenon for delivery drivers. Some owed money because of gambling or playing computer games; some drivers borrowed money from their friends and relatives because of their children's illness (for instance, D1140), or investment failure. For instance, D1126 ran a restaurant that failed in Jiuting, Shanghai, and had to pay off his debts. For him and others, becoming freelance drivers was a quick way to earn money: their income was based on their efforts because more finished orders mean more income. A group discussion with delivery drivers demonstrates this point:

I really love the feeling when I lie on my bed and look at the number in my app at night – how many orders I have finished, how much I earned. The number I see is all mine. When I wake up tomorrow, I can get the money. (G1107)

Many drivers have debts. If you work in a factory or a restaurant, you can only get paid at the end of the month, and your salary is almost fixed. However, for the [freelance] delivery drivers, you can decide your own income. If you want to earn more or need to pay back a debt, you can choose to work harder by delivering more orders. (G1107)

Because of the flexibility and freedom they enjoy, some strongly performing freelance drivers refuse to join a station even though they might earn more as full-time drivers. As introduced in Section 5.4.1, when they recruit or poach top freelance drivers, station managers can guarantee sufficient order distribution and relatively higher rates for them, but most freelance drivers prefer their current status because they can contact different restaurants, deliver to different kinds of customers and travel in different areas in Shanghai (see Chapter 6). In the WeChat group, they described their work experiences as “riding the battery-powered bikes, blowing in the breeze, picking up money, and enjoying Shanghai’s beauties”. For instance, D1118’s experiences:

Choosing to be a freelancer is for the freedom. Several stations have contacted me and encouraged me to work in their sites as a full-time driver. They can offer me a higher rate compared with the market rate – 10 yuan for each order. I refused. If I want to earn more, I can choose to deliver more orders. Working in a station as a full-time driver is a regular job – from 9 [a.m.] to 8 [p.m.] with too many regulations. If there are many orders, your station manager will push you. If your station manager is not satisfied with your work, he will also deduct your income. As freelancer drivers, we can work only one hour every day and get paid daily. (D1118)

Unlike for freelance drivers, the incentives for full-time drivers are the personal relationship with station managers and their hometown peers. Most of them join a

station after having been introduced by people they know. In fact, both existing drivers and the new ones have incentives to do this because of the lucrative introduction bonuses they can receive. In the recruitment advertisements shared in the WeChat and QQ groups, I found that if a food delivery driver introduces a new driver to join their station, they could be rewarded with 800–1500 yuan. Some drivers would share this money equally with the new recruit. This is why the food delivery drivers actively introduce their friends, relatives and people from their hometowns. Especially during the Spring Festival, when they go back to their hometowns, they show off their income in Shanghai to others, as a delivery driver working in Jingan district explained:

When I worked in a Meituan station, 90% of drivers in our site are from Jiangxi Province because the first Jiangxi driver earned some money by doing this job, and he boasted to his friends and relatives when he went back Jiangxi. Therefore, more than ten men followed him back to Shanghai. They were rewarded with several hundred yuan in introduction fees, so there are incentives to promote it. This is why more and more people are joining this sector. (D1119)

This introduction fee is paid by the station manager to new drivers after one month. Therefore, when a station needs more drivers, the station managers responsible for recruiting and managing the drivers will introduce their friends, relatives, and hometown peers (*tongxiang*) directly. On the one hand, the station manager can be rewarded in cash; on the other hand, it is a good opportunity to build a trustworthy and reliable delivery team through personal networks, as D1131, who worked in a station in Putuo, said:

When I worked in a station, our station manager valued the drivers recruited from his own hometown. It is easy to understand: he wants to have some loyal employees working for him. Also, when the site needs more drivers, he can be rewarded by introducing others. He can get up to 1500 yuan from introducing one person. (D1131)

Therefore, the full-time drivers join or remain in their stations due to good personal relationships with the station manager. A majority of full-time drivers said that their working benefits and income were decided by their station managers, who were described by some as “dictatorial”, and depended on whether they get good orders, and how much they were punished because of late orders, orders with bad comments and complaints. Delivery driver D1124, who had worked in Huangpu District before, said there were some unwritten or hidden rules in the station – for instance, whether the drivers were offered supplies (e.g. gloves, masks, water cups) was decided by their station managers. As a result, many full-time drivers send gifts and buy drinks or cigarettes for their station managers because they reckon getting on well with their station managers means they will receive help when necessary. This is echoed by another delivery driver, D1130, who said:

A good relationship means more benefits. Otherwise, he [the station manager] will not care about you. This is the reality of this society: the surface is one hand, and the actuality is another hand. (D1130)

In summary, the motivation for full-time drivers comes from team support because of their good personal relationships with their station managers and their friends, relatives and hometown peers in the same station. Stimulated by the introduction fee as a material reward, full-time drivers are also active in introducing new people to join in their stations. Compared with the circumscribed life in factories and restrictions from stations, the flexibility in working time, working area and income is attractive to freelance drivers, especially those who need to return to their hometowns frequently and pay off debts.

5.5 Conclusion

Before focusing on the precarities (Chapter 6) and livelihood strategies (Chapter 7) of the food delivery drivers, this chapter firstly elaborated on the online food delivery industry, as a platform economy – how the sector has emerged and how it is developing

and changing, as well as how it is operated, managed, and the experiences of those working within it.

The central argument of this chapter has proceeded in three parts. First, in Section 5.2 and 5.3.1 I showed how in China the two biggest platforms, Meituan and Eleme, dominate the online food delivery industry. Compared with these two online platforms which build on a strong capital base, focus on profitability and capture the largest market share, the restaurants and the food delivery drivers receive the short end of the stick. Because of high commission fees, fewer subsidies and threats about exclusive cooperation from the platforms, the conflicts between restaurants and the platforms broke out during the economic downturn in the wake of COVID-19. Illustrating the development of the duopolistic online food delivery industry in China, these findings provide empirical evidence to support Montalban et al. (2019)'s arguments on the pre-conditions for a platform economy – financialisation and venture capitalists as a fund raising strategy – and Schor (2014, p. 10)'s arguments on value capture: “the more the platforms are backed by and integrated with the large corporations that dominate the economy, the more monopolized the sector will be, and the less likely value will flow to providers and consumers”. Revealing the operation of the online food delivery industry, my findings provide insight into Schor et al. (2020, p. 23)'s recent reminder that: “to understand any segment of the platform economy, we must situate it within the larger context of the technology platforms and their ongoing re-organisation of economic activity and life”. Also, Langley and Leyshon (2017) argue that researching the burgeoning field of platform economies should detail the particular coming together of socio-technical and business practices in concrete terms for specific enterprises. My findings moreover contribute to an emerging body of work which seeks to illustrate the different patterns of the platform economy in both high-income countries (Drahokoupil and Fabo, 2016; Lepanjuuri et al., 2018) and low- and middle-income countries (D’Cruz and Noronha, 2016; Wood et al., 2019a, 2019b; Anwar and Graham, 2020, 2021).

Second, I argued in Section 5.3.2 that under the management of contractors, the food delivery drivers, as with platform workers in the Western world, are “independent contractors” without legal labour relationships with the platforms. Similar to Smart as the intermediary for Deliveroo in Belgium before October 2017 (Drahokoupil and Piasna, 2019), the contractors (*waibao gongsi* or *erbao gongsi*) are responsible for recruiting, training, managing, paying salaries and offering employment contracts to the full-time delivery drivers. However, this outsourcing strategy exposes the delivery drivers to more risks and vulnerabilities, such as more profits being shared by the contractors, and the possible problem of bankruptcy of small contractors. Because of the ambiguous relationship between contractors and platforms, full-time drivers are unclear about who their employers are, and who should be targeted when labour disputes happen. Given the full-time drivers’ management model, references to them as “independent contractors” is a misnomer because they cannot be truly independent in the terms of their employment, including pay, hours and the manner in which certain tasks are completed (Weil, 2017).

Freelance drivers have control over their work, but the full-time drivers’ station managers can dictate to them how long they have to work, the way they should perform, and how much they can earn. Much of the empirical discussion on “independent contractors” comes from remote platform work such as Amazon Mechanical Turk and ride-hailing platforms, Uber in particular (Isaac, 2014; Kuhn, 2016; Dubal, 2017; Green, 2019). Therefore, these findings expand the scope of labour geography research by examining the status of food delivery drivers in the context of China. Explaining the role of contractors in the China online food delivery industry, these findings reveal the mechanism behind the drivers’ “independent contractor” status, resonating with Ajunwa and Greene’s (2019) recent emphasis on the fact that a major challenge for researching platform works is capturing their inter-organisational effects, intra-organisational cooperation and interactivity. These findings further extend empirical studies on the precarities of food delivery drivers, a rising local/face-to-face platform workers category with a smaller group focus on (Ivanova et al., 2018; Shapiro, 2018;

Attwood-Charles, 2019a, 2019b; Drahokoupil and Piasna, 2019). Also, these findings reveal that the answer to whether the term “independent contractor” is applicable for platform workers should consider different working types of work regimes, even within one platform.

My third argument was discussed in Section 5.4. The heterogeneous workforce with high variation has different incentives when entering the online food delivery industry: full-time drivers are more likely to be encouraged by their hometown peers and have good personal relationships with their station managers; freelance drivers are attracted by the job flexibility and freedom. Similar to the research findings of Peticca-Harris et al. (2018) about three distinct subgroups of Uber drivers in Toronto, Canada, this section reveals that, facing different controls from platforms, different types of delivery drivers have various levels of precarity, even within the same platform. Compared to freelancers, full-time drivers are “hyper-precarius” because of the management from contractors. These findings of heterogeneity in workers’ employment types and working experiences cast doubt on a common assumption in labour market theorisation, which is that platform workers’ experiences are uniform within and across platforms. One reason of this assumption may be the Uber-centricity of previous research (Schor et al., 2020). Exploring two different employment types of food delivery drivers in China, these findings expand Schor et al. (2020, p. 835)’s argument that there is “strong differentiation across platforms as well as across workers on a single platform”. Alongside heterogeneity in “platform dependence” (i.e., how workers are reliant on the platforms for their earnings), the level of required skills/assets for participating in the platform economy (Schor et al., 2020), and the spatial dispersion of the work (Vallas and Schor, 2020), variation also exists in the nature of the employment relationship.

This thesis holds that to understand the food delivery drivers’ precarities and livelihood strategies, it is necessary to situate them in the broader context and investigate the mechanisms of the platforms they are working for. The food delivery drivers from Meituan and Eleme are typical participants in and constructors of the local platform economy in China, and are also an important component of platform workers globally.

Like Uber drivers and remote platform workers in Western countries, food delivery drivers in China are misclassified as “independent contractors”.

Having explained the emergence, development and operation of the online food delivery industry, the next two chapters will focus on the delivery drivers themselves, exploring their work conditions, and how they deal with their vulnerabilities.

Chapter 6: Driving to Precarity: The everyday lived experiences of Shanghai food delivery drivers

6.1 Introduction

An increasing amount of literature has focused on the work experiences and livelihoods of platform workers (Lepanjuuri et al., 2018; Peticca-Harris et al., 2018; Wood et al., 2019a). The main finding of previous research is that although platform work offers workers flexibility and freedom, precarity and vulnerability are also experienced by platform workers (Anwar and Graham, 2021) because of algorithmic controls from apps or casualisation in employment relationships (Schor et al., 2020; Vallas and Schor, 2020). A few studies have shown the commodification and ongoing process of precarisation in the labour process (Wood et al., 2019b; Katta et al., 2020). However, as explained in Section 3.2.3, there are problems with the previous research. Too much attention has been paid to Uber drivers in the Global North -- with notable exceptions in Wood et al. (2019a), (2019b); Sun (2019), Sun et al. (2021), and Lei (2021) and their “independent worker” status. As Section 2.3 explains, low-skilled workers may face complex, multi-layered precarious experiences outside their workplace. This chapter aims to address the lacuna resulting from this bias in the research by exploring the multifaceted precarities of Shanghai food delivery drivers both in terms of their work conditions and of their living experiences. Investigating the drivers’ everyday lived experiences beyond their employment, multiple aspects of their livelihoods will be explored in this chapter. This research therefore contributes to the existing literature by focusing on Shanghai food delivery drivers on the Eleme and Meituan platforms, allowing us to identify dynamics and developments in other parts of the world. The chapter also lays the groundwork for Chapter 7, where I focus on how drivers respond to precarity.

This chapter is structured as follows. First, after explaining the algorithmic controls delivery drivers face during work (Section 6.2.1), I illustrate how drivers are commodified by platforms (Section 6.2.2). Here, Polanyi’s concepts of commodification and embeddedness are used to explain the drivers’ precarious working

conditions. Section 6.2 focuses on how drivers are embedded in markets; in Section 6.3, I examine how drivers are embedded in their interpersonal networks and how these networks can be either beneficial or exploitative for workers. After explaining the precarities of platform workers in the online food delivery industry, in Section 6.4 I explore the livelihood precarities of rural–urban migrant workers in Shanghai. The living conditions and social integration of drivers who are without an urban hukou will be examined. Finally, a summary of this chapter is presented (Section 6.5), with reflection on the “beyond employment” approach and a Polanyian perspective on the platform economy.

6.2 Driven by the algorithmic controls

6.2.1 Four algorithmic controls

As introduced in Section 3.2.2, the platforms’ management and control of platform workers is based on algorithms. The order distribution, working procedures, labour processes and customer evaluations are quantified as data, and the data are stored, analysed and computed on the systems. Focusing on Shanghai food delivery drivers, this section explains what kind of algorithmic controls they face. Interviews and participant observation found that drivers for Meituan and Eleme face this “digital Taylorism” in at least four areas: a) limited delivery time, b) rank assessment, c) surge pricing, and d) customers’ service rating.

I discuss each of these algorithmic controls below.

a) Short delivery time: “time is money”

Normally, after receiving orders from their apps, drivers have to finish the order within 30 to 40 minutes. This process includes riding to the restaurant to pick up the order(s), notifying the platform and waiting for the preparation of the order(s) when arriving at the restaurant, picking up the orders, verifying that all items are included and confirming this in the app, placing the food in the delivery box on the back of the driver’s battery-powered motorbike, travelling to the customer(s)’ address, handing food to the customer(s) and notifying the platform about the completion of the delivery via the app. This shows that the system can trace the drivers’ every working step

meaning that drivers are in a rush to move onto the next step. On their apps, drivers can see their delivery time limits exactly to the second, and they will receive a voice reminder -- “Your order is going to be late, please finish as soon as possible”, if they are on the verge of being late. Alongside reminders from the system, for full-time drivers their station managers can also track their real-time locations on the system (see Figure 6.1), and managers will often hurry them up. Therefore, when delivering orders, the only thing filling drivers’ minds is to be “quicker, quicker, and quicker” because “every second is important” (Interviewee D1105).



Figure 6.1 Full-time drivers’ real-time locations as shown on the system. The rectangular insertions represent the locations of drivers. The blue figure within the insertion signifies the number of orders the driver is delivering at that moment. The yellow figure means the number of late orders on that day. Source: provided by A1102.

The punishment and encouragement designs in their apps also speed up delivery times and are linked to drivers’ payment for each delivery. Drivers delivering late will be fined by the platforms, and the amount of money is decided according to how late they are.⁸⁶ Eleme drivers will be fined 10% of their payment for being less than 5 minutes

⁸⁶ When they are late, drivers will not be fined if: a) the restaurants are slow to cook food, or b) customers’ locations

late; 30% for being 5–10 minutes late; 50% for being 10–20 minutes late; 70% for being 20–30 minutes late; and all of their payment for being more than 30 minutes late. To encourage drivers to deliver quicker, Meituan rewards drivers with an extra 2–5 yuan if orders are finished early. Therefore, many interviewees said “Time is money”, and that they are anxious to finish orders quickly. My survey data shows that 21% of respondents finish orders within 15 minutes, and 74% finish orders within 15–30 minutes (Question 14).

The short delivery time makes drivers nervous but benefits the platforms. The news report in the influential magazine *Renwu* (referred to in Chapter 4.4.1) shows that Meituan drivers are accelerating their average delivery times: in 2016, the maximum delivery time was one hour for 3 km; in 2017, this number shortened to 45 minutes, and in 2018, it decreased to 38 minutes. In 2019, the average delivery time declined 10 minutes compared to the national average in 2016 (*Renwu* Report, 2020). On the one hand, drivers are stressed and anxious to finish orders; on the other hand, the platform companies are praising their delivery teams for an improvement in their “deep algorithmic learning ability”. In November 2016, Wang Xing, the CEO of Meituan, said proudly: “Our slogan is *Meituan delivers everything quickly, 28 minutes on average* [emphasis in original]. This is evidence of technical advancement” (*Renwu* Report, 2020).

For most delivery drivers, being fined because of late delivery is a frequent and common occurrence. Normally, they have to deliver more than one order at the same time. This means if they are late for the first order, the following orders are likely to be late too. For instance, interviewee D1123 showed me from his screenshots (the first screenshot in Figure 6.2) that after picking up an order in Point 1 (in blue), he had to deliver food in twelve different locations (Points 2 to 13 in green). For each location, the different delivery time limits are shown in the system. Of these twelve orders, D1123 told me he was late for two, and fined 8 yuan in total. His system shows that he

are hard to reach (e.g. changing locations unexpectedly). For these two reasons, drivers can put a note on their systems and they will be exempted from punishments if they are late.

was fined because of late orders frequently (the red records in the second screenshot in Figure 6.2).



Figure 6.2 The screenshot on the left shows the route taken to deliver twelve orders at the same time; the right screenshot shows the penalties for being late over three days from the driver's app. Source: provided by interviewee D1123.

Under these stressful time limits, drivers tend to break traffic rules, such as driving through red lights and driving down one-way streets in the wrong direction. Almost all interviewees admitted, "If you want to earn money, it is impossible to follow all traffic rules", and "I believe 99% food delivery drivers in Shanghai have run red lights" (G1106). It is obvious that drivers are aware of the dangers of breaking traffic rules, but finishing orders quickly is more important. My survey data also show that more than half (53%) of the respondents had experienced traffic accidents (Question 23). Sun Ping, a Chinese scholar focusing on labour relationships, argues that breaking traffic rules is the drivers' response to the "algorithmic controls", and that "shorter and shorter delivery time is the main reason for more and more traffic accidents" (Renwu Report, 2020). Drivers described their working as "running with the grim reaper, gaming with

policemen, and befriending red lights” (*Renwu* Report, 2020). My interviews with four delivery drivers also discussed driving through red lights and the threats to their safety:

Why [do] many drivers run red lights? Because we are so anxious. When your app shows you will be late in thirty seconds’ time, you cannot be calm and peaceful. Food delivery drivers are rushing on the road to serve customers, especially in the last few seconds. Team leaders and the police tell us not to run the red lights. Of course we know that, but it is nonsense. If I had ninety minutes to deliver, I would finish it on time even by walking! Now we only have forty minutes. (D1126)

We have to sacrifice our safety to be on time. When delivering seven or eight orders at one time, after picking up all the orders, you may only have fifteen minutes left to deliver. (D1110)

This is a well-paid, but high-intensity, high-risk industry. Many drivers are injured or even die during work. I know a delivery driver who died several years ago, and now the weeds around his grave are over two metres high. (D1101)

Yesterday, a food delivery driver died in Suzhou in a car accident. He dedicated his life to Eleme. When they are delivering more than six orders at the same time, the drivers do not know what is a red light and what is a green light. They are using their life to work. The wealth is paid by risks. (D1104)

b) Strict rank and level assessment: “rank is bait”

Every week, all food delivery drivers are assessed into six ranks, which from lowest to highest are: common, bronze, silver, gold, diamond and king, based on their “order score” (as shown in Table 6.1). One finished order is counted as a score of 1, and if the order is finished in the early morning (6 a.m. – 9 a.m.) or around midnight (10 p.m. – 2 a.m.), the score is 1.5. The period of this assessment is one week, and at the end of each week, the system will count drivers’ “order score”, which influences their order distribution and bonus in the new week. Generally, drivers in higher ranks are more

likely to receive good orders,⁸⁷ can deliver more orders at the same time and will receive a bigger bonus at the end of the week. For instance, the drivers in the gold rank, whose order score is more than 340, can deliver eight orders at the same time. In the drivers' language, this is "different ranks, different bonus, and a different kind of orders".⁸⁸

Rank	Order score	Can deliver how many orders at the same time
Common	—	2
Bronze	80	4
Silver	200	6
Gold	340	8
Diamond	475	10
King	540	12

Table 6.1 The rank of food delivery drivers. Source: Meituan and Eleme app. Translated by author.

Every month, all food delivery drivers are divided into ten levels, based on their "progress score".⁸⁹ The assessment used to increase their progress scores contains complicated indicators, including logging into apps every day, finishing orders, buying boxes/clothes/helmets from apps, and other indicators, as shown in Table 6.2. Meanwhile, the assessment used to decrease progress scores includes three elements: receiving bad comments from customers; rejecting distributed orders; and delivering orders late (as shown in Table 6.3). Every new driver is in the first level. If they aim to upgrade to the second level after one month, then twenty orders should be finished and a "progress score" of 300 is needed. As shown in Table 6.4, with more privileges, drivers in higher levels need higher progress scores and more finished orders. If the

⁸⁷ For instance, during my fieldwork in Shanghai, when I am interviewing two drivers in a food court, one driver can receive orders from system but the other cannot, just because their ranks are different.

⁸⁸ The Chinese is: 等级不同, 奖励不同, 拿到的单子也不一样.

⁸⁹ The Chinese for "progress score" is 成长分. The function of this is to assess the drivers' progress within one month.

appropriate progress score and orders are not finished for a specific level, the driver's progress score will be decreased and their level will be degraded. For instance, for a driver with a progress score of 401 in Level 3, if they do not receive a progress score of 400 and finish fifty orders within one month, then their progress score will decrease 45% and they will be demoted to Level 1 in the next month.

	How much progress score will increase
Log into apps	+1 for each day
Buy boxes/clothes/helmets from apps	+10 for each purchase
Upload health certificate	+20
Finish the first order delivery from apps (for new drivers)	+50
Finish one order	+1
Finish one order during lunchtime (11.00 a.m. – 1.00 p.m.)	+1
Finish one order during bad weather	+2
Finish one long-distance order (more than 6 km)	+3

Table 6.2 The assessment of increasing progress score. Source: Meituan and Eleme apps.

Translated by author.

	How much progress score will decrease
Bad comments from customers	–20/order
Reject orders	–10/order
Late delivery	–3/order

Table 6.3 The assessment of decreasing progress score. Source: Meituan and Eleme apps. Translated by author.

Level	Progress score	The number of finished orders	Privileges	Decrease in rate of progress score
1	—	—	—	—
2	300	20	Can deliver 2 extra orders at one time	45%
3	400	50	Can deliver 2 extra orders	45%
4	500	150	Can deliver 6 extra orders	45%
5	1,100	250	Can deliver 6 extra orders	45%
6	1,800	350	Can deliver 6 extra orders; 100 yuan deposit will be returned	40%
7	3,100	400	Can deliver 8 extra orders; 100 yuan deposit will be returned	35%
8	4,100	650	Can deliver 8 extra orders; 100 yuan deposit will be returned	30%
9	7,500	950	Can deliver 10 extra orders; 100 yuan deposit will be returned	25%
10	13,000	1250	Can deliver 12 extra orders; 100 yuan deposit will be returned; can reject 2 distributed orders	20%

Table 6.4 Progress score, requirements and privileges of each level, and the decrease rate of progress scores. Source: Meituan and Eleme apps. Translated by author.

These rank and level assessments serve as bait to lure drivers to work hard and climb the ladder, in other words, to maintain or improve their rank, “*bao dengji*”. Experienced drivers who are familiar with this rank assessment can roughly tell how many hours they have to work every day, and accordingly how much they can earn for each specific rank. On average, drivers in the diamond level can earn about 13,000 yuan every month; drivers in the highest level, king, can earn about 16,000 yuan every month. Drivers in lower ranks aim to upgrade their levels not only in order to receive more bonuses but also to receive more easily delivered orders: “When upgrading my level, I just imagine the cash is being put in front of me. It’s hard for drivers in lower levels to get good distributed orders. Only the discarded orders from higher levels will be distributed to the lower levels” (G1109). Also, drivers acknowledge that higher rank means working longer and finishing more orders: I interviewed a driver in the king level who only slept for four hours, working from 6 a.m. to midnight every day, because only by doing so could he maintain king level (D1137). This shows the extent to which delivery drivers are under stressful and strict assessment, divided into different levels with different data characteristics.

It is interesting to note that this rank design is similar to the mobile phone game *King of Glory*, which is extremely popular among young food delivery drivers. From my observations in Shanghai, young drivers are keen on playing this mobile phone game during their rest time (normally 2 p.m. to 5 p.m.). When they want to work, they log off from this game and log onto their working platform – Eleme or Meituan. This means that they constantly switch their identities between delivery driver and game player; the boundary between work and leisure time is blurred. The drivers joked during my interviews that their whole life is like a game. This shows that they regard their job as an extended part of their game – they imagine finishing orders as playing a round of the game; upgrading their rank in work is like upgrading their rank in games. This hierarchical and “gamified” evaluation system encourages drivers to finish more orders, but also implies a covert form of exploitation and commodification, a point that will be illustrated more in Section 6.2.2.

c) Surge pricing: “price is stimulator”⁹⁰

For freelance drivers, the payment for each order is determined by a standard rate (at least 4.2 yuan) and fluctuates according to a dynamic pricing algorithm. This ever-changing rate is based on the supply (the number of working drivers) and demand (the number of orders from customers) on the food-ordering platforms. When demand is surging, the platforms will incentivise more drivers to work by increasing the rate; when there are enough drivers working for the platforms, the rate will be decreased. Therefore, this surge pricing mechanism can help the market reach equilibrium by adjusting the rate. By doing this, customer demands can be met, and more importantly, the total number of transactions can be maximised at the lowest cost. This is because the operation of each order is a practice of surge pricing. After receiving an order from customers, the platforms will set the basic price of the order according to the distance, and display the order on the drivers’ apps. For instance, for a 4 km order, normally, the basic price is 4.7 yuan. However, if no drivers want to pick up this order and click “receive” on their apps after two minutes, then the platforms will increase the price to 4.8 yuan, 4.9 yuan and so on, until one driver clicks “receive” on his/her app. This means that for freelance drivers, the price of the order is a bidding war for each delivery: they can receive the order at the basic rate, or they can wait for the surge pricing until they are satisfied. Since many drivers are competing against each other, for the platforms this “race to the bottom” can always in theory ensure that orders are finished at the lowest rate and that drivers are motivated to the surge areas. Interviewee D1126, a delivery driver with relatively high educational qualifications, explained this well:

It is a market transaction problem. If I were a manager of Eleme or Meituan, would I pay 10 yuan for one order when one driver would finish the order at 5 yuan? Of course not. When setting the price of each order, these platforms are “crossing the river by touching the stones”. Before, these platforms increased the rate 0.5 yuan each time, but now they increase the rate 0.1 yuan each time. Therefore, you can see the price of one order may be 5.6 yuan, 5.7 yuan. If no one wants to deliver a 4.5 yuan order,

⁹⁰ This point only applies to freelance drivers. But since full-time drivers can also choose the “freelancer” type, this point may be applied to all drivers.

but someone will finish the order at 4.7 yuan, this means the labour value of this job is 4.7 yuan, not 4.5 yuan or 5 yuan. This is capitalist society. (D1126)

Platforms are more likely to increase rates in two scenarios: during poor weather and in early mornings. However, drivers can be stimulated by this surge pricing. It is obvious that fewer drivers want to work at those times but that customers are more likely to order food online – white-collar workers are too busy to cook breakfast and people are not willing to go outside during heavy rain. Therefore, extra subsidies (normally 0.5–3 yuan) are given to drivers working during bad weather; drivers finishing a certain number of orders before 10.30 a.m. will also be rewarded. For instance, Figure 6.3 shows that 23 extra yuan could be earned if drivers finished more than eleven orders from 7 a.m. to 10.30 a.m. on 21 September 2020.

Although drivers earn money more quickly by earning these rewards, they are manipulated by this surge pricing and exposed to more risks. On their apps, drivers can see a real-time order distribution map – the red area means more orders with higher rates (see Figure 6.4). However, when more drivers move to nearby areas with surge pricing, the rates decline. This manipulation is also effective with regard to working times. My survey data shows that 81% of respondents worked in bad weather frequently (Question 22). Suffering from severe weather conditions and more traffic danger,⁹¹ drivers' dreams of boosting their income sometimes are unfulfilled because the surge price can disappear when platforms find that there are enough working drivers. Drivers believe that the surge pricing is not based on real weather conditions but on the number of working drivers. Whether or not there is a rate increase, and by how much, is decided by platforms, and all the data is only known by the platform owners. As delivery driver D1108 explained:

Indeed, we have bonuses or red envelopes in bad weather, but it is these platforms who decide what kind of weather conditions can or cannot be regarded as bad weather.

⁹¹ For instance, an Eleme delivery driver died from electric shock in Xuhui District, Shanghai, in a typhoon in August 2019. See related news reports: https://www.thepaper.cn/newsDetail_forward_4254378.

When it rains heavily and more drivers are needed, these platforms will increase each order by an additional 10 yuan or even 20 yuan. In this way many drivers [sitting] at home are motivated to [go out and] work. However, when you go out and open your app, you may find that the rate decreases: just because these platforms have enough drivers working for them! (D1108)



Figure 6.3 Surge pricing during early mornings. The extra pay and how many orders should be finished to get this sum is shown in red. Source: Eleme app.

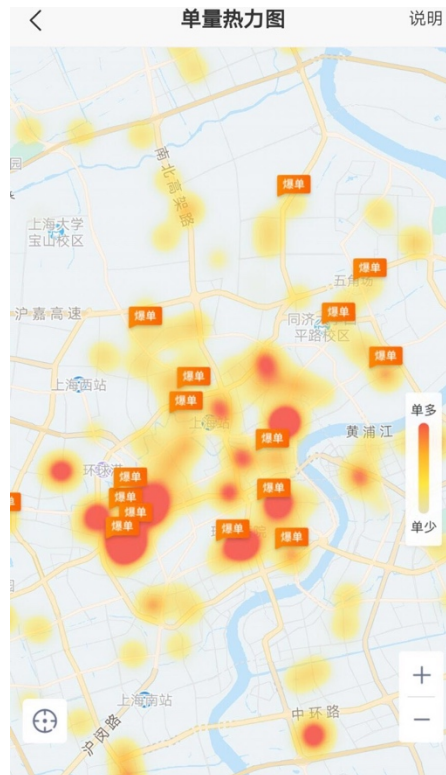
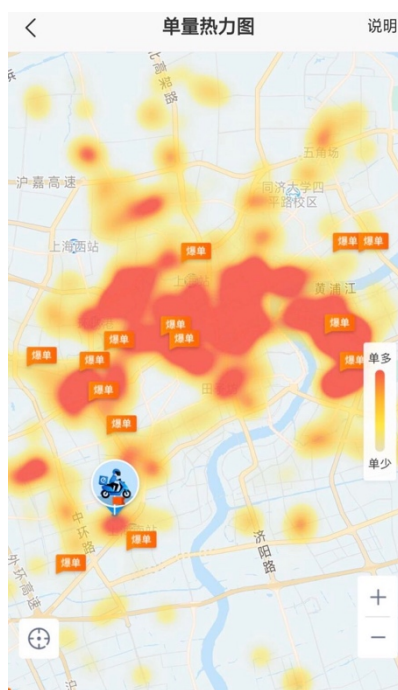


Figure 6.4 Areas with more orders and surge pricing, with red indicating the most of both categories.

Source: WeChat group.

d) Customers' service rating: "customer is god"

As mentioned in point b on strict rank assessment, the drivers' weekly bonuses are not only based on their ranks but also on their "service score", which is partly evaluated by customers. For every new week, a driver's service score is 90 initially, and their scores may decrease or increase according to their delivery services, such as whether customers make a complaint. Taking Meituan as an example, a delivery driver's service score (100%) consists of four elements: punctuality (35%), evaluation score from customers (25%), the number of cancelled orders (30%), and the number of orders receiving complaints (10%). Table 6.5 shows that if the driver's punctuality rate is less than 90%, 10 points are deducted in the "punctuality" category, and accordingly, the driver's service score will decline.

Service score categories		Service score change
Punctuality (35%)	Punctuality rate < 90%	-10
	Punctuality rate = 100%	+5
	Punctuality rate 91%–99%	No change
Evaluation score from customers (25%)	Evaluation score from customers < 4	-10
	Evaluation score from customers = 5	+5
	Evaluation score from customers 4.1–4.9	No change
Number of orders receiving complaints (10%)	Each order receiving complaints	-10

Number of cancelled orders (30%)	Each cancelled order	-10
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Table 6.5 Delivery driver's service score assessment. Source: Meituan app. Translated by author.

Drivers take their service scores seriously. Higher service scores can increase their possibility of getting more good orders, and more importantly, increases the bonus they can earn at the end of the week. As Table 6.6 shows, a driver's weekly bonus is decided by two factors: order score or rank (explained in point b on strict rank and level assessment), and service score. For instance, if a driver's order score is 475 to 549, and their service score is 86 to 95, then they can get 200 yuan as their weekly bonus. To earn a bigger bonus, apart from upgrading their rank, another important way is by improving their service scores. This is why drivers try their best to deliver orders on time and avoid complaints and bad feedback from customers. Through introducing customers' evaluation into the workplace as a labour control tool, the antagonistic capital-labour relationship is disguised, and drivers become attuned to the need for "emotional labour" (Hochschild, 1983), a notion that is widely used in service work (Korczynski, 2003).

		Service score			
Rank	Order score	<80	81-85	86-95	96-100
Common	0-79	0	0	0	0
Bronze	80-199	0	0	0	0
Silver	200-339	0	0	0	0
Gold	340-474	50	80	100	110
Diamond	475-549	100	160	200	220
King	>540	160	256	320	352

Table 6.6 The assessment of drivers' weekly bonuses (yuan). Source: Meituan and Eleme apps.

Translated by author.

However, this assessment, which relies on customers' feedback, causes conflicts between customers and drivers. My survey data shows that 54% of respondents had experienced complaints from customers that they judged to be unreasonable; 46% thought that customers' attitudes were bad (Question 24). Ever-intensifying conflicts can be seen from an accident that happened in Wuhan on 22 December 2019, when a Meituan food delivery driver stabbed and killed a customer.⁹² Although Meituan declared that there was no bad feedback record in the driver's system, most delivery drivers whom I interviewed still believed that bad feedback was the fatal factor. Also, most interviewees showed deep empathy and compassion for this driver because of their own work experiences – many of them said that some customers may leave bad feedback for trivial reasons or because they are in a bad mood. Figure 6.5 shows that just four days after this accident, when ordering food from Meituan, a customer left a note to a driver: "Don't think that just because you Meituan drivers killed a man that I can't give you a bad review. Can't you hurry up?" In my interviews, I discussed this accident and the customers' complaints and bad feedback with the delivery drivers:

Meituan's claim is the official reply. Can the platform publicise the real reasons?

Does the platform dare publicise how much drivers are fined because of bad feedback?

Will they admit that the driver killed the customer because of the bad feedback and fine? Of course not. Meituan is playing Tai Chi and transferring the responsibilities to the driver.

I do not pity the stabbed customer but I sympathise with the delivery driver. Of course, it is wrong and irrational to kill others. But from his standpoint, he just wanted to get revenge on the customer for the bad feedback. Our delivery drivers are facing a lot of pressure. Our income is related to the work assessment, so we care very much about customers' feedback. I guess that driver was living under a lot of pressure and

⁹² See Baidu Baike:

<https://baike.baidu.com/item/12%C2%B722%E6%AD%A6%E6%B1%89%E5%A4%96%E5%8D%96%E5%B0%8F%E5%93%A5%E4%BC%A4%E4%BA%BA%E8%87%B4%E6%AD%BB%E6%A1%88/24221183?fr=aladdin> 12·22 武汉外卖小哥伤人致死案 [a Meituan food delivery driver stabbed and killed a customer] Accessed on: 20 September 2022

this event is just the straw that broke the camel's back. He maybe could not endure any more and killed the customer on the spur of the moment. (D1125)

Author: What do you think of complaints and bad feedback from customers during your work?

[I find it] difficult to understand. At one time, I delivered a cup of soybean milk and the drink spilled a little. If the customer really cares about this, I will compensate or buy a new one for him. However, he said nothing but gave me bad feedback by leaving the note "incomplete food". This means 50 yuan punishment! But you know, the price of that drink is about 5 yuan. Also, this kind of bad feedback cannot be appealed against. So sometimes I am annoyed. I can earn about 200 yuan one day, but because of only one complaint and bad feedback, I lose a lot of money. (D1110)

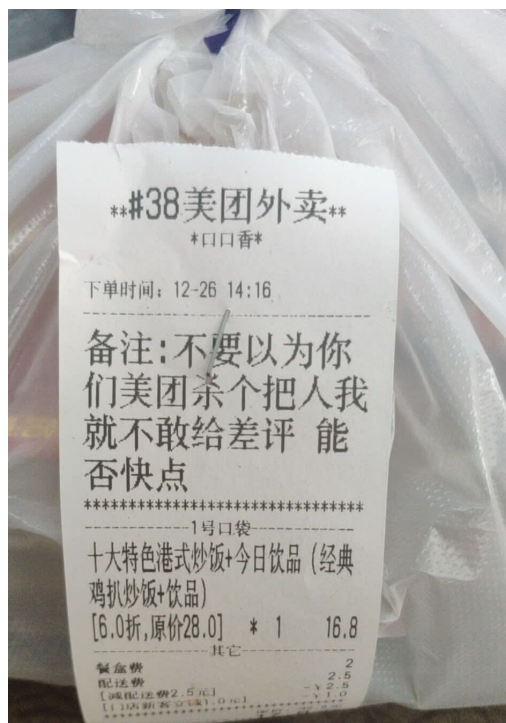


Figure 6.5 A customer's note after the Wuhan accident: "Don't think that just because you Meituan drivers killed a man that I can't give you a bad review. Can't you hurry up?". Source: WeChat group.

After receiving bad feedback and complaints from customers, drivers can make an appeal within twenty-four hours. Two means are available to them: via their apps, or via phone to the service departments of the platforms. The first online way is easy and convenient, but most interviewees said it was very difficult to get it approved because the appeal is reviewed by intelligent systems, not by real persons. “You never know what the system is thinking about” (D1119). For instance, Figure 6.6 shows that in two appeals, one driver wrote a long paragraph to explain his innocence, but his appeal was rejected by “a brutal intelligent system without any feelings” (D1119).

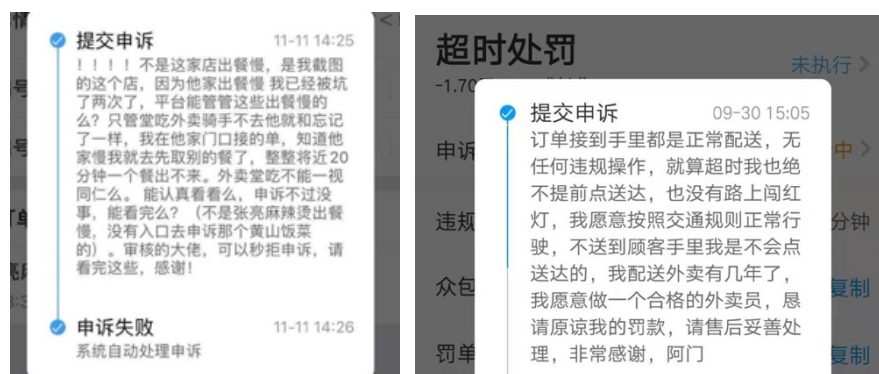


Figure 6.6 Two appeals from drivers' apps against penalties applied for late delivery. Source: provided by D1119.

Making appeals by ringing up the service department takes a longer time, and it is still not likely to be approved. After receiving a driver's appeal, the service department will call the relevant customers to check the situation. However, drivers think this is unfair because the platforms only listen to customers' side of the story. Platforms tend to take the customer's side and punish drivers for two reasons: platforms can use the fine to save money, and market demand can be maintained by pleasing customers.

The principle of Eleme is that what customers say is always right and the customer is god. As delivery drivers, what we face are different kinds of punishment. Some punishments are implemented immediately and we cannot appeal. There is no space and opportunity for us to argue. This makes me angry. The platforms do not care about us drivers at all -- all problems are the drivers' responsibilities. (D1132)

As long as the feedback on us drivers is negative, the platforms like it. Because then the platforms can fine us. This is the platforms' aim. They pursue a customer-oriented principle. As for us drivers, as long as platforms can earn money from the punishment, they will fine us. (D1121)

Maybe one late order means [a deduction of] only 3 yuan, but if every driver in Shanghai is late for only one order every day, how much can platforms earn from the punishments? It is a huge number! (D1125)

In summary, these four algorithmic controls – delivery time, rank assessment, surge pricing and service score – reduce the drivers' autonomy. The data characteristics of the drivers, including real-time location, working hours, number of finished orders, number of rejected orders, customer evaluation, etc., are continually accumulated and recorded on the system. After analysing the big data, the platforms will automatically distribute orders according to drivers' order scores, progress scores and service scores. When delivering orders, the platforms also monitor the order conditions and delivery routes through the system. After finishing one order, the drivers click “finish” on their apps, receive feedback from the customer, and receive a bonus or punishment from the platform based on their data characteristics. The drivers find themselves forced to work according to the instructions provided by the algorithm at every step.

6.2.2 Commodification of platform worker

Under the four algorithmic controls explained in Section 6.2.1, drivers relying on these platforms for income have to work long hours to make ends meet. Factory workers describe their lives as “robots” in the assembly lines, but food delivery drivers' lives are similar to “moving robots”, delivering orders across the whole city. From the survey data, 37% of respondents finished 40 to 60 orders and 12% finished more than 60 orders in one day. For Question 16, “How many hours do you work as a delivery driver every day on average?”, the percentage choosing “9 to 12 hours” was 34% and choosing “12 to 15 hours” was 18%, while 78% of respondents thought that they were working under stress and 64% of respondents believed that their job had negative effects on their health

(Question 26). Drivers have a very busy day except for afternoons when they can have lunch (see Figure 6.7) and take a nap. Even when they are resting, they still keep their apps open and listen to the reminders for new orders from the platforms, as shown in Figure 6.8.



Figure 6.7 A food delivery driver eating his lunch on a dustbin at the roadside. On his delivery box, a conspicuous word is “quick”. Source: author, taken in Zhangjiang, Pudong District.



Figure 6.8 Drivers sleeping in the afternoon and keeping their apps open. Source: WeChat group.

Besides this, the drivers have very limited flexibility on their working time and order selection as a result of the strict rank assessment and surge pricing mechanism. Survey data show that only 17% of respondents thought they could totally control their working pace. Freelance drivers admit that they cannot enjoy freedom and high income at the same time: “Freedom and earning money is contrary [to each other]. You can only choose one” (G1102). Drivers have to deliver some orders when they would prefer not to, during early mornings or in bad weather, because of the higher rates or in order to upgrade their ranks. The interview with delivery driver D1132 shows that drivers gain high income at the expense of long working times and heavy workloads:

Yes, the drivers can earn more than 10,000 yuan every month, but what we spend is a long time working, at least 12 hours every day. To maintain or upgrade rank, many drivers finish more than 500 orders every week and work 17 to 18 hours a day. This is normal. After working 18 hours a day, I just felt like my legs were broken. Last month, I earned 12,000 yuan just because I spent more time [working]. It is dangerous working too long, because when driving, we have to be focused. However, these platforms never care about their drivers’ situation, as the most

disadvantaged people in this society. They want you to work without limits. It would be very good [for them] if you could work 24 hours a day.

It should be noted that the game design in the algorithmic controls plays an important part in motivating drivers to work constantly. Similar to playing mobile phone games, drivers can easily become addicted to clicking orders via apps, delivering, finishing and getting rewards or punishments. If they repeatedly finish orders on time, they will be rewarded instantly.⁹³ On the contrary, if they are late or receive complaints or bad feedback from customers, they will be fined. The drivers experience a number of challenges when picking up and delivering orders (e.g. finding the restaurants' locations) just as if they were playing computer games. They may experience pleasure after rewards or depression after punishments, but by regarding this job as a game, they gain satisfaction from working in precarious conditions (Petriglieri et al., 2019). They are motivated to become a “winner” in each round of the game, and they aim to deliver more orders to make up the loss if they are fined. In this sense, through transporting a setting of game systems – competition, rewards, and quantifying player/user behaviour – into the workplace, delivery drivers are constantly striving to deliver more orders, work intensively, and improve their ranking. For instance, delivery driver D1121 talked about his addiction to his work in terms of gamification:

I remember clearly that on my first working day, I earned 40 yuan. On the following two days, I earned about 80 yuan and 90 yuan respectively. At that time, I felt happy from the bottom of my heart. After that, I could earn more than 100 yuan, and then more than 200 yuan every day. Now I won't stop working until I get 300 yuan. Sometimes, I think 300 yuan is not enough, and earn 400 yuan by 2 a.m. I can't feel satisfied. Every day when I get up, I want to earn more money and [feel that I] have to work the whole time. Usually, I work from 10 a.m. to midnight. This job makes

⁹³ The rewards are not just direct income/money, but can also mean getting more good orders from the system, and upgrading their ranking.

you subconsciously addicted to it and working for it has become my habit. Now I don't want to do other jobs, or I feel like I can't do other jobs any more. (D1121)

In this sense, drivers subconsciously join in “the game of making out” (Burawoy, 1979) designed by the platforms. Combining together work and pleasure, Shanghai food delivery drivers regard their labour process as a game where they are forced to agree to the rules of the game and obey the orders. The consequence is that an intrinsic belief is formed in the driver's mind – working hard and delivering more orders are their work responsibilities. Most interviewees feel that “only earning more money is meaningful” (G1101), and their pride only comes from receiving a high income from their platform. An interesting phenomenon during my fieldwork was that drivers usually called each other by their rank, not by their name. They would simply say “ask that king over there” (G1107). This suggests that drivers accept that they are defined by their data characteristics. As players in the game, it seems that drivers have job autonomy; however, the game designs in the Meituan and Eleme apps supervise workers with equivalent seemingly “playful” forms, replacing older forms of labour surveillance. Linking drivers' performance to income in a gamified approach is designed as a way to supervise workers and ensure the maximum extraction of value from labour. By fostering a “fun” culture at work, drivers are lured into concentrating on the gamified process and outcomes, away from labour-capital relations (Wu, 2020). As Woodcock and Johnson (2018) argue, gamification is not a neutral tool; it is a deliberate form entangled with workplace exploitation in the service of neoliberal capitalism.

However, the delicate digital technology itself (and algorithmic controls in particular) cannot on its own define the commodification of platform workers; the venture capitalism of these platform companies reinforces the drivers' vulnerabilities. As Zhang argues, platform companies in China rely on “venture capital to keep the tensions of commodification at bay to prioritize market expansion” (2020, p. 114). Obviously, other stakeholders in the online food delivery industry face algorithmic controls too: contractors face strict performance assessments every two weeks from platforms (as explained in Section 5.3.2), and the data characteristics of customers (e.g., the

frequency of ordering food online) and restaurants (e.g., the commission fee and advertisement fee) are also controlled by the platforms. However, compared with delivery drivers, these actors enjoy an advantageous status because their operations also bring profits for the platforms – contractors can save staff expenditure; customers buy service via the platforms; restaurants pay commission fees to the platforms. As for the delivery drivers, serving the food is the last step in this industry chain, and minimising the cost of each order and maximising the number of finished orders are the platforms' strategies to make a profit. Only by doing this can platforms maintain or even improve their market value and the value of their shares and build a capital empire which dominates the food delivery business (as explained in Section 5.2.2).

Both full-time and freelance drivers are exploited by the platforms because of the digital control and venture capitalism of the platform companies. However, full-time drivers are subject to even more precarious conditions than freelancers because of the way they are managed by delivery contractors. Full-time driver D1116, working in Zhangjiang, Pudong district, said a special rule existed in his station: every day, the first late order in his station is fined 50 yuan. As explained in Section 5.2.2, the contractors and station managers are under strict performance assessments from the platforms. In the hierarchy of “platforms – contractors – station managers – full-time drivers”, because of the pressure from platforms and the competition between different contractors, station managers pass on the amplified work pressure to the drivers. Despite these differences, both full-time and freelance drivers think they are exploited by the platforms because of long working hours, heavy workloads and unsatisfying income. From the survey data, only 6% of respondents were satisfied with their income (Question 27) and only 14% of respondents could earn more than 10,000 yuan monthly (Question 15). This is quite different from the recruitment advertisements promoted by platforms according to which, earning more than 10,000 yuan is easy. During the interviews, almost all drivers complained about their platforms, saying that they, the drivers, are just instruments enabling the platforms to make profits:

Eleme is exploiting drivers every day, every second; it never ends. The platforms won't let you die, because they want you to work for them, to make money for them, to use their apps. They can eat meat by running this business, but they do not want to share a bowl of soup with you. (D1123)

Meituan is a vampire. I don't know how many drivers are exploited by it. But as long as someone is working for it, Meituan won't die. It lives by sucking human blood. (D1103)

The platforms do not care about the drivers. For them, we are just tools. If the tool is broken or doesn't work, they will change it. It won't influence their profits. They earn money from exploiting us delivery drivers, and fining the drivers. The platforms feel jealous when the drivers can earn a lot of money. (D1114)

In summary, from a “hard Polanyi” perspective, drivers are embedded in the market society and become a “fictitious commodity” in the online food delivery industry. The received rate (i.e., the pay for one order) is the exchange value of the labour force in the market. Drivers' labour power becomes something they can sell as a commodity and exchange in the market. The surplus value is yielded by keeping rates at the lowest level and punishing drivers (e.g., as a result of bad feedback and complaints). Unlike factory workers or workers in formal employment, the food delivery drivers do not have a real boss in their workplace. However, because of the game design in the algorithmic controls, drivers have incentives to finish orders and work constantly, falling into “the game of making out” to improve their “order score”, “progress score” and “service score”, and ultimately, to earn more money. The four algorithmic controls and, more importantly, the business system centred on profit and efficiency result in the commodification and exploitation of delivery drivers. Both full-time and freelance drivers are at the bottom of the business hierarchy and have less bargaining power compared with other stakeholders (e.g. restaurants, customers). Embedded in the market mechanism, drivers can only earn money by strictly following the rules set by platforms, for instance, the ever-changing surge pricing rules. In this sense, what

Polanyi referred to as a “market society” or “the idea of a self-regulating market” is formed in this industry, and drivers subjugate themselves to “the laws of the market” (Polanyi, 1957, p. 71).

6.3 Interpersonal networks of the delivery drivers

Following the two sides of Polanyi’s thinking, this section demonstrates how platform workers are embedded within interpersonal networks, using ethnographic observation and interviews conducted in Shanghai. Section 6.2 showed how digital labour is commodified in the online food delivery industry, which is a “hard Polanyi” perspective, or “normative embeddedness”. From a “soft Polanyi” or “network embeddedness” view, this section interprets how the drivers are embedded within interpersonal networks. Compared with the “hard Polanyi” perspective (also referred to as technological embeddedness) which focuses on the relationship of tools and machines in a market society (Stroshane, 1997), network-based embeddedness refers to the ways actors are influenced and shaped by the institutional, social and cultural heritage and context in which they are located (Hess, 2004; Hess and Coe, 2006). Wood et al. (2019b) provide an original understanding of both approaches to embeddedness for the gig economy by investigating remote platform workers in Southeast Asia and sub-Saharan Africa. This section extends their discussion by reflecting on the network embeddedness of Shanghai food delivery drivers.

6.3.1 Network with delivery drivers

The personal networks among drivers play an important role in their everyday work and life. As explained in Section 5.3.2, when recruiting, introductions from their friends, relatives and hometown peers matter. By talking with experienced drivers, new drivers learn that it is possible to make money through the platforms. After entering the industry, drivers communicate with each other and share their working experiences: how to use the platforms successfully and undertake tasks, where to buy and repair battery-powered bikes, where to find more good orders, what kind of order is better, etc. Also, drivers communicate with each other about their everyday lives: where to rent apartments, where to eat, and how to save money in Shanghai. In their QQ and WeChat

groups, delivery drivers sometimes share trivial things in their work (e.g. what kind of customers they just contacted, their sleeping time). The active conversations online reduce loneliness and boredom, especially for drivers living alone in Shanghai. During the afternoons, drivers with good relationships usually eat lunch together in food courts, and then chat together before delivering dinner to customers.

Apart from cooperation, competition is also encouraged in the drivers' interpersonal networks. On their apps, the drivers are ranked against each other based on their daily finished orders. For full-time drivers, apart from the rank of all Shanghai drivers, they can also see the rank of their own stations (as showed in Figure 6.9). This means they will compare themselves with their familiar team members who have similar workplaces. The top drivers in the rank can receive more awards and bonuses from platforms. Some high-performing food delivery drivers are asked by platforms' official WeChat accounts to share their experiences. For instance, a delivery driver working in Pudong District talked about his last birthday gifts from Eleme:

Because of my excellent performance, the headquarters of Eleme called me to receive an award on my birthday last year. They invited me to train young drivers on how to avoid bad feedback and complaints from customers. I also received a 2000 yuan red envelope! I think I deserve this and the platforms recognises my efforts. (G1107)



Figure 6.9 The daily rank of drivers according to finished orders in Shanghai (left screenshot) and in one station (right screenshot). The Chinese characters in each of the main left-hand columns show the driver's name, and the number is the amount of finished orders for that driver. Source: WeChat group.

The embeddedness with other drivers provides mutual encouragement and competition, but the biggest winners are still the platforms. Most interviewees mentioned that they were motivated when looking at this informal competition and regarded it as a strategy to drive them to perform better:

When I wake up at 8 a.m., I see some drivers have finished more than 20 orders! So I get up quickly and start working. I don't know how hardworking they are, maybe some deliver orders at 1 a.m. or 2 a.m. (G1102)

Although hardworking drivers standing at the top of the rank can be rewarded financially and emotionally by the platforms, they are the subject of ever deeper exploitation as they pursue more finished orders and longer working hours. Similar to the weekly rank assessment introduced in Section 6.2.1, this fierce competition among drivers can be considered “bait”, but taking the bait also means “becoming the slaves of these platforms, totally accepting the algorithmic controls without any resistance” (G1102). For instance, delivery driver D1132, working in Jingan District, said he would work hard to earn money from these platforms, but he refused to become the top driver in the rank, exposing himself to more risks for the platforms’ benefit. When reading Eleme’s reports on praising high-performing drivers in WeChat, D1132 feels uncomfortable:

Eleme pushes for some drivers to finish 100 orders every day. They think it is an honour and a good example. But do you understand how long we should work if we aim to finish 100 orders one day? Maybe [we would have] only have 4 to 5 hours’ rest. This is so horrible and is just like eating human flesh! They think it is honourable but I find it is so disgusting to promote it! What capitalists want is simple – only profits, so they do not care about workers’ lives and death at all. (D1132)

A typical example of delivery drivers’ networks can be seen from a scheme promoted by Eleme, the Legion scheme, designed as a tool to organise freelance drivers.⁹⁴ From Eleme’s recruitment advertisement for this scheme, the platform is looking for drivers who aim to “make progress” with the organisation’s support. Even though drivers’ tasks are self-contained and involve no collaboration, freelance drivers can choose to build a group of 21 members, including a group leader. After building their own WeChat groups and reporting to their district managers, these organised drivers can set a common goal for each week, for instance, finishing 6,000 orders in total, and accordingly, personal goals for each day, for instance, finishing an average of 40 orders.

⁹⁴ This scheme’s Chinese name is 军团. This was only promoted in several districts in Shanghai, not the whole of Shanghai. Since 2020, this scheme has been replaced by a new scheme, youxuan (优选), which will be explained in Chapter 7.

They are encouraged to communicate with each other via WeChat, sharing tips and difficulties they encounter with the tasks. Drivers in the Legion scheme have further rules to follow: work more than five days weekly including during poor weather, and finish at least fifteen orders every day.

The main motivation of drivers to join in this scheme is a higher weekly bonus, although drivers may have disagreements on its distribution. By cooperating and finishing more orders, drivers in the team can earn several hundred yuan extra weekly. As shown in Table 6.7, the amount of weekly bonus for the whole Legion (21 drivers) is based on the number of finished orders and the drivers' attendance rate; the amount of weekly bonus for each driver is based on their personal number of finished orders and their working days. For instance, an additional 10% of their total income will be rewarded as a common bonus but only if 7,301–8,000 orders are finished and more than 91% drivers have worked in the past week; while 120 yuan will be rewarded to them as an individual bonus for each team member in the Legion they finished 312–384 orders and worked six days in the past week. Compared with other freelancers, drivers in the Legion find it easier to earn money with the help of the team, but they may have conflicts in coordinating the common bonus and working time. For instance, interviewee D1131, a driver in one Legion in Putuo District, said:

I am in a Legion with other drivers. You see, a few of them are playing cards there. We usually eat lunch here and chat about our work. Gradually, we became familiar with each other and formed a WeChat group. So when the Legion scheme was first promoted in September 2019, we signed up immediately. Now our group has twenty-one drivers, including a team leader. Usually, our Legion can finish 8,000 orders in one week, and each team member can get an extra 300 to 400 yuan from our common bonus. Besides, I can also earn my individual bonus by working more than five days every week. As for the distribution of our common bonus, our team leader now has a few hundred yuan more than other members because of his efforts in team management. I know drivers in other legions have the problem of how to distribute the common bonus. Now there are four Legions in this area [around the Global

Harbour building in Putuo District]. Now our Legion works well, every driver works hard and is happy with the bonus. (D1131)

Bonus for the whole Legion		
Amount of finished orders in the Legion	Attendance rate (percentage of drivers working in the past week)	Reward coefficient
Less than 4,200	----	0
4,200–5,600	80%–85%	0.5
5,601–6,300	86%–90%	0.8
6,301–7,300	91%–100%	1
7,301–8,000	91%–100%	1.1
More than 8,000	100%	1.3
Bonus for each team member		
Attendance rate	Amount of finished orders	Bonus (yuan)
Work 6 days	258–311	85
Work 6 days	312–384	120
Work 7 days	385–449	200
Work 7 days	>450	260

Table 6.7 The weekly bonus for the whole Legion and each team member. Source: provided by D1131. Translated by author.

6.3.2 Network with customers

Some experienced drivers can develop personal relationships with customers after repeated interactions. Consequently, they will use other communication technologies to bypass the platforms and finish an order delivery. Other personal communication

mediums (such as WeChat and AliPay) can guarantee instant online chat and payment. In fact, this practice starts with some customers' special requests after ordering something from Meituan or Eleme. For instance, customers might call the delivery driver to ask whether they could buy a non-food item, for example, cigarettes, when delivering food for them. Gradually, the market between customer and driver is formed, and the food-ordering platforms do not play a role in the new networks.

By performing business together outside of the digital platforms, both drivers and customers can benefit. Customers' orders can be delivered faster because of the personal service. They can order anything in any restaurant in Shanghai even though these restaurants may not use Meituan or Eleme. Figure 6.10 shows a driver's WeChat conversations with a customer – the driver says he can buy anything from markets as an agent, as long as the customer can contact him in advance noting their specific needs. For drivers, they can increase their income significantly while achieving a work-life balance that better suits them, without restrictions from the platforms. My interviewees D1103 and D1107 work with their clients privately through WeChat communication. By doing so, they can skip the platforms' supervision and earn more from the one-to-one delivery fee. For instance, D1107 put it to me as follows:

The platforms are becoming bigger and bigger. They take most of the profits. So now we start delivering things for customers privately, not through Eleme or Meituan. Sometimes, the distributed orders from platforms are not good. I have several customers' WeChat contacts and rarely use these platforms. Some drivers also know the vendors in the seafood market in Baoshan District, and are responsible for delivering seafood and fruits for them. For example, I earned 68 yuan from the platforms today, but earned 200 yuan from my own customers. (D1107)



Figure 6.10 D1103's conversations with one customer. The customer's comments have a white background; those of the driver have green. Source: provided by D1103.

The platforms, however, promote themselves by claiming that delivery drivers will have wider social networks and personal value by working for them. A Meituan recruitment advertisement in 2020 promoted the work by claiming that it had more value than just earning money during the COVID-19 pandemic and that drivers should recognise that a city cannot work without food delivery drivers (Figure 6.11). This kind of publicity tries to convince the drivers that they are significant to their customers and they are integrated into the city – and, equally importantly, the connection with customers can become social capital for the drivers. Interviews with drivers also revealed that after earning a lot of money and learning how to run a restaurant, some successful delivery drivers have indeed opened or invested in small restaurants or stalls by using their own customer base.



Figure 6.11 A Meituan recruitment advertisement in 2020. The caption above the photograph reads: “Now is a time of change, become a Meituan driver. Important job, drive against the city tide.” The first line of the caption below reads: “Fight the epidemic, stable job. You should let your friends and relatives feel that this city can’t work without you.” Source: Meituan App.

However, networks with customers may expose drivers to more uncertainty and tougher competition. Drivers admit that it is hard to negotiate delivery fees with customers, whether they are decided by distance or the weight of the food. Customers’ rights cannot be guaranteed because they cannot comment on the drivers’ services on any platforms. To minimise the risks, customers tend to choose drivers who have accumulated a large amount of previous work and good reviews in Eleme and Meituan. On these platforms, the drivers’ information (e.g. service scores, working type) is algorithmically aggregated and easily accessible for customers. Therefore, drivers still have to rely on the biggest two platforms to upgrade their ranks and receive more good feedback. Also, personal networks with customers are only one source of income for drivers, and the amount of orders from private customers is unstable. For instance, according to D1107’s experience, he had more orders from his clients during traditional Chinese

festivals such as the Mid-Autumn Festival and Spring Festival, but many fewer orders during working days.

In summary, while they are commodified in the online food delivery industry, the drivers are also embedded in their social networks and relationships. Networks with other drivers can provide cooperation and more income for the drivers but can also lead to new precarities: fierce competition, finishing more orders to become top in the ranking, and following more working time regulations in Legions. Networking with customers can also become one income source for the drivers, however they still have to improve their data characteristics on the apps (e.g. rank, service score) under circumstances in which the biggest two platforms dominate the online food delivery industry. In this sense, drivers' social relations are embedded in the economic system, and a self-regulating market, in Polanyi's term, has formed.

6.4 Livelihood as rural–urban migrants in Shanghai

6.4.1 House renting and living conditions

As low-skilled migrants, Shanghai food delivery drivers face disadvantages in the formal housing market. Without an urban hukou, they have to choose informal settlements as their living locations, such as urban villages (*chengzhongcun*), as reviewed in Section 3.3.1. My fieldwork in Shanghai found that most drivers preferred to live nearby or have easy access to their workplaces (their stations or frequent delivery areas) and to pay the lowest rents. However, a difficulty is presented by the fact that there are more orders in the city centre (Huangpu, Jingan and Xuhui Districts), but the rent in the city centre is too high. Considering convenience and cost, most drivers choose one of three accommodation types: renting bunks in big dormitories, renting an apartment with others (including one-bedroom apartments, in Chinese *yishihu*), or renting a “farmer’s self-built house” (*nongmin zijianfang*) with others.⁹⁵ I discuss each of these renting accommodation types below.

⁹⁵ “Farmer self-built house” is a literal translation of *nongmin zijianfang* 农民自建房. They are commonly found in rural China where farmers have a plot of land and they build a house themselves. In urban China, the land is owned by the state and developed by real estate companies. In suburban areas, however, there are still many farmer self-built houses to be found.

a) Renting bunks in a big dormitory

For most full-time drivers, the big dormitory is their first foothold as independent adults, especially for those who are new to Shanghai. To attract more drivers, station managers promise in recruitment advertisements that accommodation will be provided. After entering the industry, the station managers will suggest drivers live in a dormitory near their stations. In fact, these dormitories cooperate with different stations: station managers send drivers to dormitories and take a commission for each driver's accommodation reservation. Normally, these dormitories are very close to a number of stations, within 5 to 6 km, and the rents are only 500 to 800 yuan every month based on the number of roommates and locations. Most tenants are delivery drivers and couriers, introduced by different contractors. The advantage is that they can communicate with each other because of similar work experiences and they seldom disturb each other because their sleeping time is almost the same (from midnight to 5 or 6 a.m.). For instance, interviewee D1113, a full-time driver working in Putuo District, took the accommodation recommended by his station:

I live at the junction of Changning and Putuo Districts. Our station sent me there because the dormitory is the closest one to our station. There are eight persons in our room. The rent is 700 yuan every month, not including water and electricity bills. Most tenants there are delivery drivers sent by different stations. I think these dormitories have some connections with the stations. When I wanted to find accommodation, my station manager introduced me to several places like this dormitory so that I could choose one. (D1113)

Although the relatively low rents and proximity to places of work are attractive, the living conditions in these dormitories are bad. Here, the “big dormitories” refers to what is actually a small bedroom into which many drivers (normally more than eight) squeeze in, and each of them has a bunk. These dormitories are usually located in old (built before 2000) gated compounds (*xiaoqu*) in Shanghai, and drivers have to share a kitchen, bathroom and living room with other drivers from other bedrooms. Sometimes living rooms are reconstructed into bedrooms packed with bunks, and basic facilities

(e.g., washing machines, air conditioners) are not provided. Drivers who have previously lived in factory dormitories are used to these living conditions. However, most drivers complain about having to endure narrow spaces and crowded living conditions. For instance, D1115 and D1119 recounted their experiences as follows:

When I had just arrived in Shanghai, my station introduced a dormitory to me. There were four bedrooms in that dormitory, and each bedroom had ten bunks. All the people living there were delivery drivers. I hadn't lived in those kinds of circumstances for years and I was not used to it. Sometimes, I just couldn't stand the smell. After only several days, I decided to move out. Now I am renting an apartment with another two persons. Each of us has a separate bedroom, sharing kitchen and bathroom. Now the living conditions are much better. (D1115)

I lived in a bunk bed in Jingan District before. Four persons shared a bedroom no bigger than fifteen square metres. It was really breathless and stuffy. There were no other spaces in the bedroom except for beds. (D1119)

However, most of these dormitories are illegal. After renting an apartment in an old work unit compound, the landlord usually puts as many bunk beds as possible in each room. The cooperation with different stations can bring in an influx of delivery drivers paying 500 to 800 yuan in monthly rents. This kind of accommodation is more common in the city centre (Huangpu, Jiangnan and Xuhui Districts), with high housing prices and more delivery orders. Compared with urban villages, which can be easily identified, this form of renting is covert and evades administrative oversight. After the demolition and clearance of urban villages in Beijing and Shanghai,⁹⁶ the use of dormitories is a new way to provide migrant workers with accommodation at the lowest rents in the city centre. For instance, a big gated compound called Zhongyuan Lianwancheng, near Shanghai railway station is notorious for its dormitories with bunk beds rented to

⁹⁶ See related news reports: <https://www.theguardian.com/world/2017/nov/27/china-ruthless-campaign-evict-beijings-migrant-workers-condemned> *China: ruthless campaign to evict Beijing's migrant workers condemned*; <https://www.scmp.com/news/china/policies-politics/article/2126836/how-eviction-beijings-migrant-workers-tearing-fabric> *How the eviction of Beijing's migrant workers is tearing at the fabric of the city's economy* Accessed on: 20 September 2022

migrant workers.⁹⁷ However, according to the Shanghai Administrative Measures for the Leasing of Residential Houses (SAMLRH) implemented from 2014,⁹⁸ renting with others (*hezu*) is legal but renting in a group (*qunzu*) is illegal. The criteria for renting in a group are based on one of the following five situations:

Set[ting] up a collective dormitory in a residential quarter; rent[ing] out a refurbished room with partitions originally designed as a living space, or rent[ing] by the bunk; rent[ing] out space that was originally designed as non-residential space such as kitchen, bathroom, balcony or underground storage room; per capita living area of any rented room is less than five square metres; more than two persons liv[ing] in any rental room (except those with statutory relationship of supporting parents, children and spouse). (SAMLRH, 2014)

Most big dormitories are “group renting” and therefore illegal. Although some food delivery drivers know these Shanghai house-renting regulations, they admit the reality is different:

Some accidents happened in Beijing before because of inappropriate operations when the delivery drivers were charging the batteries of their bikes. Several died in the accidents. So Beijing’s governments looked strictly into group renting of houses. In Shanghai, it is legal if everyone rents one room of an apartment, but partitioning a single room or renting bunks is illegal. But if we strictly follow the rules, all the poor people have to leave this city. Many food delivery drivers share one room in apartments in Shanghai city centre, but local government turns a blind eye. In fact, this regulation is an excuse to push poor people to leave [the city]. (D1129)

⁹⁷ See related news reports: <http://news.sohu.com/20070907/n252020519.shtml> 群租导致环境脏乱上海中远两湾城整改在即 [Group rent leads to dirty environment, and rectification of Zhongyuan Lianwancheng in Shanghai is imminent]; https://www.163.com/money/article/99LK19Q500252G50_all.html 上海中远两湾城：被“驱赶”的群租人 [Zhongyuan Lianwancheng in Shanghai: Group renters are “expelled”] Accessed on: 20 September 2022

⁹⁸ See the Chinese regulation: https://www.shqp.gov.cn/cgjc/cgjc/upload/202109/0929_093444_863.pdf 上海市居住房屋租赁管理办法 [Shanghai Administrative Measures for the Leasing of Residential Houses] Accessed on: 20 September 2022

b) Renting an apartment with others (including a one-bedroom apartment)

If drivers work near a business centre in the inner suburbs rather than the city centre, they can rent an apartment with others. This kind of accommodation is suitable for drivers who migrate to Shanghai with their friends, relatives, hometown peers and spouses. Unlike the dormitories introduced by station managers, information on renting apartments is usually found by drivers themselves from house-renting websites, WeChat and QQ groups, or recommended by experienced drivers. In these rented apartments, the living conditions are better: three or four people live together in a relatively new gated compound (built after 2000), each of them has a separate bedroom (about five square metres) and they share a common living room, kitchen and bathroom. The only disadvantage for drivers is the high rent – at least 1,000 yuan. For instance, interviewee D1121 rented an apartment with another two drivers in Xinzhuang, Minhang District, and interviewee D1106 rented an attic room with his wife in Zhangjiang, Pudong District. Both of them admitted that their relatively good living conditions came at the expense of high rents:

I am living with another two drivers in Guifeng, Xinzhuang, Minhang. I rent the largest bed room and my rent is 1,600 yuan every month. The rent for the smaller room is lower. Because my wife comes to Shanghai from my hometown sometimes, I rent a larger room. Last year, I lived in a smaller room in Duanqiao. The rent was 750 yuan. Only if your rent is more than 1,000 yuan does the room look fit for human living. You know, now the rents are so high. I heard from my friends in Kangqiao, Pudong District, that the rent there for a bedroom of an apartment is 1,000 yuan at least; in Zhongshan North Road, Putuo District, one driver's rent is 1,400 yuan every month; even in [suburban] Baoshan District, it is about 1,200 yuan. If you do not work hard, you cannot afford it. It is a heavy burden. I just paid my rent this month and now I am short on cash again. (D1121)

I rent an attic. My rent is 1,000 yuan every month, and the room is only twelve square metres. In my hometown in Shandong Province, I can rent an apartment of about eighty square metres with 1,000 yuan. (D1106)

Another apartment form is cheaper – renting a one-bedroom apartment with others. This is a special room layout in Shanghai because of the fast-rising housing prices. Normally, in less than fifty square metres, apart from the small bathroom and kitchen, four to six bunk beds are put in the bedroom (about fifteen square metres), as shown in Figure 6.12. Compared with renting bunks in big dormitories, fewer drivers share their bedroom in this kind of accommodation; compared with renting a separate bedroom in an apartment, the rent in this kind of accommodation is much lower, normally about 700 yuan. For instance, interviewee D1117, a full-time delivery driver working in Putuo District, rented a one-bedroom apartment:

I rent a one-bedroom apartment with another three hometown mates. It is close to our station and the Global Harbour Building. There are four bunks in the room. Our rent is 750 yuan every month per person, and the water and electricity bills are shared equally by us. There is a small kitchen where we can cook. In fact, it is a small apartment but reconstructed into something like a dormitory. This place was introduced to me by my friend, not the station. (D1117)



Figure 6.12 The layout of two typical one-bedroom apartments. The area shaded brown is the bedroom, and the kitchen is the larger of the other two rooms in both plans. Source: house-renting website Beike Zhaofang.

In short, this kind of accommodation is more common on the periphery of the city centre or in the inner suburbs (e.g. Putuo, Pudong and Hongkou Districts). The number of orders in these areas may be not as many as in the most central areas of Shanghai, but by living near a business centre or a big shopping mall, most drivers can still have enough orders to deliver and earn money. Escaping from the noisy and crowded city centre, drivers told me that living in these apartments in the inner suburbs makes them feel that their working conditions and living quality are better: there are fewer police officers, and fewer cars on the roads. The only disadvantage – the high rents – can be solved by finishing more orders or renting one-bedroom apartments.

c) Renting a farmer self-built house with others

Compared with the above two types, renting a house is less common for food delivery drivers. This is because most affordable houses are located in the outer suburbs (e.g. Minhang, Baoshan and Jiading Districts), which means the number of orders nearby is smaller. One scenario I found in the fieldwork was that the drivers travelled between the city centre and the suburbs delivering orders to the city centre. Some interviewees rented a house in Pujiang Town, Minhang District, which is close to two university campuses (Shanghai Jiao Tong University and East China Normal University). This means there are enough orders from university students. However, during the summer and winter vacations, almost all the students leave and the drivers turn to a different platform, the quick delivery platform *Shansong*. Every day, in the early morning, they told me that they would first deliver orders (e.g., documents) from Minhang District to the city centre using the quick delivery platform, and then open their Eleme or Meituan apps in the city centre. After finishing delivering dinners in the city centre, the drivers would use the quick delivery platform again, checking orders from the city centre to Pujiang. Although Pujiang is almost 20 km away from the city centre, it has easy access to Shanghai's central areas because of good transport services.

There are two main reasons for renting a self-built house in the outer suburbs. First, paying the lower rents (normally 500 to 800 yuan per month), drivers can enjoy much bigger room space compared with the above two accommodation types. Because of the

much lower housing prices in Shanghai's less developed suburbs, each driver living in a self-built house can have a separate bedroom, normally bigger than twelve square metres. Second, the rural lifestyle in suburban areas is easier for the drivers to adapt to. As can be seen from the pictures from the Baidu search engine showing a search for “renting self-built house in Shanghai suburbs” (Figure 6.13), these suburban areas used to be, and sometimes still are, agricultural. Most of these houses are built in temporarily empty land (*kongdi*) in suburbs (Roast, 2022). Because of the previous rural status of most drivers, they feel familiar with its living conditions and find it easier to communicate with their landlords in these areas. Put differently, although some drivers work in the city centre of Shanghai, their life in these peri-urban regions is between the urban and the rural (Roast, 2020).

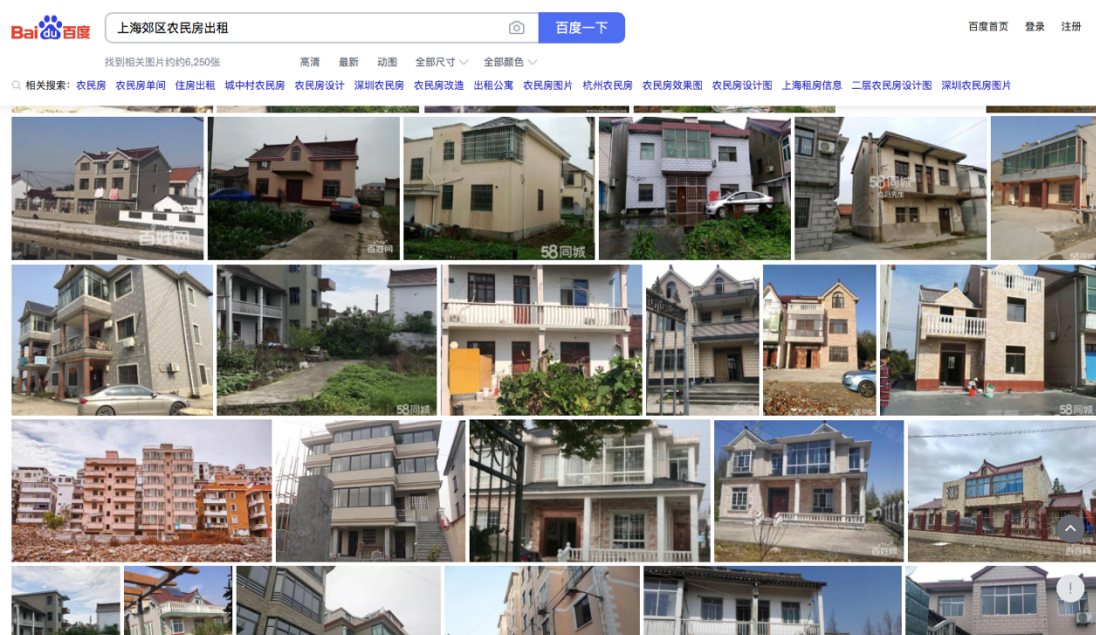


Figure 6.13 Screenshot from Baidu, searching “renting farmer self-built house in Shanghai suburbs”.

Source: author.

In summary, these three types of accommodation are compared in Table 6.8. One delivery driver, who had migrated to Shanghai for over five years, summarised the general house renting situation among delivery drivers:

If you want to live well, you should earn at least 10,000 yuan every month to afford at least 1,000 yuan in rent. I know the market price roughly: renting a single room costs about 1,500 yuan, but sharing a room with ten persons in a dormitory only costs 600 yuan; in [central] Xuhui and Huangpu Districts, sharing a room with eight persons in a dormitory costs about 700–800 yuan. (G1109)

	Location	Rent	Information channel	Living conditions	Amount of orders nearby
Big dormitory/ bunk beds	City centre	Relatively low, 500–800 yuan/month	Station managers	Poor, similar to factory dormitories	Most
Renting an apartment	Periphery of the city centre, inner suburbs or near big shopping malls	Relatively high, more than 1,000 yuan/month or about 700 yuan if renting one-bedroom apartment	Friends, relatives, or from online information	Better, but still crowded in one-bedroom apartment	Moderate
Renting a self-built house	Outer suburbs	Relatively low, 500–800 yuan/month	Friends, relatives, or from online information	Similar to rural areas	Depends on nearby surroundings

Table 6.8 Comparison of three accommodation types. Source: author.

6.4.2 Social integration and isolation

In terms of social integration and institutional protection, whether drivers have access to local social insurance is an important indicator. My fieldwork in Shanghai found that, like other types of platform workers, since drivers are not employees of these platforms,

they have very limited access to local social insurance, covering primarily medical insurance, pensions, unemployment insurance, injury insurance and maternity insurance.⁹⁹ On the other hand, much more limited traffic insurance policies are mandatory and made available to drivers by contractors. For full-time drivers, a 90-yuan traffic insurance fee is deducted from their income every month. As explained in Section 5.2.2, only full-time drivers sign labour contracts and have a legal labour relationship with contractors. To ensure the drivers' safety and transfer responsibilities, contractors require full-time drivers to buy this traffic insurance from insurance companies. For freelance drivers, they have to pay three yuan every working day as traffic insurance, and this money is deducted automatically when they open their apps. In other words, this institutional protection is bought from the commercial insurance market.

However, this protection may be of limited use. Some drivers do not know when and how to use this insurance because of information asymmetry between them and the platforms. During my fieldwork, some young and inexperienced drivers told me they did not have any insurance, while some said they had social insurance; some did not know which insurance company they should contact when accidents happen. One reason for the low level of understanding of their insurance is that the three yuan insurance is shown as a "service fee for platforms" on the freelance drivers' apps. Even though some drivers know clearly about their commercial insurance, they are not willing to use it because of the high requirements for claims. For instance, only treatment documents from high-ranking comprehensive hospitals (rather than community hospitals) in Shanghai can be accepted; compensation can be obtained only when drivers are injured during working hours, which means they should contact the platforms' service departments and insurance companies immediately, even though

⁹⁹ See the five types of insurance in Shanghai: <http://sh.bendibao.com/shsi/2020419/221667.shtml> 上海社保缴纳基数及比例 [Social insurance contribution base and proportion in Shanghai] Accessed on: 20 September 2022

they might have injured their hands or arms. This is why most drivers will buy medicine directly from pharmacies and community hospitals when they are slightly injured. The majority of interviewees admitted that they had never used their insurance and they regarded the insurance as simply a prerequisite to start working. Some drivers also suspected that the platforms earn money from the cooperation with different insurance companies.

Apart from their contested labour status, the hukou system also results in limited access to Shanghai social insurance for the drivers. As reviewed in Section 3.3.2, in China, the place where people can receive social benefits is based on their birth location and the two distinct hukou types, urban and rural. For drivers migrating from the countryside and finding employment in Shanghai, benefiting from sophisticated social insurance and high-quality medical care in first-tier cities is extremely difficult. Their employers are reluctant to pay for relatively expensive Shanghai social insurance – about 4,900 yuan every month per person. This is why before 2015, when the full-time drivers were directly managed by platforms without contractors, social insurance from other nearby small cities (e.g. Kunshan in neighbouring Jiangsu Province) rather than from Shanghai was bought for full-time drivers. Without a Shanghai hukou, even though some drivers can earn a lot of money, they cannot enjoy the city benefits attached to a decent job, such jobs being predominantly held by people with Shanghai hukou. Interviewees D1126 and D1122 compared their work with white-collar workers with Shanghai hukou. D1126 thought that, compared with workers in permanent employment, “we are like a blank sheet of paper for Shanghai” without any tax records and social insurance, even though the drivers’ monthly income is considered to be relatively high:

“Earning more than 10,000 yuan every month” is only the propaganda. The high income that the man on the street thinks we earn is entirely different from our drivers’ real experiences. I think we are just migrant workers. Our 10,000 yuan every month and the 10,000 yuan salary from a formal job are two [different] matters. For instance, for a man working in a company or a white-collar worker in an office, their salary may be less than ours, but they have medical insurance, unemployment insurance.

They have no worries for the future. The white-collar workers in the office have one or two days off every week. But for us drivers, if we aim to earn more than 10,000 yuan every month, we cannot have too much rest. We get up at 6 a.m. and deliver breakfast, lunch until 2 p.m., have three hours' rest and then work until midnight. Everyday, every week like this. As for our insurance, nothing. Our income may be paid by a company [meaning a contractor] from Anhui or some other province. For the Shanghai government, we are nobody. If we had an accident or got ill seriously, this city would say bye-bye to us. We would leave Shanghai and no one would notice. Therefore, our 10,000 yuan every month cannot compare with the 10,000 yuan salary for an office worker. They have a decent job. (D1126)

White-collar workers have fixed working hours and they just sit in the office. We have to travel during rainy days and cold nights, carrying heavy mineral water to the sixth floor without lifts. If we calculate working time, the hourly pay of delivery drivers is very low. The average hourly wage for us is about 22 to 28 yuan. It would be very good if we could earn 30 yuan per hour. This means we have to deliver five to six orders every hour, considering the current price of one order. We are coolies. (D1122)

Without Shanghai hukou and social insurance, drivers spend money – what some of them call “sweat money” (*xuehanqian*) – very carefully. Drivers with a heavy family burden have to control their expenditure in Shanghai, for instance by finding accommodation at the lowest rent. This is common for drivers who are in their 40s and 50 – they have the older generation to look after and the younger generation to feed in their rural hometowns. Every month, these drivers have to save money, trying to send several thousand yuan as remittance to their hometowns. Drivers believe that this is the meaning of doing this job and earning money in Shanghai – to support their families. For example, one of D1118's hometown peers was a forty-nine-year-old driver from Henan Province. In his hometown, his two children were in high school; his elderly father was in poor health and needed to buy medicine every month. As the only breadwinner in his family, he had to earn money very hard – he did not have one day

off and did not even go back home during the Spring Festival. He could earn 20,000 yuan in one month at most, but was living in a crowded big dormitory and paying 600 yuan per month as the bunk-bed rent.

Besides this, what might be termed institutional isolation leads to psychological isolation. Drivers with rural hukou feel uncomfortable about the significant disparities between their lives and those of better-off urban people. During their work, drivers come into contact with people who live in more comfortable settings, and they have the chance to observe their daily life in Shanghai. Drivers may have a higher monthly income than some local people, but they are likely to have much lower living standards and poorer living conditions. The expensive rents and high price of consumption in Shanghai gives drivers a sense of crisis, afraid of being eliminated in this highly competitive city. A group discussion and interviews with two delivery drivers shows this point:

— In Shanghai, I can't understand rich people's life. They pay 50 yuan to buy a small cup of coffee.

— It is not a big thing. At one time, I delivered a birthday cake and it was a little damaged. I said sorry to the customer and promised I could compensate if she cared about it. However, she said it doesn't matter because the cake is for her cat's birthday. It is made of a special cat food so it is delicate. I just feel a cat's life is much better than mine: it has a more-than-300-yuan birthday cake!

— Indeed! The rich retired old people in Shanghai like having a dog or cat. Their pets have beautiful clothes and socks. I even saw a dog sitting in a baby stroller! They pay several thousand yuan to buy a pet and feed them. They even call their pets "son" or "daughter". (G1109)

— According to government reports, the average salary in Shanghai is about 9,000 yuan every month. But what is the meaning of this average? In Shanghai, there are CEOs with 50,000 yuan monthly incomes, rich people who own several hundred

million yuan, and also working class, blue-collar workers, us delivery drivers. Only people with Shanghai hukou can reach that “average” standard. (D1126)

— Shanghai is famous for high rents and high consumption. Many factories moved to Kunshan, Suzhou or Nanjing because of lower labour costs. There are fewer factories and workers in Shanghai. Now factories are moving out, workers are leaving, so what is left in Shanghai? Only elites. (D1121)

During their everyday work, the perceived discrimination also reinforces their social isolation. The food delivery drivers are not allowed to enter most gated compounds, campus and office buildings in Shanghai, as shown in Figure 6.14. Conflicts with security staff (*baoran*) may happen if customers ask drivers to enter the building when they are not allowed to. On 7 May 2019, an Eleme delivery driver stabbed a member of security staff in Hangzhou because he was banned from entering a university campus.¹⁰⁰ Most shopping malls and office buildings in Shanghai open only one lift near a side entrance for delivery drivers. They cannot use the lifts near the main entrance of these buildings because their “shabby” image is very different from the “upper class” people working there. This means that during peak times (lunch and dinner time), drivers have to wait for and crowd into one small lift. When entering compounds, drivers are sometimes rejected by the security staff, who, according to several of my interviewees, claim that objects are stolen by delivery drivers or couriers. 30% of respondents thought that they were looked down upon by security staff during their everyday work (Question 24), and the interviews also show this point:

Some *baoran* are so arrogant. They look down on us delivery drivers. At one time, a *baoran* told me directly, ‘Do you think this is a place you can enter’? I am wondering what is this high-end place? Are we cattle? (D1103)

¹⁰⁰ See news report: http://js.zjol.com.cn/ycxw_zxtf/201905/t20190507_10071469.shtml 外卖员刺伤浙大紫金港校区保安 [A delivery driver stabbed the security staff at Zhejiang University] Accessed on: 21 September 2022

Baoan say delivery drivers steal things in compounds. But I want to ask how many things are stolen by our drivers? Are all drivers thieves? (G1108)



Figure 6.14 Posts on an office building (left) and a campus building (right). They both convey the message that delivery drivers are forbidden from entering. Source: author, taken in Jingan District, 16 November 2019.

Another perceived source of discrimination comes from traffic police. Most interviewees complained that they were more likely to be checked by police than other passengers on the roads. When a traffic police officer asks them to stop, drivers have to pull their battery-powered bikes over to the curb, show their ID card and answer questions. This may take at least five minutes, which means a lot to the busy drivers. Some drivers told me police officers stop them so that they can fine them. Therefore, some experienced drivers tend to hand over to the police officer 30 to 50 yuan so as to be allowed to resume their work without delay. For instance, D1130 said:

I don't want to waste too much time on it. If I was late and complained about by customers because of that, I would be fined by my station and my service score would be influenced. So I would just give them money in some urgent cases. The 50 yuan fine can be earned [back] by finishing more orders.

There are three main checks that police officers conduct. The Shanghai local battery-powered motorbike licence is the most common and frequent one. Drivers in Shanghai are required to process a Shanghai local “soft licence” and “hard licence” (see Figure 6.15). The “hard licence” refers to a plate with a registration number installed on the battery-powered bikes; it can be easily photographed by CCTV cameras on roads and can be used to catch drivers if they break traffic rules. The “soft licence” is a certificate with the bike number, its registration including expiry date, the owner’s name and the owner’s ID number. If either licence is missing, they will be fined at least 50 yuan. However, these two licences can be processed only when the bike is bought in Shanghai. This means that if drivers buy a bike and deliver food in other nearby cities (e.g., Suzhou), they cannot directly ride their battery-powered bikes to Shanghai and deliver orders. Their work can only be started after buying a battery-powered bike in Shanghai, which costs 6,000 to 8,000 yuan on average, and paying 200 yuan for processing the two Shanghai licences with the invoice. This policy is designed to boost the Shanghai economy but puts more economic burden on drivers.

You should always remember, here we are in Shanghai where many national regulations do not work. For instance, you can’t drive a bike with a non-Shanghai licence here. A non-Shanghai licence is the same as no licence. Also, you can’t get a Shanghai licence easily unless you buy a battery-powered bike in the city [and not elsewhere]. (G1109)



Figure 6.15 The necessary “soft” (left) and “hard” (right) licences for the battery-powered bikes.

Source: WeChat group.

Another punishment that police officers apply is to remove windshields and umbrellas from the drivers’ battery-powered bikes. The drivers use these two pieces of equipment to block out cold wind and rain (see Figure 6.16). However, this is forbidden by Shanghai regulations despite being commonplace in many other Chinese cities. Drivers can be fined at least 50 yuan and have their equipment expropriated. Drivers told me that they see this as a regulation aimed at them in particular as people in other occupations seldom have to ride battery-powered bikes in bad weather. They believe that the main reason why this equipment is not allowed is to maintain the good image of the city.



Figure 6.16. Drivers' windshields and umbrellas on their battery-powered bikes. Source: author, taken in Jingan District.

Apart from the above two regulations that affect the whole of Shanghai, delivery drivers in Pudong District have to follow another regulation: wearing working uniforms. The working uniform is a vest with their platform's logo and a job number (Figure 6.17). Drivers can be easily recognised and managed because of the bright colour – Eleme's is blue and Meituan's is yellow. However, many drivers feel victimised when wearing the vests, especially Meituan drivers. This is because in China, most suspected criminals have to wear yellow vests with a number. A Meituan driver told me, "Because of the colour, when wearing it, I just feel like a prisoner" (D1103).



Figure 6.17 Working vests in Meituan. Source: from WeChat group.

The often hostile attitudes of security staff and police officers can make drivers feel uncomfortable and embarrassed. Some drivers even regard this job as a stigma. In their rural hometowns, they tell relatives and friends that they are doing other jobs such as working in factories or logistics companies, believing that they “will never understand our real job” (G1103). Several of my interviewees thought that drivers may occasionally be responsible for negative events (e.g. stealing food, attacking police officers), but they believe that the news tends to get exaggerated, meaning that ordinary people tend to believe that all drivers are impolite, poorly educated and bad-mannered. This, they say, can lead to discrimination spreading through the whole of society. This point was made by one in a group discussion:

We are seen as thieves. Police are catching us on the road. Once a traffic accident happens, the passengers will say it is because the delivery driver drove too fast. They don't even ask who is responsible for [the accident]. Some drivers feel the police have punished them unfairly and may start arguing with them. Then the passengers will say the drivers are rude and do not respect public officials. I just feel the image of food delivery drivers is not good, and negative news about us is exposed. For instance, [you often hear that] a driver eats customers' food in the lift secretly; a driver punches restaurant staff because they are slow to cook. But what is the truth? Ordinary people are only interested in the eye-catching news, but this news has been exaggerated and has a negative impact on us drivers. (G1108)

The perceived discrimination and isolation drain some drivers of the will to stay in Shanghai and continue doing this job. Most drivers regard this job in this city as a quick way to make fast money. From the survey data, 32% of respondents admitted that they did not have a clear plan for future work, and 19% thought they would stop doing this job in the next six months (Question 25). During my interviews, most drivers talked about their worries about doing this job for a long time and their desire to change to another job:

After the Spring Festival, I will first try to find a better job in my hometown. If I can avoid it, I won't come back to Shanghai. Who wants to travel so far away from home? Most drivers don't stay in this industry for a long time, maybe just two to three years. It is an unsafe job. I just want to earn money quickly and then find a stable job. (D1106)

For me, the future of this industry is uncertain. I cannot do this forever. It's so tiring. The only reason I chose this job is that I need money and can't find a better job. (D1117)

This is a job which doesn't look like a job. Compared with a formal job, we are not Eleme's employees, but we are doing the same work at lower rates. This is a job to earn money fast, but it may not last long in the future. (G1109)

In Shanghai, the least [you spend on] consumption [items] is about 3,000 yuan every month. We have to work almost every day but still live a hard and stressful life. So how can we stay in Shanghai and even buy somewhere to live in the future? (D1126)

Following the “beyond employment” approach, this chapter shows that precarity of the delivery drivers exists not only within their workplace but also in every aspect of their daily lives, such as house renting, living conditions, social integration and job sustainability. Multi-layered precarious experience should be examined because, as explained in Section 6.2, under the gamified designs in apps, the boundary between work and life is blurred. For most drivers, their roommates are also food delivery drivers or couriers, many of whom may have migrated from the same province and work in the same area of Shanghai. This network can provide mutual support for drivers, but also contributes to social isolation – drivers regard themselves as outsiders in Shanghai, crowded in “big dormitories” or having to pay high rent while local people as insiders can enjoy city benefits. Perceived discrimination from security staff and traffic officers in drivers' everyday work also limits their social integration.

6.5 Conclusion

Following the “beyond employment” approach and a Polanyian perspective on the platform economy, this chapter has argued that the food delivery drivers’ precarity lies both in their work experiences as platform workers in the online food delivery industry and in their everyday lives as rural–urban migrant workers in Shanghai. Section 6.2 illustrated that, driven by four algorithmic controls during work, drivers have limited flexibility and are exploited by platforms. Section 6.3 showed that networks with other drivers and customers can provide cooperation and more income for the drivers, but they also lead to new precarities: fierce competition and deeper commodification. Section 6.4 elaborated on the delivery drivers’ uncertainty and unsustainable livelihood by presenting their informal house renting, perceived social isolation, and discrimination because of their rural hukou. Specifically, the absence of legal labour status and urban hukou, the game design in algorithmic controls and the venture capitalism of these platform firms explain the social segregation faced by drivers in everyday life and commodification in the workplace.

Borrowing from Polanyi’s two sides of embeddedness (namely “hard Polanyi” and “soft Polanyi” perspectives), this chapter has explained the “gradational embeddedness” and “network embeddedness” of food delivery drivers in Shanghai, and the intersection between these two approaches. As Wood et al. (2019b, p. 946) highlight, these two sides of embeddedness reconcile each other: “network embeddedness is crucial for understanding *how work gets done*, whereas normative disembeddedness is important for understanding *the conditions under which the work is done* and the risks it may represent to social reproduction”.¹⁰¹ Demonstrating digital labour’s commodification in the emerging online food delivery industry and its embeddedness within interpersonal networks, this chapter geographically extends Wood et al. (2019b)’s research on reconnecting the two sides of Polanyi’s thinking to understand remote platform workers in Southeast Asia and sub-Saharan Africa. Focusing on Shanghai

¹⁰¹ In Wood et al. (2019)’s article, “normative disembeddedness” is the same as the “gradational embeddedness” used in this thesis.

food delivery drivers, this chapter has argued that their network embeddedness is a facet of their embeddedness in the economic system because of the rise of market society.

This chapter initiates a dialogue with researchers who have used Karl Polanyi's work as a point of departure for a discussion of more general features and implications of the platform economy. Apart from Wood et al. (2019b)'s empirical demonstration on the value of an integrated understanding of Polanyi's approach to embeddedness for understanding contemporary economic transformations, other scholars have focused more on Polanyi's fictitious commodity and commodification concepts. As Kenney et al. (2020) remark, "labour is organised and compensated for generating the value captured by the platform firms" (p. 229); "the platform economy is remarkable as it confirms Polanyi's (and Marx's before him) insight that the reach of the market is based upon increased commodification as it has been able to reach into ever more parts of social life" (p. 228). Notably, a new form of commodity – data – is proposed. Srnicek (2017, p. 6) argues that capitalism in the twenty-first century has turned to data "as its most basic raw material", which is processed by algorithms, whether on a platform or not (Kenney et al., 2020). From this perspective, platforms, as a new business model, make profits from "extracting and controlling immense amounts of data" (Srnicek, 2017, p. 6). This datafication, however, "does not stop at an appropriation of what already has been produced, but instead is aimed at forging conditions that ensure an unrelenting production of further data" (Grabher and König, 2020, p. 106). Stehlin et al. (2020, p. 1253) have a similar argument – data is "a form of capital: a production apparatus that valorizes raw information through algorithmic processing". With powerful business models, platforms can extend their business to other sectors by appropriating data, and large monopolistic firms or mega-platforms, such as Apple, Amazon, Facebook, Google and Microsoft, are becoming ever more powerful. With the emergence of "platform capitalism", life itself "needs to be configured so as to generate such a resource" (Couldry and Mejias, 2018, p. 338).

This chapter advanced a Polanyian perspective on the platform economy through discussing the work conditions of digital labour. Drivers are normatively disembedded

from urban social protections through a process of commodification, as explained in Section 6.2. Revealing four types of algorithmic control from the online food delivery industries, this chapter also explores the commodification of data. For instance, the delivery drivers' working hours, finished orders, rejected orders and customers' comments are all quantified into data (e.g., progress score, order score and service score), and platforms distribute future orders and reward or punish drivers according to the cloud computing of data. More importantly, with strong venture capital investment and advanced technology advantages as explained in Section 5.2.2, the Meituan and Eleme platforms can theoretically tap into deeper pools of informational raw material that can be commodified as data (Zuboff, 2019), and practically speaking they are indeed expanding to other adjacent e-grocery businesses, which may cause more power and information inequalities between capital and labour. The accumulation of data helps platforms "convert data into money" (Sadowski, 2020, p. 572). With the emergence of "super-apps", unicorn platforms are interpenetrating society.

Finally, this chapter elaborated on Polanyi's understanding of the historical great transformation of the various modes of socioeconomic relationship by drawing particular attention to the foundational elements of his framework: embeddedness and commodification, specifically embeddedness of digital labour and commodification of data. As Kenney and Zysman (2016, p. 62) write, "If the industrial revolution was organised around the factory, today's changes are organised around ... digital platforms", which is facilitated by the abundance of data. Similarly, Grabher and König (2020) have also used Polanyi's analysis of the "great transformation" to frame the rise of the platform economy. However, as explained in Section 2.2, the embeddedness and commodification is only the first half of Polanyi's great transformation, and the second half of the double movement is the self-protection movement; question of how to fight against these emergent processes of precarisation, as explained in Section 2.3.2, and the resistance to the platforms' use of algorithms as reviewed in Section 3.2.2. This will be explained in Chapter 7.

Chapter 7: Acting back: The livelihood strategies of Shanghai food delivery drivers

7.1 Introduction

Patterns of resistance vary between cases across different eras and different geographical areas. As Vinthagen and Johansson argue, “Resistance is always situated, in a context, a historic tradition, a certain place and/or social space forged by those who rebel” (2013, p. 14). As reviewed in Section 3.2.3, platform workers have adopted both collective action and a variety of sophisticated and informal practices as tools to address the digital constraints limiting their autonomy (Anwar and Graham, 2020; Sutherland et al., 2020). Research conducted by Lei (2021) and Liu and Friedman (2021) would suggest that collective action by food delivery drivers in China would be an unlikely event. However, they only focus on “moments of collectivism and solidarity” (Lei, 2021, p. 305) while tending to overlook worker agency “that is not articulated as collectively organised” (Lier, 2007, p. 829), the “quiet, largely atomized” and (Bayat, 1997b, p. 57), “non-collective but prolonged direct action by individuals” referred to by Bayat (2000, p. 536). Furthermore, as Lilja et al. (2017) argue, the interlinkage and nexus between different forms of resistance are underexplored. The previous two chapters shed light on commodification in the workplace and unsustainability in the daily lives of delivery drivers. Building on three strands of literature – Polanyi’s counter-movement, Scott’s “everyday resistance” and Bayat’s “quiet encroachment of the ordinary” -- this chapter aims to answer the following questions: How do delivery drivers in China protect themselves and survive in a big city? How should we understand the complexity, fluidity and effectiveness of their resistance in the Chinese context? And how should we interpret the interplay/relationship between different forms and practices of resistance? Further, since the platform economy is largely shaped by wider economic and political factors (Kalleberg, 2011; Zwick, 2018), delivery drivers’ work conditions and livelihood strategies may also change because of

broader social contexts. Starting in late January 2020, the COVID-19 virus disrupted both the global and Chinese economies, and badly affected the online food delivery industry and its drivers. Based on talks with drivers who had just entered and were intending to leave this industry in 2020, this chapter also explores the drivers' diverse responses to industry changes because of a sluggish economic environment.

This chapter is structured as follows. Firstly, in Section 7.2, two organised protests from delivery drivers in Shanghai in 2019 are introduced. After explaining the emergence, process and results of these two protests, I reflect on the limited effectiveness of collective action by platform workers in China. Section 7.3 explains their everyday work, how food delivery drivers for the Meituan and Eleme platforms deal with their precarious working conditions (especially the frequent traffic accidents and strict algorithmic controls from the platforms). The impacts of COVID-19 on the drivers and their reactions are discussed in Section 7.4. The main arguments of this chapter and their relationships to the three influential writers on resistance (Polanyi's counter-movement, Scott's "everyday form of resistance" and Bayat's "quiet encroachment of the ordinary") are presented in the conclusion section.

7.2 Protests and collective actions

7.2.1 Protests of delivery drivers on Shansong platform in 2019

As reviewed in Chapters 2.4.3 and 3.3.3, the existing literature on resistance in China has discussed labour protests by migrant factory workers, construction workers and vendors (Pun and Smith, 2007; Pun and Lu, 2010b; Pun and Chan, 2012). However, because of the particular characteristics relating to their work and political issues in China, delivery drivers in Shanghai seldom resort to visible protests and collective action. This is unlike platform workers in Western countries, as explained in Tassinari and Maccarrone (2020)'s research on the food delivery drivers' trade union movement in Italy. My survey data in Shanghai shows that 10% of respondents joined in open strikes and protests (Question 31).¹⁰² The low participation can be explained by two

¹⁰² 10% may be quite a high estimate given the Chinese context and the nature of the work. There are two possible reasons for this: first, respondents may have participated in strikes and protests in other cities; the interview question did not indicate "only in Shanghai"; and second, respondents' definition of "join in" may be broad, for instance, observing the protests might be counted in, as explained on page 215.

factors. First, the exploitation and commodification of drivers in the food delivery industry is in a covert and disguised form because of the game design in their work, as a result of which drivers may be incentivised to overwork through a penalties/rewards system without realising that their rights are being infringed. Second, organised collective actions, which are regarded as challenging the state's political legitimacy, are strictly monitored and banned in China. The Meituan and Eleme apps clearly warn that drivers organising and participating in protests will be added to blacklists on the platforms and their accounts deleted. As one delivery driver said about the platforms' response to protests: "It is very simple, direct and rude: delete your account forever and add your name onto the blacklist of the platforms. You cannot become a food delivery driver forever. You will 'die' if you protest violently" (G1103).

However, during my fieldwork in Shanghai, two protests were organised in October 2019, which provided opportunities for me to observe the reasons for, and emergence, process and impact of protests. The protest was led by delivery drivers on the Shansong platform (in Chinese: 闪送), which provides one-to-one delivery services. Unlike food delivery drivers, Shansong drivers can be responsible for delivering anything (e.g. documents, daily supplies, flowers, birthday cakes) from point A to point B in the same city. Another difference is that Shansong drivers only pick up one order at a time and, normally, delivery should be finished within one hour. Before explaining the effectiveness of the protests, which could be applied to other types of platform workers across the whole of China, this section details the protest I observed. Here I introduce the two protests of the Shansong platform drivers in Shanghai.

a. The first protest, encouraged by a Beijing protest

Before the protests, two causes of discontent at Shansong had been brewing among drivers. The main complaint was what was considered as an unfair order distribution between full-time and freelance drivers on the platform. Since March 2019, Shansong has recruited a large number of full-time drivers through agencies. These newly recruited drivers have been given what were seen as better orders, and consequently freelance drivers had fewer orders to deliver. In QQ and WeChat groups, Shansong

freelance drivers said: “We want the platform to give us a fair working environment, and abolish the unreasonable regulations”. The freelancers argued that orders should be evenly distributed to all working drivers, not a small group of drivers; also, the distribution should be based on the drivers’ work performance rather than work type. This, for instance, was the experience of interviewee D1111, who worked for Shansong as a freelancer for over a year:

Almost all orders are distributed to full-time drivers now. Before, I could earn 500 yuan every day on average, but now earning 300 yuan is a little hard. I don’t object that the platform recruits full-time drivers, but I think it is unfair if our order distribution is uneven. Everyone working for this platform should face the same competition and have the same rights. For example, now my service score is 99, which means I should have more orders than others. However, a new driver recruited yesterday can have more orders and earn more money than me. In other words, the platform should treat full-time and freelance drivers equally. One type can’t be replaced by the other.

To encourage newly recruited full-time drivers to join in the protests, another long-term complaint – the low delivery fee drivers earn – was also proposed by protestors. The received price drivers earn from delivering one order was based on delivery distance and package weight. However, the calculation of distance was based on direct distance on the map, rather than real distance in practice. This is problematic in Shanghai, where the Huangpu river divides the city into west and east, linked by several bridges. For instance, as shown in Figure 7.1, when delivering from point A to point B, the real distance (blue line, following roads and bridges) is much longer than the direct distance (red line, crossing the river directly). Similar to drivers in Meituan and Eleme, Shansong drivers also suffered from the platform’s strict assessments of delivery time, customer service, etc., and they were liable to be fined by the platform if they did not follow the standards. Therefore, anger at their low income brought all the drivers into the protest. For instance, one driver said in a WeChat group:

We must protest. The received price of one order is too low. To be honest, we are just a cheap labour force. Our income is not paid equally based on our efforts. The work intensity is so high and we rush to deliver the orders. Besides, our delivery drivers do not have any labour rights. The platform can punish and fine us at will.

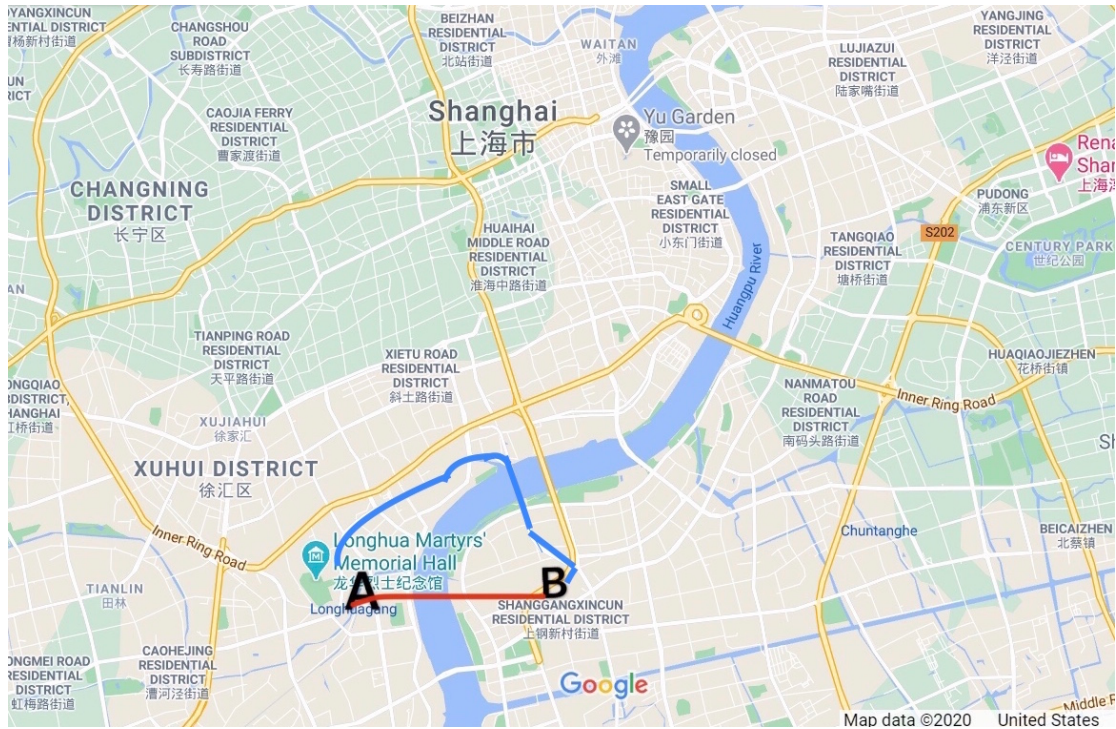


Figure 7.1 The difference between direct distance in map (red line) and travelled distance (blue line).

Source: author.

The first protest in Shanghai (24 October 2019) was significantly encouraged by a similar protest in Beijing. On 23 October 2019, Beijing drivers held a protest at the Shansong headquarters to argue about the unfair order distribution between full-time and freelance drivers. When the protest video and pictures spread online, Shanghai drivers had heated discussions in their QQ and WeChat groups. Most of them supported the Beijing collective action, but were cautious about the consequences. For instance, here are some conversations from their QQ and WeChat groups:

— I also want to participate, but Beijing is too far. I support them spiritually!

— Let's wait and see the result. I just feel that they can't change the platform's regulations. The platform would say that they'll consider [making changes], but nothing will change. I myself don't have any expectations. It is better to find another job or transition to another platform.

— Although they protest, they can be easily cheated by the platforms. Just like other platforms, Shansong bullies us underlings. This won't change.

However, the Shanghai drivers' doubts were soon dispelled at night when the Shansong platform in Beijing published an announcement – the distribution of orders would be fairly conducted between full-time and freelance drivers, and all drivers should check on orders from their apps. This apparently successful protest was celebrated by Beijing drivers, and more importantly, it brought hope to Shanghai drivers. The common belief among Shanghai drivers was that “things changed in Beijing after the protest. So if we do not protest, we will be bullied by platforms forever” (G1103). In the QQ and WeChat groups, drivers heatedly discussed how to organise Shanghai drivers and how to mobilise drivers' discontent legally. On the night of 23 October, just two hours after the Beijing announcement, Shanghai drivers shared the time and location of a protest the next day in their WeChat and QQ groups – at 10.30 a.m., 24 October, at 188 Qinzhou North Road, Shansong's headquarters. To motivate more drivers to recognise the potential impact of a protest by *laobaixing* (common people), drivers made reference in their WeChat and QQ groups to “successful” peasant movements in history (e.g. the Taiping Rebellion 1851–1864). Emotional words like “dignity”, “human rights”, “exploitation” and “your brothers and sisters” were used in their promotion of the protest, but at the same time, cautious words like “safeguarding rights legally and reasonably” and “parking our bikes in an orderly way” were also used. Messages included phrases such as: “This action is totally voluntary” and “No one is organising or leading”.

From 10.30 a.m. on 24 October, at 188 Qinzhou North Road, in front of the Shansong headquarters office, several drivers gathered. Most drivers were late for the arranged

time. Several drivers admitted in the QQ and WeChat groups that they wanted to deliver orders before joining the protest; some drivers worried about legal problems and personal safety issues, but other drivers disseminated the idea that the protest would be legal and peaceful because no violent actions would occur and no banners would be displayed. At 11 a.m., about 200 drivers gathered at the gate of the Shansong headquarters office. Six representatives from the protestors were selected to bargain with the Shansong leaders in the office, while most drivers just waited outside. Since the Shansong headquarters is situated at one corner of a crossroads, while most protestors gathered and waited just outside the office building, some drivers grouped at the other three corners. It is hard to define whether they were protestors or not: if the “mainstream” protestors needed them, they would join in and support them, but for most of the time on 24 October, they just sat on their bikes, smoked and observed the opposite corner. When I asked them whether they had come here to protest, one driver said, “You can say yes and you can also say no. If there are suitable orders, I will click on the app and deliver them” (G1104). My questioning revealed that most of these drivers were new full-time drivers for Shansong, or had other income sources (e.g. working for Meituan or Eleme). With relatively low motivation for protesting, staying in nearby corners at a close distance gave them the space to move forward and join the protest, or move backward, leaving the protest location without being noticed.

Shanghai drivers did not get any reply from the Shansong platform until the afternoon of that day. Six representatives finished discussions with Shansong leaders and said the final results would be made known on 30 October when Beijing leaders would come to Shanghai and discuss with Shanghai platform officials. Therefore, the result of first protest was a wait for the headquarters’ decision a few days later. Most drivers, who had already waited outside for a half day, were dissatisfied with this unclear result. However, following the rule of “safeguarding rights legally and reasonably”, the drivers left the protest location and agreed that they would come to the headquarters office again five days later. My discussions with protestors show that they were pessimistic about this protest:

— Here we only have about 200 drivers. It's a very small percentage of all the delivery drivers in Shanghai.

— It's hopeless coming here to protest. I haven't seen the leaders of Shansong and nothing will be solved. The leaders may think that if you do not want to work for the platform, you can change to another job. Protesting is just a joke for them.

b. The second protest

On 30 October 2019, Shanghai drivers organised a second protest and went back to the Shansong headquarters office. However, unlike the first time, their mobilisation was not widely shared in drivers' QQ and WeChat groups. In this sense, information about the second protest was shared only among drivers who participated in the first protest on 24 October. Therefore, the number of drivers joining the second protest decreased significantly. When I arrived at the protest location, the previous six representatives had already held discussions with leading Shanghai and Beijing Shansong officials. With three security staff (*baogan*) ensuring order, most drivers were sitting outside the office building, just like the first time but in much quieter mood. When I spoke with protestors, it became clear that although they did not fully trust the selected representatives, most drivers did not want to be among the six representatives because of the possibility that they might receive a “bad” record from the Shansong platform. Take, for instance, my conversation with D1111:

Author: Do you know how these six representatives were selected?

Driver D1111: No. When I came here, they had [already] been selected. It is said that they are volunteers. I don't know whether some of them are undercover [agents for the platform]. After the last protest, a [drivers'] representative even spoke for Shansong! Another representative is said to also work for the Eleme platform. So I think they maybe can't fully understand what we are experiencing. It would be great if we could have two representatives who are freelance delivery drivers speaking for us.

Author: Do you want to be a representative?

DIII: Of course not. Becoming a representative means that you need to sign your true name and show your ID card before discussing with the Shansong officials. I'm afraid they will take revenge on me later, like deleting my account on this platform.

A new phenomenon in the second protest was that a female lawyer, a driver's wife, also joined in with the drivers and supported them. With her professional knowledge, she tried to identify areas of illegality in the Shansong platform's behaviour and accordingly, the solutions for the drivers. From the lawyer's standpoint, the biggest question remained the freelance drivers' employment status – whether they were employees of the platform and whether they had labour contracts with the platform. The paradox of the Shansong platform is that on the one hand, Shansong manages drivers as their employees – drivers have to finish a specific workload weekly and buy equipment (e.g. helmets, box) from the app; on the other hand, Shansong claims that there is only a relationship of cooperation rather than labour relations. Therefore, the lawyer questioned whether it was legal to require drivers to buy equipment from Shansong apps if the drivers' employment status is vague:

Author: Do the drivers have labour contract with the platform?

Lawyer: They only have an agreement and that agreement is unequal and legally invalid. But in law, is a labour contract the only factor that decides labour relations? Before, a Beijing case supported [the argument] that the relationship between the drivers and platform is a labour relation. However, a case in Shanghai showed that they are only in a relationship of cooperation, not labour relations. However, the Shansong platform should explain whether the capital expropriation [meaning the equipment costs for the drivers] is legal or not. The lawyers of Shansong should answer whether, if these protestors want to quit this job, the money spent on the equipment will be refunded. If these drivers are not employees of the platform, then the drivers should get the money back. Otherwise, the drivers' labour rights are being breached.

On the afternoon of 30 October, the final replies from Shansong headquarters indicated that the protestors in Shanghai had only achieved one aim: the order distribution would be fair between full-time and freelance drivers. However, the other appeals from the drivers were not met: for instance, the calculation of the delivery payment still depends on direct distance drawn on the map.

The result of these two protests has been that Shanghai drivers do not trust the effectiveness of collective action. They even doubt whether the order distribution is actually fair between all working drivers because of the black-box intelligent order distribution. “No one can ensure that the order distribution will be truly fair. Can we believe Shansong’s words?” (G1104). After these two collective actions, they acknowledged that protest was of limited effect. The overwhelming reaction in their QQ and WeChat groups was that their low bargaining power could not be changed by protests; if they still wanted to work and earn money in this industry, they should only obey the rules and accept decreasing rates of pay.

In summary, the effectiveness of these two protests can be seen from their emergence, process and outcome. When the protest was organised in Beijing, drivers in Shanghai doubted its effect. However, by the night of 23 October, they were largely encouraged by the positive results in Beijing. The protests in Shanghai were organised very quickly. When protesting, on the one hand, the drivers waited for the results with hope; on the other hand, they did not trust their six representatives. Although the organisation of the protests was messy, they knew how to protect themselves during the protest. Unlike the “rightful resistance” of farmers in rural China (O’Brien and Li, 1996), delivery drivers in Shanghai kept themselves in a safe and legal zone by using other methods: keeping anonymous online, staying in the three corners of the crossroads furthest from the platform’s offices, using a lawyer and not being the representative when protesting. From my observations, their protest was not violent or aggressive; the drivers just sat in front of the building, chatting with each other, and waiting for a reply from the platform. In this sense, the protestors just wanted to show that they were in the same position as Beijing’s drivers and, as they saw it, could not be cheated forever. Reaction

in the QQ and WeChat groups to the unsatisfactory nature of the final result suggested that no one would strive for it and bargain with the platforms any more. After the protest, in their online groups the drivers were still complaining about their work and talking about changing to another job, but they were still working for the Shansong platform.

7.2.2 Limited effectiveness of protests

These two protests are a cameo of platform workers' strikes in China nowadays. According to the China Labour Bulletin, couriers had organised twenty-five protests before October 2020, and there were twenty-seven protests in the whole year of 2019; from 2016 to 2019, food delivery drivers organised 121 strikes.¹⁰³ In 2016, Shanghai food delivery drivers for Eleme and Meituan also organised several large-scale protests in Pudong District. However, most protestors found it difficult to achieve their demands, which were mainly linked to wage arrears, pay cuts and fines. Stepping beyond the protests from drivers for the Shansong platform in 2019, this section reflects on the reasons for the limited effectiveness of platform workers' collective actions in China. Based on interviews with both food delivery drivers and couriers, I aim to provide here a holistic picture of the current dilemma that face platform workers considering and undertaking protests, and shed light on platform workers' protection mechanisms.

Three reasons characteristic of platform workers can account for the limited effectiveness of protests. Firstly, platform workers are split and divided. After the Shansong protest, one common complaint from drivers was that they were not united. "We are too weak and cowardly. We are like thousands of grains of sand on a plate with different ideas. Our team lacks cohesion and it is really hard to organise a protest" (G1104). It is obvious that drivers are heterogeneous in their economic conditions and that drivers in bad financial situations are more likely to forsake protest action and work for the platforms when monetary motivation is provided. As introduced in Section 6.2.1, the received price of each order changes instantly according to the demand and supply in the market. This means that when there are more drivers joining protests and fewer

¹⁰³ Data source: <https://clb.org.hk/content/express-delivery-workers-protest-wage-arrears-singles-day-approaches>
Express delivery workers protest wage arrears as Singles Day approaches Accessed on: 21 September 2022

drivers working for the platforms, the price of an order will increase to attract more drivers to deliver orders. Therefore, some poor protestors are likely to stop protesting, leading to a split caused by this surge pricing. From the protestors' standpoint, this is the platforms' economic strategy to induce the poor to work for them:

This is the trick played by the platforms. When the drivers protest and no one delivers orders, the platforms will increase the received price of one order immediately. For example, two or three extra yuan will be added to each order. Some undecided drivers find the higher rate lucrative and attractive, so they stop protesting and start delivering orders. So how many people will insist on protesting? This is why the protest cannot last for a long time. (D1119)

Most protestors also understand why some drivers do not participate in protests and still work at a relatively low rate. As a driver explained in the WeChat group, "They urgently need to earn money for survival, for their basic life. Otherwise, who will work hard for that four-yuan or five-yuan order?" (G1109) Especially for drivers who rely heavily on the income from platforms, with low educational qualifications and professional competence, it is difficult to find another job if their accounts are deleted by the platforms only because they joined in the protests. Therefore, when higher rates are provided by platforms, those drivers are motivated to earn money from delivering orders. In this sense, the main goal of protestors and non-protestors is the same – "the necessity to survive and improve a dignified life" (Bayat, 2000, p. 547) – but the reaction is different: through protesting openly or through delivering more orders silently.

Apart from their economic differences, platform workers are also divided by different working types. As we saw in Section 7.2.1, most protestors against Shansong were freelancers. For Meituan and Eleme, full-time drivers, freelancers and drivers in different schemes (e.g. Meituan Lepao and Eleme Better Selection, which will be explained in Section 7.4.2) are competing with each other. When freelance drivers held protests in Pudong District in 2016, station leaders in that area told full-time drivers:

“Do not join them. You are full-time drivers, and remember, we are different from them. Their protest also gives you a good opportunity to deliver more orders and earn more money” (G1105). In the full-time drivers’ morning meetings, they are told that their image and reputation should be made better than those of freelancers by increasing their service scores. After the Meituan Lepao and Eleme Better Selection schemes were widely promoted from 2020, freelance drivers have also complained that drivers in these schemes have the privilege of getting more orders. It is clear that drivers of different working types and schemes may have conflicts of interest (especially about order distribution), and the platforms are good at manipulating this point. As a delivery driver put it:

Meituan Lepao and Eleme Better Selection are smart strategies to create in-fighting among the drivers. Now the platforms don’t care about protests because the full-time drivers and drivers in the two new schemes cannot reject the distributed orders. This means that they have enough working drivers who can help the platforms to finish all the orders in the system. The platforms are using the drivers to deal with the protest drivers. (D1124)

Secondly, drivers can be easily replaced because of fierce competition. As a growing industry, the food delivery industry is expanding rapidly and attracting more migrant workers. Because of low barriers to entry, drivers only need three steps to start this job: buying a battery-powered bike, processing their health certificate and Shanghai local bike licenses, and registering on the apps. “Everyone can do this job as long as you know how to ride a battery-powered bike, how to use smartphones and an electronic map. After all, this is a job that relies on your two legs, not your brain” (D1141). However, from the perspective of market supply and demand, the more drivers work in this industry, the less they can earn from each order, and accordingly, the less bargaining power they have. This has indeed happened with Eleme and Meituan. At the early stages of the industry, drivers had better work experiences and higher income, “on average, 8–10 yuan per order” (G1101). After 2017, with the influx of migrant workers, the received price of each order declined. Drivers also acknowledge that the lower rates

are caused by there being more working drivers than before. Therefore, even though drivers protested for higher rates and better working conditions after 2017, “the platforms don’t care because there are enough drivers working for them” (G1104). Most interviewees who were working before 2017 are nostalgic about the golden time “when it was very easy to earn 15,000 yuan every month”, but now “in every corner in Shanghai, you can find food delivery drivers, and everyone wants to share a piece of this profitable industry” (D1137). Because of the sufficient supply of cheap labour, the platforms are dominating this industry while drivers are at a disadvantage.

The platforms’ attitude is that it’s fine if you want to work. If you don’t want to work, you should get out of this industry. Anyway, they don’t care whether you protest or not; there is no shortage of drivers. (D1119)

Protest is just the drivers’ wishful thinking. The protest is like a self-produced performance. When some drivers are protesting for higher rates, some drivers are still delivering orders because of the two yuan subsidies from the platforms. Some drivers exist in this industry, and others will enter this industry tomorrow. The only thing these platforms don’t lack is a cheap labour force. (G1104)

Thirdly, workers lack organisation power because of their independent work and online communication. Although drivers may join a station or a team, delivering orders is individual work and needs little cooperation. Compared with labour protests in factories, it is hard to organise scattered drivers who lack team spirit in their work. Although drivers frequently contact and communicate with each other online, I found that they tended to question the truthfulness of online information. When they share protest information in their QQ and WeChat groups, some drivers also worry about fake information. On the one hand, the online contact and organisation can protect the protestors by keeping them anonymous, without clear leaders and formal organisation; on the other hand, it causes low levels of trust among the drivers.

This echoes Bayat's argument on the organisational power of the urban poor in the Global South. He notes that, "Unlike groups such as organised workers or students, the unemployed, migrants, refugees, or street vendors are groups in flux; they are the structurally atomised individuals who operate outside the formal institutions of factories, schools, and associations" (1997b, p. 58); and "they lack an organisational power of disruption – the possibility of going on strike" (2000, p. 548). Although drivers may meet, talk and interact with each other at food courts or on the streets outside restaurants, they are fluid and heterogeneous. Without permanent communication channels, their mobilisation is only around friends, hometown peers, relatives, or location-based networks, or through largely anonymous WeChat and QQ groups. This is also the reason why drivers' collective actions are usually "unplanned, unstructured and instantaneous" (Bayat, 1997b, p. 66).

In summary, because of the split and divided protestors, and platform workers' low competitiveness and lack of organisational power, protests are of limited effectiveness for platform workers in China. Restricted by their low bargaining power, it is hard for platform workers to protest against the big platforms with all their corporate muscle. However, this does not mean that the workers will not resort to action. As the protests by Shansong drivers in 2019 showed, drivers can be easily encouraged and inspired by successful protests in other similar situations – the positive results in Beijing gave the Shanghai drivers hope and courage. As Lilja et al. argue, "resistance inspires, provokes, generates, encourages or eventually discourages resistance; depending on contextual factors and other circumstances" (2017, p. 52). However, the importance of external factors also indicates that drivers are opportunistic in their attempts to gain more benefits. This opportunism can protect their political safety even while they are participating in the protest. However, their working conditions are likely only to be improved in a limited fashion. Unsuccessful protest action can have the adverse effect of making drivers recognise their limitations and trust less in future protests. As an alternative, they turn to everyday forms of resistance, dealing with their precarity quietly and under the radar. The next section will explain how drivers protect

themselves in their everyday work, especially against precarious work conditions (e.g., traffic accidents in particular) and strict algorithmic controls (e.g., short delivery time).

7.3 “Everyday resistance” of Shanghai food delivery drivers

7.3.1 Taking advantage of traffic accidents

As introduced in Section 6.4.2, most delivery drivers have very limited access to Shanghai social insurance policies because of their rural hukou. An obvious question is how drivers react to traffic accidents, which are quite common in their everyday work. During my fieldwork, I followed three cases to observe how drivers protect themselves under such precarious conditions. As introduced in Section 6.4.2, drivers can get compensation from their traffic insurance only if: a) they are responsible for the accident and they hurt others (or cause property damage); and b) the accident happens during work time (e.g., when picking up or delivering orders). However, the strict regulations on using traffic insurance do not influence drivers' compensation claims; these three cases show that drivers can get reasonable monetary compensation. From their experiences, the drivers' general strategy is: if they are responsible for a car accident, they will make full use of the insurance they have bought from the platforms; if not, they will try to get as much money as possible from the car drivers, whether through legal or private channels. Each of these three cases is discussed below.

Case 1

D1121's case shows that the platform-provided traffic insurance can be useful when the driver is responsible for the accident.

Delivery driver D1121 is a freelancer for Eleme, working in Xinzhuang, Minhang District. In November 2019, D1121 had a traffic accident when he crashed into a restaurant's front window, and he needed to pay the restaurant owner 700 yuan as compensation for material damage to the restaurant. At that time, he called a traffic officer immediately. After filling in records and signing an agreement form in the police station, his personal information (e.g., bank card number and telephone number) was transferred to the insurance company, GuoTai. After just three working days, the 700-

yuan compensation was paid to his bank card from the insurance company. In the WeChat group, D1121 told other drivers excitedly:

Our traffic insurance is helpful! This is why we pay three yuan every day! So when an accident happens, we should learn how to use it. Don't waste it! The whole procedure through the police is not difficult, and in fact, it is faster than I had imagined. From this accident, I learned one lesson: we should call the traffic officer when similar accidents happen and keep the necessary document [meaning the signed agreement form] to get compensation from the insurance company.

Case 2:

D1111's case shows that, through legal and formal channels, he was able to get compensation from a car driver who was responsible for the traffic accident.

Also in November 2019, D1111 had a serious traffic accident with a car as a result of which he injured his arms. His battery-powered bike was badly impacted and he could not work any more. Unlike D1121's case, in D111's case the car driver was fully responsible. Waiting for the doctor's check-up in a hospital, D1111 promptly shared this accident in his WeChat group, and other drivers discussed it heatedly and gave him many suggestions:

— Shanghainese are rich. He [the car driver] is responsible for this and you should get compensation. When talking with the doctor, you should say that your head and legs are also hurt and you should have a whole body check, not just your arms. Then you should persuade the doctor to recommend one month of sick leave. So you can get compensation for working time loss, nutrition cost, emotional distress, and so on from his insurance company.

— You should remember that you shouldn't pay for the medicine or the check-up. You can directly say that you don't have money. Anyway, he is fully responsible for this. If he doesn't pay for it, you can call the police or complain about him through the 24-hour Shanghai telephone hotline.

— He [the car driver] has a car and insurance. Of course he can afford the medicine fee. Let him pay for everything. Don't be afraid. Non-Shanghainese are easily bullied in Shanghai. These insurance companies also have many tricks and you should be careful about how to get the compensation back. Remember, you are legally protected now. After getting your whole body check report in the hospital, you can discuss the compensation with him.

— This is the common sense in this industry: if you are knocked over by a car, then just lie on the road for at least 30 minutes! If you stand up quickly, well, it means there is not a big thing. And when you stand up slowly, you should say every part of your body is hurt and you require a whole body check-up in hospital. I know a driver who lay on the road in the hot sun for 20 minutes after a traffic accident.

Whether D1111 listened to other drivers' "useful" suggestions or not, he got 6,500 yuan as compensation from the car driver's insurance company after four days. He said, "The amount of money is based on the insurance company's standards. I wanted to get more, but I couldn't." With the money, D1111 bought a new battery-powered bike and had his arms successfully treated. After this accident, D1111 benefited from the car driver's insurance, but his posts suggest that he had less trust in the insurance provided by the platform. He aimed to earn more money and then have a solid financial foundation to buy better traffic and medical insurance from other insurance companies.

Case 3:

D1126's case shows how, through informal channels, he was able to get compensation privately from the drivers of the cars who were responsible for an accident. In some sense, he tried to take advantage by deliberately causing car accidents.

D1126 had been a professional car driver so he knew very well about liability judgments when traffic accidents happen. Because of this, he intentionally became the victim and got injured in car accidents to get more compensation.

Driver D1126: I am very familiar with the traffic rules. This year, I have had four traffic accidents, and every time, the full responsibility was with the car drivers. To be honest, I kind of deliberately have accidents with others. For example, when I go straight at a corner, a car wants to turn right, but the car driver's technique is not very good and a minor accident occurs. I aim to fall off my bike and maybe there are some bruises on my body. Then I will say, how about giving me 800 yuan as compensation? Otherwise, we will go to hospital and I will have a complete check-up. Every time, the car drivers want to avoid wasting time, and we deal with the car accident privately. In fact, I can control my battery-powered bike and I can stop the accident from happening, but I aim to cause one. The reason is simple: I ride my bike regularly on the road but the car drivers may break some traffic rules when turning. Anyway, if the car licence is from Shanghai and the driver is female, it is easy to get the money. In these four traffic accidents, I have been almost safe and sound. I have not needed to go to hospital or buy any medicine, but I have got about 3,000 yuan as compensation from the four car drivers.

Author: Have you ever used the insurance you bought from the platform?

D1126: No. In fact, I even don't know which company we bought the insurance from. That is a compulsory requirement from the platforms. If I could choose, I wouldn't want to buy it. With my command of the traffic rules, I know how to avoid accidents.

In the WeChat group, D1126's experiences were supported by most drivers. Delivery drivers said that traffic officers will not take their side and will always speak for Shanghainese people. Therefore, if the responsibility is the car driver's, most delivery drivers prefer to deal with traffic accidents privately rather than through legal and formal channels, which include contacting a traffic officer, getting a hospital check if anyone is injured, signing agreement document with car drivers, and discussing compensation with the car owners and their insurance companies. By pretending to get hurt seriously and intentionally selecting certain car drivers such as young women or, as D1126 did, Shanghainese, who tend to be regarded indiscriminately as wealthy,

drivers who are good at bargaining can get higher compensation than they would through legal and formal channels.

Although drivers can benefit from their traffic insurance or the car drivers' insurance, it does not mean they can always take advantage of traffic accidents. The informal and private methods can only be used in small traffic accidents and drivers try to avoid having serious traffic accidents, whether they are troublemaker or victim. Getting injured seriously means their traffic insurance may not cover the expensive medical costs. Drivers' "independent contractor" status is also disputed when lawsuits are involved. A typical example is from 2018, when an Eleme delivery driver knocked down a renowned doctor in Shanghai because he was driving too fast. Injured seriously, the doctor died soon after and the delivery driver was sued by the doctor's daughter. The low-income driver could not afford the huge compensation, but Eleme transferred the whole responsibility onto the contractor.¹⁰⁴ This accident sparked discussion over what led to the driver speeding and who should pay for the tragedy. To avoid this trouble, experienced drivers such as D1126 are very careful when breaking traffic rules, which is quite common in their daily work, as explained in Section 6.2.1. They strive to avoid hurting others seriously, and at the same time, try to "control" to what extent they are injured in small traffic accidents and get monetary compensation from car drivers.

In summary, these three cases show that the delivery drivers are not always victims or part of a disadvantaged group; instead, many of them know how to protect themselves in a big city by using insurance, or through informal and private channels, although their traffic insurance from the platforms is of limited help. They are not necessarily powerless actors; on the contrary, they can exhibit tenacity and resourcefulness when faced with traffic accidents. These three cases unravel the drivers' heterogeneous responses to traffic accidents and their diverse forms of "income"-maximising behaviour, but they have a common aim in the context of limited protection from public

¹⁰⁴ See news reports and Eleme's reply: https://www.sohu.com/a/247821973_118680? f=index_chan43news_65 饿了么外卖小哥撞伤致死医学泰斗 谁来为最后一公里的安全负责 [A medical professor died in a traffic accident with a Eleme delivery driver. Who is responsible for the safety of the last mile?] Accessed on: 21 September 2022

policies: to maximise their compensation, whether by legal or illegal means, when accidents happen.

7.3.2 Working in grey areas to earn money

As introduced in Section 6.2.1, drivers face strict algorithmic controls in their everyday work. However, drivers are not always passive receivers of every order from their apps. They are good at finding loopholes in their working regulations and working outside or at the very margins of these regulations. D1107 explained the reasons why some drivers can earn well: “There is something fishy behind every industry. Only those clever people who can use their heads to think of tactics can earn money and become outstanding.” Two techniques are commonly shared among drivers: to upgrade their ranks and get more bonuses, drivers may make fake orders; and to deal with short delivery times, drivers sometimes click “finished” in advance in their apps.

a. Working with restaurants to make fake orders

In the initial period of this industry, the digital supervision of drivers (e.g., online payment, real-time location tracking) was not strict because of the absence of intelligent systems. The main management of delivery drivers concentrated on the amount of finished orders, which dictated their income. Therefore, drivers found a quick way to earn more money without making much effort: they pretended to be customers to order food on the platforms, but before that, they contacted several restaurants in advance and formed a cooperative relationship with the restaurant owners. After receiving orders from drivers, the restaurants did not have to cook or prepare any food, and the drivers did not have to pick up or deliver any orders. The only thing the drivers had to do was sit very close to the location of the restaurants (because the order distribution was based on the nearest location), and order food from their cooperating restaurant using different accounts on the platforms. As explained in Section 5.2.1, at the beginning of this industry, in the face of fierce competition, the platforms tended to subsidise the restaurants and give discounts to the customers in order to expand the market. This means that drivers received relatively high income and rewards based on their “finished” orders, and the restaurants received the subsidies from the platforms

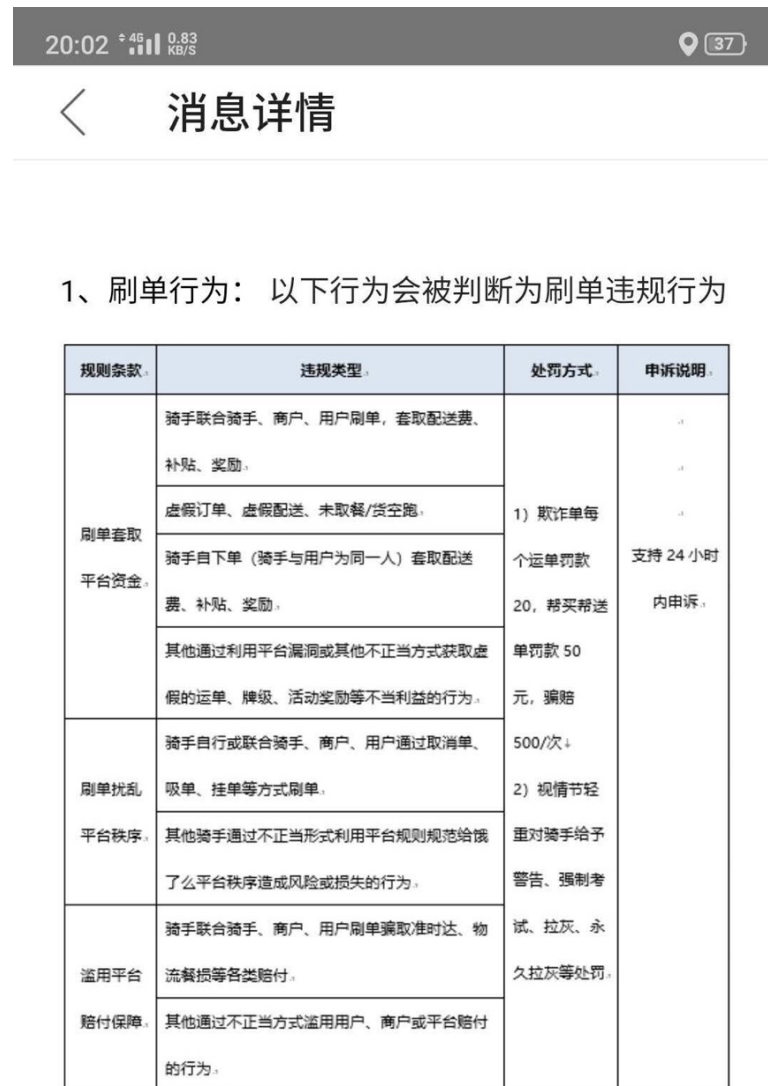
without any cost. In the delivery drivers' language, this method is called "making fake orders in collaboration with the restaurants". For instance, D1116 explained why drivers earned a lot of money in the initial stages of the industry:

It was very easy and fast to earn a lot of money in 2015. As long as you were smart and reacted quickly to market change, earning more than 10,000 yuan every month was easy when you were lying on your bed. I heard that many drivers "finished" more than 100 orders with restaurants every day and earned a lot of money at that time. I was not lucky and entered this industry late. Now the platforms supervise our online payment, and the drivers' locations at any time, so it is hard to play this trick again.

Besides this, before they used online payment methods, it was hard for the platforms to track the real price of the food paid by customers; therefore food delivery drivers could earn money from the price gap between their actual costs and the customers' payments. As introduced in Section 5.2.2, delivery drivers were responsible for paying for the food in cash until 2014 when the online payment options emerged. Without strict algorithmic controls, drivers could earn money from getting extra discounts after becoming familiar with the restaurant owners, or gaining restaurant membership schemes. For instance, a driver who registered as a member of Starbucks could get 10% off when buying coffee and snacks. However, customers paid drivers the whole price if they did not notice the invoice.

It should be noted that nowadays this strategy is rarely used by drivers because Meituan and Eleme platforms supervise every step in the delivery process through the online payment system and real-location tracking system. This strategy is mainly used when drivers aim to upgrade their ranks. For instance, if another two finished orders are needed by a driver who wants to become King in the next week, then they will place two orders with either Meituan or Eleme, pay for them, pick them up at the restaurant and eat the food. They can argue that "we are delivery drivers, but we are also customers and need to eat" (G1109) if the fake nature of the orders is discovered by the platforms. Usually, these fake orders will not be found if one driver makes fewer than ten fake

orders every month. However, if these fake orders are too frequent, they are likely to be caught by the platforms. Drivers will be fined 20 to 500 yuan according to different cases; drivers' accounts will be deleted by the platforms and they will to receive face-to-face training before being allowed to resume work. This is because this behaviour is strictly banned under the drivers' working procedure on their apps. For instance, Figure 7.2 shows different examples of Eleme identifying "fake orders".



规则条款	违规类型	处罚方式	申诉说明
刷单套取平台资金	骑手联合骑手、商户、用户刷单，套取配送费、补贴、奖励。	1) 欺诈单每个运单罚款20，帮买帮送单罚款50元，骗赔500/次。	支持24小时内申诉。
	虚假订单、虚假配送、未取餐/货空跑。		
	骑手自下单（骑手与用户为同一人）套取配送费、补贴、奖励。		
	其他通过利用平台漏洞或其他不正当方式获取虚假的运单、牌级、活动奖励等不当利益的行为。		
刷单扰乱平台秩序	骑手自行或联合骑手、商户、用户通过取消单、吸单、挂单等方式刷单。	2) 视情节轻重对骑手给予警告、强制考试、拉灰、永久拉灰等处罚。	
	其他骑手通过不正当形式利用平台规则规范给饿了么平台秩序造成风险或损失的行为。		
滥用平台赔付保障	骑手联合骑手、商户、用户刷单骗取准时达、物流餐损等各类赔付。		
	其他通过不正当方式滥用用户、商户或平台赔付的行为。		

Figure 7.2 Eleme's identification of "making fake orders". The heading reads as follows: "Ways of illegally taking money from the platform include: cooperating with other drivers, restaurants and customers to get higher delivery fees and bonuses; faking orders, or not picking up orders at restaurants; drivers ordering food in their own accounts to get the delivery fee and bonus; taking

advantage of platform loopholes or using illegal ways to get money from platforms.” Source: Eleme app, translated by author.

b. Working with customers and contractors to deliver on time

As explained in Section 6.2.1, delivery drivers face short delivery times. To avoid punishment because of late delivery, drivers will click “finished” or “cannot contact the customer” on their apps when they are about to be late delivering the orders. In the drivers’ language, this is called “clicking finished in advance” and “ostensible abnormal situation report”, which are clearly banned by the platforms. To evade the platforms’ supervision, the drivers will call their customers in advance, persuading them not to answer any phone calls from the platforms later. If the customers agree and cooperate with the driver, then the driver is successful in using these tactics; otherwise, if their behaviour is found out by the platforms, the driver will be fined 50 yuan and their service score will be deducted 20 points. This tactic was commonly used by drivers and when I ordered food from Meituan and Eleme: sometimes, I did not receive my food but it showed that the order had been finished on my app. A food delivery driver for Eleme justified this tactic in his everyday work:

If there isn’t enough time, we’ll click “finish” at a very close distance from our customers. Of course, we haven’t delivered the food to the customer, but normally, the platforms won’t find out. If they do, we can argue that there was no signal in the gated compound or office building’s elevators, so I had to click “finish” outside the building. Or I can claim that I contacted the customer in advance and was told to deliver to another location [but this turned out not to be possible]. If I don’t have time to contact customers in advance and they question this, I can also say that oh, I clicked wrong – I wanted to click another order in my app but clicked your order; I hope you could understand. (D1114)

For full-time drivers, the only risk is that their exact real-time locations are shown on their station managers’ computers. However, most interviewees admitted that actually their station managers know this tactic and sometimes even encourage drivers to use it.

This is because one important criterion of the station's working performance is "delivering on time", and delivering orders late also means punishments for the station manager, as explained in Chapter 5.3.2. In this sense, full-time drivers and their station managers work together to fool the platforms and to deal with the strict assessments. As a delivery driver said:

In our morning meetings, our station leader said, as long as we call customers in advance and communicate well, we can click "finish" on the app in advance. Of course, this is banned by the platforms, but I think station leaders know this; they just do not want to admit it. (D1132)

Thus both drivers and station managers get bonuses from the platforms by making their data "look pretty". Scrutinising the "pretty-looking" data, managers at Meituan and Eleme are satisfied with the "quick" delivery, and they are happy about the shortened delivery time.

Leaders in the top level think everything goes well now and most orders can be finished within 40 minutes, so how about shortening the delivery time to 35 minutes? They don't know the data is changed and modified beforehand. But if we have to finish an order in 35 minutes, we'll click "finished" in advance or change customers' location more frequently. (D1132)

The cycle of "short delivery time – click finished in advance – shorter delivery time – click finished in advance more frequently" is caused by intensified data management in the industry. Here, data has different meanings for different stakeholders in the online food delivery industry. Platform managers look at data on the total volume of finished orders, the number of late and cancelled orders, the number of orders receiving complaints and bad feedback; by relying on the good data, they can attract more venture investment and grab a bigger share of the market. For contractors, data is their income: good data, based on the platforms' assessment every two weeks, means a higher level for the station and higher monthly income. The stress of data management is aggravated

for delivery drivers, who strive to improve their “service score”, “order score” and “progress score”. Clicking “finished” in advance and “ostensible abnormal situation report” are drivers’ coping strategies in the face of strict data management, but in the long term, drivers have to work more intensely and the operation of this industry is driven ever more by dependence on the data. As a driver put it in a group discussion:

Platforms and contractors just focus on the data in the systems on their computers, but they have no idea of what we are doing and experiencing every day. They do not care about the process; they only care about the final results. Drivers are asked to finish a job according to their rules. Therefore, we try to make the data normal when it is going to be abnormal. (G1109)

In summary, whether the drivers are taking advantage of traffic accidents or working in grey areas, this section highlights their use of Scott’s “weapons of the weak” – dissimulation, false compliance and feigned ignorance. Each type of everyday resistance presented above can be read as an attempt by drivers to gain a measure of control over their own working circumstances and renegotiate the restrictions on their labour process with their employers. Faced with strict algorithmic controls from apps, drivers know how to play the system in their everyday work and collude with other actors (e.g. restaurant owners, customers and station managers) to cover up their resistance. As a driver said in WeChat group, “policies come from above, counter-policies from below [*shang you zhengce, xia you duice*]”. Unlike collective action, these minor coping strategies are effective: drivers can get satisfactory compensation through informal channels, and they can upgrade their ranks and get higher income by slightly manipulating data, which is the only focus of the platforms. At the same time, drivers clearly acknowledge that they can play games with platforms occasionally, based on different cases. Most interviewees said that getting more compensation in informal ways from car drivers can only be used in small traffic accidents; too obvious and frequent fake orders and clicking “finished” in advance too often can be found out by platforms and the drivers will be punished seriously for it. This shows that

experienced drivers get the hang of keeping a balance between formal and informal, legal and illegal in their everyday work.

7.4 Quiet encroachment during COVID-19: how to make a living

7.4.1 The impacts of COVID-19 on drivers

In late January 2020, a coronavirus outbreak started in Wuhan, a densely populated city located in central China, then public panic spread to the whole of China, and further on a global scale. With borders closed and flights grounded, COVID-19 affected the global economy and caused a serious decline in global GDP, similar to the global financial crisis in 2008. These effects are felt especially by those on lower incomes. While food delivery drivers travelled around Shanghai wearing face masks, white-collar workers could earn money working at home, and enjoy the convenient delivery services. With sharper divisions and economic downturn, this section examines the drivers' experiences and reactions during the COVID-19 pandemic. After introducing the impact of the pandemic on drivers in this section, the next section will explain the drivers' livelihood strategies.

During the first and so far most serious peak of COVID-19 in China (late January to the end of March 2020), most Shanghai delivery drivers stayed in the city or found themselves stuck in their rural hometowns, but both situations exposed them to health and economic risks. Those who stayed in Shanghai and delivered orders could earn about 10 yuan (\$1.60) from each order, more than double the average rate. But high income also meant high risks. Although the drivers made a great contribution delivering food for the cooped-up consumers, the only protection they could receive was one face mask and body temperature checks every working day. Drivers staying in Shanghai enjoyed a relatively high price for each order, but drivers stuck in their rural hometowns had no income. Because the coronavirus outbreak occurred just before the traditional Chinese Spring Festival, many drivers had returned to their rural hometowns, and were locked down there until late March, when work resumption was encouraged and migrant workers (except for those from Hubei Province) were allowed to travel to

Shanghai. Idling at home for more than two months, many of these drivers are likely to have had to continuing paying their housing rents in Shanghai.

After the peak of COVID-19 (i.e., after March 2020), most drivers' income declined dramatically, mainly for two reasons. Firstly, the volume of orders decreased. Worrying about food safety, consumers were hesitant to order food online, especially as several delivery drivers in Shenzhen, Qingdao and Beijing were diagnosed as COVID-19 positive.¹⁰⁵ Some customers did not order food online because their favourite restaurants closed down, and they had to walk to the gates of their compounds to pick up their food because of no-contact delivery. A slower economy also weighed on consumers – cooking at home rather than ordering cooked meals can save money. Most interviewees admitted that the amount of daily finished orders decreased significantly in 2020 because “there are fewer orders on the apps” (D1139).

Secondly, the received price of each order decreased. As a result of the hit taken by the economy, less educated and low skilled migrant workers became unemployed. An online survey showed that nationally at least 30 to 50 million migrants lost their jobs in late March 2020 (Che et al., 2020). Because of the low entry requirements of delivery jobs and relatively high income for migrant workers, many of them took up work as delivery drivers. According to a report from Xinhua, China's official news agency, Meituan has recruited more than one million new delivery drivers since the start of 2020, more than 260,000 of them come from poor areas, and more than 70,000 of them are listed officially as being “poverty-stricken population” in national documents (*guojia jiandang lika pinkun renkou*).¹⁰⁶ A sufficient supply of cheap labour meant more competition between the drivers, and the received payment for each order fell.

¹⁰⁵ See related news reports: https://www.guancha.cn/politics/2020_06_23_555164.shtml 饿了么回应外卖员确诊：正在对北京所有外卖骑手进行核酸检测 [Eleme responds to the delivery driver's diagnosis: testing is being carried out on all riders in Beijing]; <https://baijiahao.baidu.com/s?id=1657479546953226851&wfr=spider&for=pc> 深圳 1 名外卖骑手确诊，14 天潜伏期一直在送外卖 [A food delivery drivers in Shenzhen was diagnosed as positive, and he has been delivering food in the past two weeks] Accessed on: 21 September 2022

¹⁰⁶ Data source: http://k.sina.com.cn/article_2810373291_a782e4ab02001q0dt.html 美团五个月新增骑手超 107 万 逾 26 万来自贫困地区 [Meituan attracts more than 1.07 million new riders in the past five months, and more than 260,000 riders migrate from poor areas] Accessed on: 21 September 2022

Complaints from drivers confirm this point:

This year, the number of food delivery drivers is extremely large. People in small companies lost their jobs because many companies and factories went bankrupt. Many workers' salaries decreased because the economy is doing so badly, so people like cleaners, couriers, and security staff deliver food as a part-time job. More and more people are joining in this industry because it is easy. Therefore, the payment we receive for each order falls. (D1140)

After the pandemic, a lot of people lost their job and became food delivery drivers. The platforms are not short of labour. It is simple: if you do not work, others will. Don't talk about 4.7 yuan per order, if the payment for one order falls to 3.5 yuan, there will be enough working drivers just because they need the money! (D1134)

Since March 2020, because of the decline of both the order volume and the received price of each order, it has been harder for drivers to earn money. In my fieldwork I found that the lowest received payment for each order fell to 4.5 yuan, from 5.2 yuan in 2019. Because more freelancers compete for each order under the surge pricing mechanism, drivers find it harder to make money from platforms. The next section will explain three reactions that drivers have had to the difficult work conditions brought about by the coronavirus.

7.4.2 Shanghai food delivery drivers' responses to the changes brought about by COVID-19

Response a: Join new schemes Meituan Lepao or Eleme Better Selection

Meituan Lepao was first promoted in November 2019, and later, Eleme launched a similar scheme, Better Selection (*Youxuan*). Freelance drivers joining these two new schemes had the advantage of getting as good orders as full-time drivers. After payment has been received from customers, orders are first distributed to drivers in the new schemes, then to full-time drivers in stations, and finally to freelancers. According to delivery driver D1121, in Xinzhuang, Mingang District, twenty-two drivers in the Lepao scheme finish about 55% of the orders in that area. In other words, drivers in the

new schemes have enough orders to deliver. The recruitment advertisements for the Better Selection and Meituan Lepao schemes show that the platforms are looking for freelancers who aim to earn more money and have a stable order distribution. Images on the advertisement indicate better working experiences: red envelopes filled with money, and a happy Meituan driver, with no mention of decreasing order volume (see Figure 7.3). However, at the same time, drivers must obey similar working rules to full-time drivers. For instance, drivers in Better Selection have to work at least six days every week, forty-eight hours every week, eight hours every day regardless of weather conditions, and finish at least 150 orders every week. Additional working regulations (e.g. fewer than five late orders per week) can be seen in Table 7.1, and drivers seriously violating these rules can be added to the platform's blacklist and be barred from new schemes in the future.

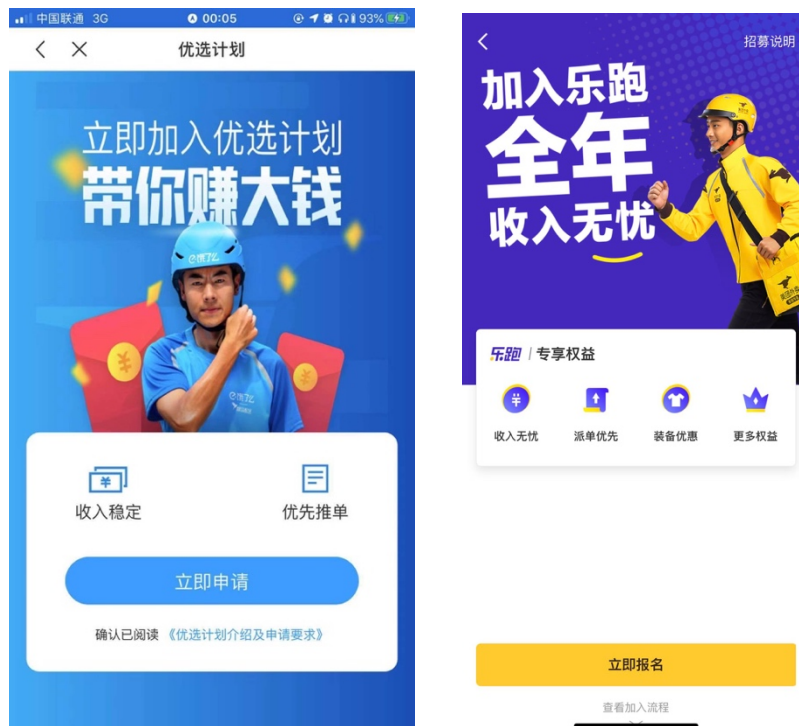


Figure 7.3 Recruitment advertisements for Eleme Better Selection and Meituan Lepao. They suggest that drivers in these new schemes will have stable income and the privilege of delivering good orders. Source: Eleme and Meituan apps.

	Point will be deducted when...	Number of
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		points deducted
Attendance	Less than 8 working hours in one day	-10
	Less than 2 working days in a week	-10
Service quality	More than 5 late orders per week	-5
	2-5 late orders per week	-2
	Reject one order per week	-1/order
	One order receives complaint from customers	-2
	More than 2 orders receive complaints from customers	-10
	More than 5 “ostensible abnormal situation reports”	-5
	2-5 “ostensible abnormal situation reports”	-2
	Violate working rules when delivering orders	-2
Basic management	Disobedience towards management	-5
	Serious disobedience towards management seriously and cause bad influence	-10
	Absence from morning meeting	-2
	Slander platform	-10
	Join in collective actions	Add to the platform’s blacklist

Table 7.1 Working regulations for Eleme Better Selection. The management of drivers is based on “point deductions” and drivers only have 10 points which can be deducted in a week. The left-hand column contains the three main items managing the drivers; the centre column shows detailed behaviour for which points will be deducted; the right-hand column shows how many points will be deducted for each infraction. For instance, more than five late orders in a week will deduct 5 points; two to five late orders will deduct 2 points; rejecting one order will deduct 1 point. Source: WeChat group.

Obviously, most drivers in the new schemes can earn money because of their privileged position in terms of the way orders are distributed. However, they have to sacrifice their working flexibility to obey the strict rules of the schemes. This is illustrated in my interview with D1123, who was working in the Better Selection scheme in Minhang District:

Author: Why did you join this new scheme?

D1123: Orders given to freelancers are fewer and fewer. Freelancers in the King or Diamond rank can still get orders, but drivers in lower ranks can only pick up garbage orders. Joining in new schemes, people can earn more money than by working as freelancers because more orders are distributed to drivers in the new schemes. For freelancers, their order distribution has declined at least 30% to 40% compared to last year. For me, everything is for money. If [making] money were not my goal, would I join in this scheme? If I had enough money, of course I wouldn't do this job! Every day, I am thinking that I want to exit this scheme, but looking at my app, I can earn about 3,000 yuan every week! I am short of money and staying in this scheme can bring me a lot of money.

Author: What is your feeling about working in this scheme?

D1123: The good thing is that as long as I open my app, orders will be distributed and I have orders to deliver. The bad thing is that I can't reject an order if I don't like it. Also, I should be very careful about delivering on time because I can't get the bonus if I deliver late. I know one driver, he rejected six orders and then he was added to the blacklist and his account was cancelled by the platform. I know joining in this scheme means I will lose freedom, but now I don't care whether I'm free or not. Freelancers are free, but they can't earn much money.

For the platforms, the reason for promoting these new schemes is clear: maximising the number of finished orders and minimising the labour costs. Like full-time drivers, drivers in the new schemes have the "privilege" of delivering good orders, but can only reject the distributed orders three times every day. This means drivers in the new schemes have to receive and finish almost all distributed orders, no matter the delivery distance and weather conditions. As interviewee D1124 said,

Why are platforms promoting the new schemes? Because just like with full-time drivers, Better Selection can guarantee that orders can be finished at any time. Freelance drivers can reject orders casually. This means many difficult orders, like having to deliver to the sixth floor without lifts, can't be finished. You reject this order,

and others will also reject it. One order may be received after [waiting] one hour.

Freelancers are too lazy for the platforms, especially during rainy days when many drivers do not want to work. Therefore, the new schemes must have some advantages.

Drivers in the new schemes have to deliver the distributed orders. They can help the platforms finish all the orders without any excuse. In other words, the new schemes can guarantee that orders are received and finished in a short time. (D1124)

These new schemes can help the platforms minimise costs because for drivers in these schemes, the payment they receive for one order is fixed and relatively low (compared with for the full-time drivers), normally about 4 to 5.3 yuan per order. The received price of each order may be slightly different in different areas, but the basic principle is the same: the more finished orders, the higher payment received for each order, and the more bonuses paid out by the platforms. For instance, for drivers in Lepao in Xinzhuang District, the weekly income assessment increments are fewer than 200 finished orders weekly, which pays 4 yuan per order, 200 to 250 finished orders weekly, 5.4 yuan, 251 to 300 finished orders weekly, 5.1 yuan, and more than 300 finished orders weekly, 5.3 yuan per order. Drivers will receive other subsidies if they deliver orders during peak times or deliver orders on time (as shown in Table 7.2). Similarly, for drivers in Better Selection in Putuo District, the weekly income assessment increments are 4.8 yuan, 5.4 yuan, 5.6 yuan, and 5.8 yuan per order for fewer than 200 finished orders weekly, 200 to 250 finished orders weekly, 251 to 300 finished orders weekly, and more than 300 finished orders weekly respectively. Drivers working more than five days a week and finishing more than thirty-five orders every working day can get a 400 yuan weekly bonus; other bonuses can be earned by working during bad weather or delivering long-distance orders (see Table 7.3).

Assessment of drivers' weekly basic income and bonus	Drivers can get the following bonuses if...
Basic salary according to the amount of finished orders weekly	0–200 orders: 4 yuan/order 201–250 orders: 4.9 yuan/order 251–301 orders: 5.1 yuan/order More than 301 orders: 5.3 yuan/order

Peak time subsidies	10.30 a.m. – 1.30 p.m.: 0.5 extra yuan/order 10 p.m. – 6 a.m.: 1 extra yuan/order
Large orders subsidies (depending on price paid by customer for one order)	51–80 yuan: 1 extra yuan/order 81–100 yuan: 3 extra yuan/order More than 100 yuan: 5 extra yuan/order
Distance subsidies (based on delivery distance between restaurant and customer)	3.5–5.5 km: 1 extra yuan/order 5.5–6.5 km: 3 extra yuan/order More than 6.5 km: 5 extra yuan/order
Attendance subsidies	Work more than five days every week and finish more than thirty-five orders every working day: 400 yuan
Customer service subsidies	Rate of delivering orders on time > 97%: 0.6 extra yuan/order Rate of delivering orders on time > 96%: 0.5 extra yuan/order

Table 7.2 Assessment of drivers' weekly basic income and bonuses in the Lepao scheme in Xinzhuang District. Source: WeChat group.

Assessment of drivers' weekly basic income and bonus	Drivers can get a bonus if...
Basic salary according to the amount of finished orders weekly	0–200 orders: 4.8 yuan/order 201–250 orders: 5.4 yuan/order 251–300 orders: 5.6 yuan/order More than 301 orders: 5.8 yuan/order
Peak time subsidies	Midnight – 6 a.m.: 2 extra yuan/order 10.30 a.m. – 12.30 p.m.: 0.5 extra yuan/order 10 p.m. – midnight: 2 extra yuan/order
Weather subsidies	0.5–5 yuan/order, according to weather conditions
Distance subsidies (based on delivery distance between restaurant and customer)	3.5–5.0 km: 0.5 extra yuan/order 5.0–6.0 km: 1 extra yuan/order 6.0–7.0 km: 2 extra yuan/order More than 7 km: 3 extra yuan/order
Attendance subsidies	Work more than five days every week and finish more than thirty-five orders every working day: 400 yuan
Customer service subsidies	Rate of delivering orders on time > 97%: 0.6 extra yuan/order Rate of delivering orders on time > 96%: 0.5 extra yuan/order

Table 7.3 Assessment of drivers' weekly basic income and bonuses in the Better Selection scheme in Putuo District. Source: provided by D1137, translated by author.

Therefore, drivers in these two schemes can earn more not because of the payment they receive for each order, but only because they finish more orders. In order to get the bonuses, drivers also have to deliver orders during bad weather and late nights. Most interviewees in these new schemes complained that they had to work for a longer time and became more tired than before. Some drivers had to work about twelve hours every day. Apart from losing the flexibility of their working time, they also lost the autonomy to reject orders. "Joining in the new schemes means working without any rest. The system will never stop distributing orders for you, and you cannot reject the orders" (D1137). Their only choice was to finish more orders (normally more than fifty per day) to earn more money. During my fieldwork, I interviewed two drivers who joined these new schemes for several weeks but then exited them about a month later. Here are their explanations of their reasons for joining and withdrawing, and their experiences in the schemes:

D1137: I withdrew from the Better Selection scheme today. I couldn't bear it; it drove me crazy. Other drivers ridicule me for being a deserter, but I don't care. Anyway, I quit. The system distributes orders every few minutes, and it's very hard and tiring to finish all the orders. When I joined the scheme, it was said that we work eight hours and finish at least thirty orders every day. However, in reality, we work more than that. There are no limits. I finished about fifty orders every day, and I know someone who finishes 100 orders every day. As long as your smartphone and your bike have electricity, you will be sent orders.

Author: Why did you join the scheme in the first place?

D1137: I was worried that I wouldn't have enough orders as a freelancer. When the platform promoted its new scheme, it was natural that more good orders would be distributed through the new scheme. Therefore, when my friend encouraged me to join, I agreed and we joined in the same team. Now, we have both quit. It is flexible:

every week, drivers can choose to join or quit; many drivers quit like me, and new drivers join in all the time.

Author: What is your feeling about the scheme?

D1137: This scheme is slavery. You have to implement every instruction from the system. There is no bargaining room to argue. It is crueller than the management of full-time drivers in the stations. When the full-time drivers want to reject an order, they can ask their station leaders. But this is impossible for the drivers in this scheme, and it is not negotiable.

I even think that the aim of [getting you to] distribute orders endlessly is to let you deliver the orders late and then fine you. Once, my friend delivered eight orders late, and he was fined 3 yuan for each order, so he lost 24 yuan. We only earn 5 yuan from each order, and this means he delivered about 5 free orders for the platform! Almost one hour's workload!

Author: What has been your biggest difficulty in the scheme?

D1137: Any kind of order can be distributed through the system. We have to pick up orders more than 3 km away, and deliver them in different directions. I often felt that I was working in the whole Shanghai area. The problem is that we cannot reject orders like freelance drivers. Another problem is that I was told I would receive 5.5 yuan per order before joining the scheme. However, actually it is 5.2 yuan per order. This is not reasonable.

D1140, a freelancer for Eleme, had a similar experience:

I joined Better Selection during the first week that it was promoted in Putuo District. After one month, I quit. Right, I can earn more in the scheme, about 400 yuan every day, but it was very tiring. After finishing work every day, I had pains in my whole body, and the battery of my bike was running down. I had to drive very fast when delivering orders. The bad road conditions in this area affected the life of my tires.

Before joining in the scheme, I changed my tires every six months, but after joining it, I had to change them every two months! In addition to the impact on my personal health, I did not think it was worth staying in the scheme so I quit.

But, the main reason [for quitting] is freedom. As a freelance driver, I can work until 2 a.m., then I can start working at 11 a.m. the following day. It is comfortable to be able to decide my own working time. But the drivers in Better Selection have to follow the management [requirements]: 10 a.m. to 2 p.m. is the required working time with an additional mandatory four hours.... Sometimes, I was really very tired and I could not get up before 10 a.m [the next day]. (D1140)

On the one hand, drivers like D1137 and D1140 withdraw from these schemes; on the other hand, new drivers are competing to join. Drivers in Jingan District told me that it had become very hard to join the Lepao scheme in this area unless they had a good personal relationship with the station leader. Normally, for each fixed area (such as a station, with a delivery radius of 5 to 6 kilometres), every team in the Lepao scheme has a fixed number of drivers, normally between ten and twenty. If no one leaves the team, no new drivers can join. “The existing drivers in these schemes have a good relationship with the station managers in their area. If you want to join in Lepao now, you must have a personal relationship or money [to offer as a bribe]” (D1134).

Response b: Join new platforms to deliver more orders

Apart from joining the new schemes, another popular choice is to join fresh food and grocery platforms such as Freshippo and Dingdong. Although the growth in the delivery of cooked food is slowing, the COVID-19 pandemic opened up an opportunity for the grocery and fresh produce e-commerce industry. User demand for fresh produce, groceries and medicines surged during the COVID-19 epidemic as millions remained isolated at home. Paying more attention to nutrition and personal health because of the coronavirus epidemic, people preferred to order fresh vegetables, fruit and meat online, and cook at home. For instance, during the first few weeks after the outbreak, Dingdong processed 50,000 orders per day on average, and customers’ payment per order nearly

doubled from 60 yuan (\$8.45) to over 100 yuan.¹⁰⁷ Dingdong faced competition from rivals such as the Alibaba-backed Freshippo, Meituan Maicai and JD Daojia. Therefore, with the rise of fresh produce e-commerce platforms, food delivery drivers flooded to these new platforms in 2020.

Drivers for these new platforms are responsible for delivering fresh food and groceries from their stations to customers (normally in gated compounds) within a 7-kilometre radius, and within approximately 30 minutes. My interviewees found that compared with delivering food, the disadvantages of working for these platforms are: all drivers are managed by their station manager who decides on their working time and order volume, and handles complaints from customers. Like the drivers for the Meituan Lepao and Eleme Better Selection schemes, drivers in these new platforms earn money by delivering more orders, and the amount they receive for each order is only 4 to 5 yuan.

From my observations in Shanghai, most delivery drivers tend to transit between different platforms. It is common to see them wearing Eleme's vest, but having Meituan's box, Freshippo's helmet, and be distributing orders from the Dingdong platform. This overlapping presence on multiple platforms is acceptable as long as they are freelancers on these platforms. After registering on different platforms, drivers can observe which platform is easier to make money on and which platform is easier to get bonuses on. On his WeChat group, a delivery driver wrote:

Now most delivery drivers have accounts and may work for five platforms at the same time. Anyway, we'll switch to the most profitable platform to earn more money. More platforms mean more ways to earn money. Receiving money from multiple platforms is better than receiving money from only one platform. (G1108)

The autonomy to switch between different platforms also helps the drivers recognise their labour power as platform workers. In the WeChat group, a delivery driver shared

¹⁰⁷ Data source: <https://technode.com/2020/04/02/the-chinese-startup-leading-the-pack-in-grocery-delivery/> *The Chinese startup leading the pack in grocery delivery*. Accessed on: 21 September 2022

his imaginings of an ideal situation when all drivers are united and can even control these platforms. By switching between various platforms freely, the drivers can “vote with their feet” for different platforms. He believed that maintaining a high degree of everyday mobility and flexibility is a means to cope with the monopoly of capital.

If we could organise 90% of delivery drivers in Shanghai and get our act together, then we could deal with any of the platforms easily. These platforms would listen to us, rather than us listening to them as it is now. When all the drivers participate in a strike, these platforms will compromise. For instance, if platform A is bullying our drivers or if the payment received for an order is too low, then we could call on all the drivers in Shanghai not to work for this platform. On the first day, all the drivers in Shanghai would work for platform B; on the second day, all the drivers in Shanghai would work for platform C. So the platforms would know the strength of us drivers. We should be united in battle against the capitalists; the platforms would be obedient if we used this strategy.

Only when we have accounts with and can work for any platforms can we have the initiative. Please don't worry about the costs [of buying helmets, vests and other equipment] when you join a platform. It is useless to rely on only one platform, and we can be easily cheated by one platform. If we have accounts with and can move between different platforms, our drivers will have more options. We should be confident and believe that we are cooperating with these platforms, not just working for them. Although we should obey the platforms' regulations, we cannot [allow ourselves to] be a cheap labour force. If all delivery drivers in Shanghai received this information and we reacted in a united way, we could change the existing situation totally. No platforms would dare fine us drivers at their will. (D1104)

However, this driver's ideal situation may be hard to realise; one notable factor is that the platforms are controlled by giant unicorn companies with strong capital. For instance, Eleme and Freshippo are both owned by Alibaba, while Tencent is the largest shareholder of Meituan and Dingdong. Therefore, even though freelance drivers can

switch between different platforms freely, they may still be working for the same company. As long as they work in the online daily necessities delivery industry (including the online food delivery industry, fresh food delivery, and express delivery), it is hard for them to escape the controls of big corporations. Drivers joke that whether they are working for Eleme, Freshippo, Meituan or Dingdong, they are all making profit for the two richest people in China – Jack Ma, the owner of Alibaba, and Tony Ma, the owner of Tencent.

Whether they are working for new platforms or joining new schemes, both activities mean that drivers have to earn money by delivering more orders and strictly following the platforms' working rules. In this sense, drivers are exploited and commoditised by algorithmic controls again, and to a deeper level. In my interviews, most drivers talked about two common feelings: "earning more money is the only way out", and "our income is decided by ourselves". Drivers stressed that they needed to work harder to earn more, even if they were exploited by the platforms. This shows that drivers may fall into self-exploitation under the platforms' strict management. Several drivers even told me that COVID-19 had had no impact on their income because it was they who decided their income. Before, they could earn 300 yuan every day after finishing forty orders, but now the same income means fifty to sixty finished orders. "The only difference is that it is harder to earn money and if we aim to earn the same income, we have to work longer and finish more orders" (D1140). Most interviewees think that "obeying the law of the jungle" is their only choice. For instance, two freelance drivers put it to me as follows:

My low income is not because of the low received price of each order, it is because of my own limited ability. Some drivers in Shanghai can earn 20,000 yuan every month. This means this industry is lucrative. King drivers in Shanghai work from 6 a.m. in the morning until 2 a.m. at night. They can finish 100 orders every day. Of course, most of them are more than fifty years old and they have a heavy family burden. For me, I feel uncomfortable if I cannot sleep eight hours, and this is why I cannot earn a lot of money. (D1138)

This is the rule in this industry: some drivers can put up with the hardness and difficulties, while some drivers only earn 100 yuan every day to satisfy the least daily consumption. Some drivers can adapt to this working model while others cannot. There are some outstanding drivers who can earn a lot of money in this industry. Your job performance and income are your personal thing, and they are totally decided by personal ability. (D1141)

Response c: Exit – migrate to other cities or transition to other industries

It should be noted that exiting this industry is a not common and represents a difficult choice for most drivers. They have invested a lot in this job (e.g., buying a battery-powered bike) and in Shanghai (e.g., house renting); they will lose money if they sell their bikes or terminate the tenancy agreement when they leave this industry and Shanghai.

However, one group of drivers is more likely to exit and return to their hometowns: drivers in their 30s and 40s with families and rural opportunities. After experiencing life in the big city, some find it impossible to obtain a Shanghai hukou and buy an apartment. Being “with families” means that their children will be sent to lower quality schools in Shanghai because of the hukou system; their parents in their hometowns also need their care. Being “with rural opportunities” means that with their accumulated capital (e.g., money, job experiences, working abilities, personal relationships), they can find a job in their hometowns. For instance, D1138 planned to go back to his hometown after three years’ work in Shanghai. Although he was staying in Shanghai for now, he thought his friend’s life was better: his friend had worked as a delivery driver but returned home to better look after family members and now felt like he had less life pressure:

My hometown is a small city in Henan Province. My wife and I migrated to Shanghai three years ago and we only returned to our hometown during the Spring Festival. Now we are planning to return home soon, trying to find a formal job or open a small restaurant there. I have bought a small apartment there and have to pay mortgage

every month. This year, it is hard to earn money in Shanghai and, to be honest, I don't have any sense of belonging here. We don't cook here, and just eat in fast food restaurants. I don't have the feeling of "home". In my hometown, at least I have my family and relatives. This year when I returned home, another delivery driver who had been working in Shanghai told me he would stay there and not return to Shanghai. He earned some money during those years [in Shanghai] and opened a small restaurant in my hometown. He got a house and a car from his father. I think his life is good now, less pressure. His son is going to primary school soon and he wants to better educate him. (D1138)

Although the existing literature on second generation migrant workers in China finds that they tend to stay in big cities and work in the service industry,¹⁰⁸ some of my young interviewees in their 20s told me that they are keen to migrate to medium and small cities in their home provinces. For instance, 29-year-old D1126 planned to return to his native Shenzhen to run a small restaurant with his brother. D1129, a 28-year old from a village in Henan Province, planned to go back Zhoukou, a medium-sized city in Henan, where his parents had bought an apartment and arranged a marriage for him. For them, reuniting with their families was better than drifting in Shanghai alone. These drivers also talked about fulfilling traditional ideas commonly found in China's rural areas – it was time to “marry and settle down” (*chengjia liye*), and “fallen leaves should return to the tree roots” (*luoye guigen*).

However, restricted by their limited educational qualifications and vocational skills, some former drivers find it hard to improve their lives. They are free from the exploitation of the online food delivery industry, but they cannot avoid other types of precarity in the labour market. Without enough professional skills, former drivers are likely only to find labour-intensive and low value-added jobs, such as factory work or cleaning, near their hometowns. Becoming self-employed (e.g. opening a restaurant)

¹⁰⁸ For instance, see Liu, C. 2010. China's new generation of migrant workers: Characteristics, problems and countermeasures. *Population Research [renkou yanjiu]*, 34(2), pp. 34–39; and Tang, S. and Feng, J. 2015. Cohort differences in the urban settlement intentions of rural migrants: A case study in Jiangsu Province, China. *Habitat International*. 49, pp. 357–365.

also means taking on the business risk in a time of economic uncertainty. This is also the reason why some drivers stay in the food delivery industry – they “cannot find a better job compared with the current one” (G1109).

This is exactly what I found often happens to one kind of migrant worker – those aged over 45 with a heavy family burden – who tend to be more eager to migrate to Shanghai to work as food delivery drivers and, once there, to stay. Their incentive is to earn more money because they are too old to find a job in rural areas or in factories. Two of my interviewees, D1134 and D1141, fell into this category.

D1141, 46 years old, migrated to Shanghai after 2020 as a food delivery driver. Before moving to Shanghai, he had worked in a factory near his hometown in Hunan Province. However, he had to leave because the factory did not employ people aged 45 or over. He also looked at job advertisements for security staff in gated compounds in Changsha and Shanghai. Again, his age ruled him out. He said:

If I could choose, I would not want to work in Shanghai; I prefer to work in factories close to my hometown, but they do not need old people like me. This year, it is hard to find a job, and only the online food delivery industry can accommodate poor and old people like me. For me, it is a job to get by. Otherwise, what can I do? Maybe just working as a construction worker or truck driver; I think that is worse than delivery driver. (D1141)

D1134, 52 years old, migrated to Shanghai and became a delivery driver five years ago. He had the same views:

What can I do in my rural hometown? What kind of job could I find? I don't know. Now I am over 50 years old, and I can earn some money here in Shanghai, although I am a little tired sometimes. In my rural hometown, I don't have opportunities [in the job market]. (D1134)

D1134's son was a university student in Xiamen. Apart from paying his tuition fee, D1134 sent 2,000 yuan every month to his son for daily expenses. D1134's wife worked in a small bakery in Shanghai, and together they could earn 10,000 to 12,000 yuan monthly in Shanghai. However, D1134 said they spent almost all of it by the end of the month:

We have to spend about 6,000 yuan in Shanghai as housing rent and living costs; 2000 yuan as the mortgage because I bought a small apartment in Xinyang [a third-tier city in Henan Province] as a gift for my son's future marriage, and I send 2000 yuan to my son for his living costs. I also plan to prepare some money for him once he has a family. Therefore, all the earned money is for basic living costs, house loan, and my son. We are earning and saving money in Shanghai for my son, for his current and future life. (D1134)

It is clear from my research that, after coronavirus, some drivers have chosen to exit the online food delivery industry because they have found it harder to make and save money (as with D1138), or they want to reunite with family after years of working in Shanghai (as with D1129); at the same time, older people with a heavy family burden tend to join or stay in this industry. However, the motivation to join or exit the industry is the same: to earn money to live on, or to live better. Older workers tend to migrate to Shanghai to support their families; younger drivers are more likely to migrate to nearby towns or smaller cities so as to have less life pressure. However, they are all driven by the motivation of survival – “the force of necessity to survive and improve a dignified life” (Bayat, 2000, p. 547). In this sense, drivers leave the online food delivery industry not because of the exploitation, but because other settlements and job choices can provide a better life. Drivers joining this industry in 2020 clearly acknowledged the commodification and precarity in the platform economy, but they still worked hard to finish more orders.

In the WeChat and QQ groups, the most common topic drivers discussed was how much they should earn every month, and accordingly, how much they should earn every day

and how many orders should be finished every day. “If I do not finish my daily goal today, my families will be starving tomorrow” (G1109). This mindset makes drivers reluctant to invest time and money for the future. For instance, D1130 had a chance to learn how to repair cars, which would have meant his monthly salary would have been higher and more stable after mastering the techniques. However, he would have had to spend several months as an apprentice in a garage before being formally hired by the car repair shop. This would have meant he had no job income in that period. D1130 finally gave up this opportunity and continued to work as a food delivery driver because his savings could not support him to make a living for those few months. D1101 had a similar experience: he was hesitant to learn how to clean air conditioners and earn 200 yuan for each piece cleaned. Thinking about his two children and his wife in their rural hometown, he used his savings to change to a new battery-powered bike and try to deliver more orders. As another delivery driver said:

Working in this industry for years makes drivers impetuous and lost. Most drivers want to earn money quickly and do not want to learn some skills or techniques from the very start. Current life is the most important, and they can't think beyond that. This is my life orientation and pursuit: supporting family and make a living currently is the priority. (D1138)

In summary, the drivers' various responses to the changes resulting from the COVID-19 pandemic – joining new schemes or platforms, finding other jobs – are all driven by their motivation to survive. However, their short-term survival goals limit their options. Because the volume of orders declined dramatically after the outbreak of COVID-19, joining new schemes (Meituan Lepao and Eleme Better Selection) and fresh food delivery platforms (Freshippo and Dingdong) can help to guarantee drivers enough orders to deliver. However, the low payment received for each order means drivers have to work longer and finish more orders to earn the same amount of money as in 2019. In this sense, drivers are still exploited by the different platforms. Exiting and finding a new job – which, nevertheless, is a hard choice for most drivers – can lead them out of exploitation in the food delivery industry. However, restricted by their limited

vocational skills and by their concentration on the here and now, most drivers who leave their jobs can only engage in low-paid and insecure employment. Falling into other types of precarity, drivers often fail to alleviate their poverty and vulnerability, and find it hard to improve their lives.

7.5 Conclusion

In Chapter 6, I related the everyday lives and work practices of delivery drivers to Polanyi's concept of embeddedness. In this chapter, I have advanced my argument by showing how Scott's "everyday forms of resistance" and Bayat's "quiet encroachment of the ordinary" are also relevant to an understanding of the expressions of resistance by Shanghai delivery drivers. The main research findings were presented in three sections in this chapter, which respond to the two disputed points within the literature on resistance and labour agency among informal workers beyond the Global North: the link between everyday resistance and organised resistance, and the intention of resistance, as proposed in Section 2.4.2.

Firstly, this chapter examined the relationship between open, collective action and "everyday forms of resistance". The case of the Shanghai delivery drivers shows that their resistance is neither Scott's *linear development dynamics* nor Bayat's *oscillation dynamics* (see Chapter 2.4.2); rather, it is closer to the argument of Lilja et al. that "organised resistance could encourage everyday resistance" (2017, p. 41) and "resistance inspires, provokes, generates, encourages or eventually discourages resistance" (2017, p. 52). The successful protest in Beijing encouraged a similar protest in Shanghai. However, the Shanghai delivery drivers' ineffective protest further provoked quiet, everyday forms of resistance. In the context of China, it is hard to conclude that everyday forms of resistance could lay the foundations for open and undisguised confrontations. Two factors help account for this. Firstly, workers' collective actions are politically sensitive and clearly banned by employers. Since mid-2010s under Xi Jinping's rule, the Chinese government has become more aggressive in dealing with protest activities and increased surveillance on those who engage in collective actions (Chen, 2020). Secondly, the delivery drivers' individual and

geographically dispersed work is different from that of factory workers and vendors, who have common work spaces. Existing literature on resistance from factory workers and vendors shows that their common public space can breed organisation, communication and networking among actors (Bayat, 1997b; Ngai and Smith, 2007). The lack of common work places among delivery drivers explains the rarity of organised resistance from these platform workers.

Secondly, there is no clear dichotomy between open defiance and everyday forms of resistance as Scott supposed; rather, the Shanghai delivery drivers' case shows that public confrontations can also be quiet, disguised, anonymous and indirect; and everyday forms of resistance are not necessarily that invisible. The two protests by Shansong drivers in 2019 were not dramatic, loud and disorderly; rather, they were more similar to a peaceful discussion with the Shansong platform. Although protestors were not satisfied with the efforts of their six representatives and the final replies from the Shansong platform, they did not express their dissatisfaction openly and directly. Their QQ and WeChat groups became their main communication channel because of the anonymity they afford. Drivers' everyday forms of resistance are broader than individual actions. Making fake orders at the initial stage of the online food delivery industry needs cooperation from restaurant owners; clicking "finished" in advance also requires customers' consent and is acknowledged by station managers. Therefore, it is hard to define which forms of resistance the drivers have used under the binary perception of everyday resistance and organised social movements. The complexity of delivery drivers' resistance should be recognised, because resistance is "heterogeneous and contingent due to changing contexts and situations (not a universal strategy or coherent form of action)" (Johansson and Vinthagen, 2016, p. 418). In this sense, this research avoids the clear dichotomy suggested by Scott and thoroughly explores "a whole world of small-scale resistance that we need to recognize" (Lilja and Vinthagen, 2018, p. 225). As Vinthagen and Johansson argue, a more powerful searchlight should be shone on the:

Less obvious kinds of resistance that are – for the moment and in certain situations – neither expressed in dramatic, confrontational and public events, nor with (collectively elected) leadership, or (explicit) political motivations or sustained by formal (underground) organisations. (2013, p. 9)

Thirdly, the platform workers' resistance is not a political act; rather, they are driven by the "necessity to survive and improve a dignified life" (Bayat, 1997b, p. 58). Their survival practices fall into Katz's category of *resilience*, which "concerns the small acts of 'getting by' that help individuals and groups cope with everyday realities" (Coe and Lier, 2010, p. 216). The consequences or intention of workers' agency do not change the essence of social relationships, and may even reinforce them. For most delivery drivers, their main motivation to join a protest, make fake orders or click "finished" in advance in their everyday work, or to join new schemes or new platforms during COVID-19, was to have more orders and earn more money, not to openly resist the platforms' exploitation. This expression of intent to resist on the part of Shanghai delivery drivers is similar to Bayat's (2000, p. 546) argument on "floating social clusters – migrants, refugees, unemployed, squatters, street vendors and other marginalised groups" in the Middle East, "whose growth has been accelerated by the process of economic globalisation". "They strive in a lifelong process to improve their lot... in this process... This non-movement is neither able to cause broader political transformation, nor does it aim for it" (Bayat, 2000, p. 553). Without "clear leadership, ideology and structured organization" (Bayat, 1997b, p. 57), drivers participating in protests do not have any intention to challenge political authority or power structures in their work. This motivation to survive also explains the drivers' caution about participating in collective actions – they may lose their jobs and income and their accounts may be deleted by platforms because of organising protests. Driven by the survival instinct to pursue a better life in Shanghai, the drivers' resistance is not "carried out as conscious political acts" (Lilja et al., 2017, p. 44).

Chapter 8: Conclusion

8.1 Introduction

Many would say that the rise of the platform economy has greatly facilitated our lives, and an increasing number of people are using digital platforms such as Airbnb, Uber and Amazon. In China, most low-skilled platform workers are rural–urban migrant workers and attracted by the work flexibility of the gig economy. Referring to existing literature on Polanyi’s double movement theory, this thesis has focused on the precarity and livelihood strategies of app-based migrant food delivery drivers in Shanghai, a less discussed geographical setting. The principal contributions of this research are as follows. Firstly, it has shown that the precarious experience of these platform workers is multi-layered, and this is true for almost every aspect of their everyday lives. Secondly, it provides evidence to argue that, in the face of precarity, these drivers are not always powerless actors; on the contrary, they respond to marketisation and commodification by adopting different subtle and nuanced forms of resistance. This research, by examining the platform workers’ precarious conditions both inside and, importantly, outside their places of employment, deepens our understanding of the complexity of the precarity that defines the existence of digital platform workers, and of the means that these workers employ to defy the challenges that their precarity imposes on them.

In this final chapter I summarise the thesis by presenting the key points from previous chapters, and I reflect on how the findings respond to the research questions outlined in Chapter 1. In Chapter 2, an analytical framework was developed to examine the embeddedness and labour agency of platform workers. Shanghai delivery drivers’ precarity and labour resistance have been found to take distinctive forms and involve manifold facets in a specifically Chinese context and in a platform economy. Based on this point, in Chapter 3 the study further reviewed the literature on livelihoods of migrant workers in China and platform workers in global contexts. In terms of methodology (Chapter 4), the study built its findings on a case study of Shanghai and five different locations in various districts. The use of case studies is suitable to collect

thorough and detailed information, and these five locations were selected for their representativeness. A mixed method combining qualitative and quantitative analysis was adopted. Empirical materials came from two sources, 50 in-depth interviews and 210 survey questionnaires, administered both online and face-to-face.

In this concluding chapter, the empirical findings of the research elaborated in Chapters 5, 6 and 7 are first summarised. These are organised in line with the three analytical themes – the mechanism of the online food delivery industry in China, the livelihoods of migrant food delivery drivers in Shanghai, and their (lack of) labour agency. Chapter 5 explained that the online food delivery industry in Shanghai is dominated by two giant platforms – Meituan and Eleme. Delivery drivers for these two platforms face similar management models, but neither full-time nor freelance drivers are employees of the platforms. Chapter 6 revealed that the migrant food delivery drivers in Shanghai face multi-faceted precarity: strict algorithmic controls and venture capitalism in the exploitative online food delivery industry, as well as precarious everyday experiences in terms of living conditions and social integration. Chapter 7 argued that many of the drivers know how to protect themselves in a big city by organising episodic collective action, dissimulating data and registering on multiple platforms. Nevertheless, the drivers' resistance is not a political act; rather, they are driven by the necessity to survive and forge a dignified life.

In addition to providing answers to the five research questions posed in Chapter 1, the research contribution to the existing literature is explained in Section 8.2. To reiterate the importance of this research topic, the changes in the platform economy after the outbreak of COVID-19 are briefly reviewed in Section 8.3. Finally, the last section, Section 8.4, provides a discussion of the broader implications of the Chinese platform economy in both practical and academic terms.

8.2 The online food delivery industry and migrant food delivery drivers in Shanghai: empirical findings

8.2.1 Two giant and dominant platforms in the Shanghai online food delivery industry

The first research question asked how the online food delivery industry emerged, developed, operated and changed in Shanghai. For this question, Chapter 5 revealed that Meituan, owned by Meituan Dianping, and Eleme, owned by Alibaba, as two giant unicorn platform companies, are leading this industry and capturing the largest portion of market profits. The monopolisation of these two platforms is reflected in three ways.

First, after six years of competition with other platforms such as Baidu and DiDi, 97% of the market share is held by Meituan and Eleme, thanks to their advanced digital payment technology and financial strength. In the initial period of this industry, platforms had to subsidise restaurant owners, delivery drivers and customers. This meant that only platforms with stable venture capitalists as financial strategy could survive and thrive in the fiercely competitive environment (Chapter 5.2.2). On the one hand, this fundraising strategy helped platforms stand out in the battle and make money after years of cash-burning investment; on the other hand, platform managers are driven by their market performance – their focus is on the data shown on balance-sheets rather than the lived experiences of delivery drivers, and their priority is the interests of investors rather than the appeals of other stakeholders (such as customers, drivers and restaurant owners) in the online food delivery industry.

Second, between the six actors (food delivery drivers, customers, contractors, restaurant owners, platforms and the government) in the online food delivery business in Shanghai, platforms are the biggest beneficiaries with dominant management power and the largest proportion of profits (Chapter 5.3.1). Because of the innovation of the platform economy and its offered services, both central and Shanghai government regulations leave much discretionary power to the platform companies. The training and social security for food delivery drivers, the management of customers' complaints, and the food safety of restaurants are all in the charge of the platforms. On the share of market profits, platforms have the final say on how much delivery drivers can earn from

finishing each order, how much commission and advertising fees restaurant owners should pay to the platforms, and how large a bonus contractor (i.e. station managers) can receive based on their working performance (Chapter 5.2.3 and 5.3.2). In-depth interviews with delivery drivers, restaurant owners and station managers found that these three groups of actors are all under a lot of pressure in the face of strict performance management from the platforms and a competitive market. Compared to the two well-capitalised large platforms which have dominated this industry, these three groups of stakeholders have limited bargaining power and much lower status in the profit-flow chain.

Third, the dominance of the two platforms was reinforced during and after the peak of the COVID-19 pandemic in the late winter and spring of 2020, when the platform economy was thriving and big digital platforms were taking advantage of the crisis. Thanks to the digital surge caused by the pandemic, almost all brick-and-mortar business moved online and people had to adapt to online activities such as communicating online, shopping online, working online and entertaining online. This shift benefitted big technology companies such as Alibaba and Tencent in China, as well as Google and Amazon in many other parts of the world. Alibaba and Tencent have long been diversifying their digital businesses and competing to offer an expanding range of services. For instance, Tencent Meeting, the Chinese equivalent of Zoom and Microsoft Teams, is widely used by office workers and students for online meetings and classes. Like other sectors of the platform economy, the online food delivery industry has grown fast in China because of contactless delivery during the pandemic. In addition to ordering cooked food online, fresh food and daily necessities can also be ordered online and delivered quickly from supermarkets to customers quarantined at home. However, while the food-ordering platforms enjoy the expanding market and their growing popularity, other stakeholders can only share limited profits. Relying more on online business since in-store business has almost halted, restaurants have to pay high advertisement fees to platforms and provide discounts to attract customers. As explained in Chapter 5.2.3, in addition to the high commission fees paid

to platforms, restaurants earn lower margins. When a large amount of unemployed factory workers took up work as delivery drivers after the peak of the pandemic, low-skilled drivers found it harder to earn money and bargain with the platforms (Chapter 7.4.1).

8.2.2 Heterogeneous management within the same platform

The second research question asked how the platforms manage Shanghai migrant food-delivery drivers. The existing literature concentrates on the various working conditions among different types of platform work, especially between place-based/face-to-face platform work and remote platform work, while the variation within a single platform is less discussed (Chapter 3.2.1). Focusing on the two principal online food delivery platforms in Shanghai, this research found that delivery drivers from different platforms face similar management modes and labour controls, but the biggest difference lies in different working types within the same platform – whether a driver is full-time or freelance. While freelance drivers enjoy more flexibility of working hours, workloads and delivery areas, full-time drivers are attracted by receiving more orders and higher prices for each order. In Chapter 5.4, the different working experiences and incentives between full-time and freelance drivers in Shanghai were compared.

In China, neither full-time nor freelance drivers are employees of their platforms; but the reasons for this are different. The platforms do not provide social insurance or a minimum monthly income for freelancers since they can exit this industry at any time and some of them may have other sources of income. However, for the full-time drivers who are required to work eight hours every day, six to seven days a week with a fixed workload, and wear clothes with their working platforms' logo, they are not treated as employed workers of the platforms. This is because the full-time drivers are directly organised, managed and trained by contractors (*erbao gongsi* or *waibao gongsi*) and their station managers. Therefore, there is a hierarchy of management power among stakeholders in the online food delivery industry: platforms – contractors – station managers – full-time delivery drivers (Chapter 5.3.2). While the bulk of the business risk and potential labour costs (such as medical insurance) is shifted from the platforms

to contractors, the delivery drivers, as members of the lowest layer in the industry, are deprived of employment protections (such as minimum wages and sick pay) and have to face aggravated pressure from multiple higher layers in the industry.

In Chapter 7.4.2, I further demonstrated that after the peak of the COVID-19 pandemic, the two online food delivery platforms, Meituan and Eleme, began promoting new working schemes. The drivers in these new schemes are freelancers but face similar working rules as full-time drivers. The three various working types of delivery driver are designed by the platforms to guarantee enough labour supply at the lowest labour cost, especially during peak times (lunch time and dinner time). Full-time drivers and drivers in the new schemes have to finish all orders distributed by the platforms, while freelancers bid against each order under the surge pricing mechanism. For platforms, the three types of worker can complement each other, maximising the amount of finished orders and minimising the labour costs. However, for the delivery drivers, the fierce competition and clear division among them leads to less common identity and solidarity. This disunity among the drivers also degrades their working conditions and weakens their collective resistance.

Unlike in Lei's (2021) research on food delivery drivers in Chongqing, Shanghai drivers' livelihoods and labour resistance do not show different patterns because of their various working types. Lei observes that, "Whereas most SPCs [service platform workers] do not consider their work relations unfair or exploitative, most GPCs [gig platform workers] do"; "GPCs are much more likely to go on strike, protest, and express solidarity" (p. 282).¹⁰⁹ My empirical findings in Shanghai do not support this conclusion. One important reason is that the Shanghai drivers can freely and actually always transition to different working types. Put simply, during my more-than-six-month fieldwork in Shanghai, my participants' working types were not fixed, and it was hard to define if they were full-time drivers, freelancers, or drivers in the new working schemes over a long period of time. Therefore, when exploring the livelihoods of

¹⁰⁹ In Lei's research, "service platform workers" are the same as "full-time" drivers in this research, and "gig platform workers" are the same as "freelancers" in this research.

migrant delivery drivers in Chapter 6 and their livelihood strategies in Chapter 7, the various working types were found not to be a singularly dominant factor in shaping drivers' livelihood experiences, although the manipulation of different working types is designed to split the drivers (Chapter 7.2.2).

The research findings on the monopoly created by the two dominant platforms and the heterogeneous management structure within the same platform contribute to the ongoing discussion of the mechanics of the platform economy. Chapter 3.2.3 pointed out that the existing literature mainly focuses on the role of technology (in particular, algorithmic control), yet much less attention has been paid to the value-creation strategies and internal organisation of these platforms. By exploring the emergence, development, operation and changes of the online food delivery industry in Shanghai, my research findings on fundraising strategies and internal management of the two biggest platforms (Chapter 5.2), Meituan and Eleme, fill this research gap.

8.2.3 Precarious livelihoods within and outside the workplace

The third and fourth research questions related to the everyday lived experiences of migrant food-delivery drivers in Shanghai. Following the “beyond employment” approach, this research contributes to the concept of precarity by examining two facets of the precariousities the drivers face. My review of the literature on precarity found that most research concentrates more on workplace precarity and less on the broader conditions outside the place of employment and how these contribute to overall precarity (but see, for example, Butler, 2009, and Lewis et al., 2015; McIlwaine, 2020) (Chapter 2.3). Therefore, focusing on their identities as both platform workers and migrant workers in Shanghai, this research explores the food delivery drivers' precariousities both within and outside the workplace. My analysis of multi-layered precariousities echoes Polanyi's argument that the commodification in the market economy has reached into ever more spheres of social life.

Shanghai delivery drivers' work precarity and exploitation is similar to that of other types of platform workers in a global context, whether remote platform workers in sub-

Saharan Africa (Wood et al., 2019a, 2019b) or food delivery drivers in Australia (Veen et al., 2020). The difference lies in the employment status of platform workers. Since February 2021, Uber drivers in the UK have been regarded as employed workers with paid leave according to a UK Supreme Court ruling, and this change has wider implications for a lot of other gig economy workers, such as couriers and delivery drivers, in the Global North. Unlike for Uber drivers and other platform workers in UK, no legislation has clarified platform workers' employment status in China. The Shanghai migrant food-delivery drivers' vague status is not only related to the specialities of gig work in the digital economy, but also to their rural hukou status in China, which influences their social insurance, housing, medical care, children's education and other social welfare.

As migrant workers in Shanghai, food delivery drivers mainly face two kinds of precarity – housing conditions and lack of social integration – outside their workplace. As reviewed in Chapter 3.3, these two themes are widely discussed within the literature on migrant workers' livelihoods in China. While most existing literature focuses on urban villages (*chengzhongcun*) as migrant workers' settlements, this research finds that renting bunks in big dormitories and renting an apartment (including a one-bedroom apartment) with other drivers in the city centre are more common for food delivery drivers in Shanghai (Chapter 6.4.1). In the context of the redevelopment and demolition of urban villages in China, these types of living arrangement provide migrant workers with affordable accommodation, which is hard for urban management officers to find. However, most of these settlements are informal and illegal (Chapter 6.4.1); drivers usually find themselves crowded into small spaces with others for the lowest rents. In terms of social integration, like migrant workers in other types of informal work (such as in factories and construction sites), food delivery drivers have very limited access to Shanghai local social insurance. This research also finds that in their everyday work, most drivers find themselves discriminated against by security staff (*baoran*) and traffic police. This discrimination further influences their livelihood unsustainability (Chapter 6.4.2).

The findings on drivers' precarious work conditions contribute to Polanyi's concepts of embeddedness and commodification by revealing two key points: the commodification of data and the intersection between "network embeddedness" and "gradational embeddedness". As platform workers, compared to factory workers and construction workers, delivery drivers are facing digital types of labour control and commodification. In Chapter 6.2.1, four types of algorithmic control – short delivery time, strict rank assessment, surge pricing and customers' service rating – were illustrated. From a "hard Polanyi" perspective, drivers have been embedded in the market society and become a "fictitious commodity" in the online food delivery industry (Chapter 6.2). Also, their personal data such as working hours, finished orders, rejected orders and customers' comments becomes another form of commodity in the platform economy and is appropriated by the platforms to make more profits. Although drivers are embedded in their interpersonal networks with customers and other drivers from a "soft Polanyi" perspective, this embeddedness also brings fiercer competition and deeper commodification for drivers (Chapter 6.3). In other words, soft embeddedness leads to deeper commodification.

Polanyi's concepts are reflected here because of their great relevance to contemporary Chinese society and his influence on different strands of social science. Indeed, the case of Shanghai app-based food delivery drivers shows how prescient he was in many ways. However, my case study has added to Polanyi's framework in at least two important ways. Firstly, it has shown that the drivers' precarious livelihood is not only shaped by the market economy, as Polanyi argued, but is also the result of state institutions and regulations. The dominance of the two biggest online food delivery platform companies and the drivers' low bargaining power is greatly influenced by the Chinese government's stringent attitude towards digital platforms and increased surveillance of protestors. The precarity faced by food delivery drivers, both within and outside the workplace, is not simply the result of algorithmic control from their apps, nor is it just the result of particular institutions in China such as the hukou. Secondly, compared to the labour controls on factory workers that existed in Polanyi's time, the game design

in the algorithmic control of Shanghai drivers leads to a covert form of exploitation and commodification, as well as a blurred boundary between work and leisure time in their daily lives. Lured by the gameified culture created by their apps, drivers find it hard to draw a clear line between their work and everyday life on the one hand and the world of games on the other. This illustrates and emphasises the multidimensionality of precarity: the gamification of the drivers' work makes in-app and out-of-app precarity feed off and reinforce each other, compounding the precarity.

The research findings on Shanghai food delivery drivers' precarious livelihoods contributes to and extends the existing literature on platform workers in a global context. As reviewed in Chapter 3.2.3, much attention has been paid to the Global North, with Uber drivers and low-skilled remote platform workers. Focusing on food delivery drivers in Shanghai, this study provides new dynamics and developments in a Global South context. Specifically, two factors are highlighted within the broader political and economic context in which delivery drivers are embedded. The first factor is the drivers' status as migrant workers and their rural hukou in the context of China. Restricted by their hukou, the low-skilled drivers have very limited access to Shanghai local social insurance and formal settlements, which reinforces their social isolation in Shanghai. The second factor is the value-creation strategies and internal management methods of these platforms. Venture capitalism as a fundraising strategy of the platforms further explains the low bargaining power of the delivery drivers. These research findings show the multi-layered precarities the migrant food-delivery drivers are facing, which emanate from both within their workplace and outside it. Also, this study echoes Alberti et al.'s call to explore the "heterogeneous experiences and perceptions of insecure employment" (2018, p. 447), the "drivers of precarity, and their variegated impacts" (2018, p. 450).

8.2.4 Shanghai delivery drivers' resistance and labour agency

The last research question explored Shanghai food delivery drivers' various responses and reactions to vulnerability and precarity. In addition, the effectiveness and links of different forms of labour agency, as well as the intention of these practices, were

researched. The existing literature on platform workers has found that both collective actions as well as a variety of sophisticated and informal practices have been adopted to address digital constraints and to exert workers' agency (Chapter 3.2.2). However, most research concerns high-income countries and discusses collective bargaining in the Global North (Anwar and Graham, 2020). In China's fragmented authoritarianism context, resistance and labour agency show different patterns and forms (Chapter 2.4.3). Therefore, Chapter 2.4 reviewed three concepts of resistance and labour agency from informal workers beyond the Global North context: Scott's everyday resistance, Bayat's quiet encroachment and O'Brien and Li's rightful resistance. Building on the three strands of literature, Chapter 7 focused on migrant food-delivery drivers' self-protection movement to earn and sustain their livelihoods in Shanghai.

Although collective action and protests are strictly monitored by the government, banned by platforms and of limited effectiveness for delivery drivers, collective forms of resistance *are* observed in Shanghai. Chapter 7.2.1 described two protests organised by delivery drivers on the Shansong platform in October 2019. However, the public confrontations were not dramatic, loud and disorderly, in the way that Scott argued. Similarly, Shanghai delivery drivers' everyday forms of resistance, such as taking advantage of traffic accidents, working with restaurants to make fake orders and clicking "finished" in advance on their apps, are not necessarily quiet, disguised and invisible, as Scott (1985) would lead one to believe (Chapter 7.3). These everyday forms of resistance are a kind of common knowledge, shared among the delivery drivers and even their station managers. The example of the Shansong drivers' protest in Shanghai shows that their everyday communication with other drivers, whether online or offline, and successful protests in other cities in China play an important role in mobilisation. However, the unsuccessful protest further stimulates everyday forms of resistance. In this sense, the Shanghai delivery drivers' resistance is close to Lilja et al.'s argument on the linkages of different forms of resistance: "organised resistance could encourage everyday resistance" (2017, p. 41), and "resistance inspires, provokes, generates, encourages or eventually discourages resistance" (2017, p. 52).

The other significant finding relates to the survival motivation of delivery drivers' resistance and labour agency. Put simply, whether joining in protests against the platforms or developing their own skills to deal with algorithmic controls from the platforms, the drivers' main aim is to receive more income from the platforms. This survival motivation is more evident when examining drivers' responses to the changes brought about by COVID-19. Since the peak of COVID-19 in China in March 2020, when most low-skilled drivers found it harder to earn money, they have developed three livelihood strategies – joining in the new Meituan Lepao or Eleme Better Selection schemes, joining in emerging fresh food and grocery delivery platforms, and migrating to other cities (Chapter 7.4.2). However, both of the new schemes were intended to increase exploitation in the food delivery industry; the first and second strategies, aiming at finishing more orders, led to fiercer competition among drivers, a cheaper labour supply for platforms and deeper commodification of the drivers. In this sense, the Shanghai delivery drivers' survival intention is very similar to Bayat's observation of the urban poor in the cities of the Global South, and Katz's resilience reading of resistance.

The discussion of Shanghai food delivery drivers' resistance and labour agency resonates with McDowell's (2015) assertion on the importance of the small-scale labour geographies of workers. Also, this research echoes Coe and Lier's (2011) argument on "constrained labour agency", that workers' everyday agency goes beyond the economy into wider "societal and state structures" and therefore needs to be reconnected to its social contexts. Discussing labour agency and the new art of resistance among African gig workers, Anwar and Graham conclude that "the agency of gig workers is constrained by two key factors" – "socio-economic and cultural contexts in which workers are embedded" and "the class power of workers" (2020, p. 1,286). In the case of Shanghai migrant food-delivery drivers, the short-term and fragmented nature of platform jobs explains the relatively low class power and class consciousness of the drivers. More importantly, their labour agency and resistance is largely constrained by the fragmented authoritarianism or bargained authoritarianism

in China (Chapter 2.4.3). Therefore, more informal and unorganised everyday resistance, rather than collective actions, is favoured by the drivers and proves to be more effective. This is also the reason why the Shanghai delivery drivers' resistance shows different patterns to that of place-based platform workers (such as food delivery riders and taxi drivers) in the Global North, where the "public transcript" among gig workers is more popular and platform workers can be easily mobilised to stage strikes and demonstrations (Anwar and Graham, 2020, p. 1,285). Emphasising the importance of broader social contexts, the research findings on Shanghai delivery drivers' labour agency therefore can be applied to other countries.

The discussion of Shanghai food delivery drivers' resistance and labour agency further contributes to the literature on Polanyi's double movement theory in China. Chapter 2.2.3 pointed out that Polanyi's framework has been preliminarily applied to the platform economy and economic transition in China. However, the discussion of the counter-movement in China mainly concentrates on the top-down response from the government, rather than bottom-up reactions from individuals. Facing new types of commodification in the online food delivery industry (e.g., algorithmic controls), the drivers' self-protection movement is closer to Scott's everyday form of resistance and Bayat's quiet encroachment of the ordinary rather than to the factory movement and trade unions, as described by Polanyi in reference to the nineteenth century. However, the drivers' everyday resistance is not necessarily quiet, disguised and covert as stressed by Scott; they indeed resort to open confrontations to protect their rights, although it is limited effective. Further, the intentions behind Shanghai drivers' resistance echo Bayat's observations on the survival techniques of the urban poor in the Middle East, rather than the political act argued by Scott. In terms of the linkages of different forms of labour agency, Shanghai delivery drivers' resistance does not present a neat dichotomy between everyday resistance and public resistance as Scott argued. In this sense, this research not only builds on Polanyi, Scott and Bayat's theories, but also develops their theories in the context of China.

8.3 The platform economy and platform workers post-pandemic

Since late January 2020, the disruptions from the coronavirus pandemic have shown that the role of platforms as intermediaries has become more pronounced than ever. The COVID-19 pandemic has accelerated the shift towards online expenditure and boosted the growth of digital delivery models. Also, online platform firms have seized the business opportunities and insinuated themselves into ever more sectors of the economy. The pervasiveness and power of the platforms is remarkable (Kenney and Zysman, 2020). Compared to airlines, restaurants, hotel chains and millions of small businesses that were fighting for survival amid the COVID-19 pandemic, these platform firms increased their value and stayed ahead because of the digital transformation. For instance, the big five technology firms in the US, Amazon, Apple, Google, Microsoft and Facebook, all showed at least a 6% increase in their revenue in the first six months of 2020, compared to the same time in 2019 (Sasikumar and Sersia, 2020), and in December of 2020, these five firms accounted for 22% of the S&P 500 market capitalisation (Wigglesworth, 2020). As of September 2020, the world's seven most valuable public companies were all platform companies – Apple, Microsoft, Amazon, Google, Alibaba Group, Facebook, and Tencent. Together, these seven companies represented more than \$8.3 trillion in market value (Stark and Pais, 2020). Because of the power of these platform companies, as Kenney et al. argue, “platforms are ever more pervasive in the global economy” (2021, p. 21) and become a “fundamental organizing institutional form for the entire economy” (2021, p. 22). Similarly, Nieborg and Poell (2018) point out that because of the platformisation, digital platforms and the web and app ecosystems have penetrated and extended into economic, governmental and infrastructural organisations. Therefore, it is important to have a better understanding of the logic and dynamism of the platform economy, especially in the post-pandemic economic scenario.

In the growing digital platform economy, compared to the platform firms who are generating enough profits, the low-skilled platform labour faces rising informalisation, technology control, lower quality jobs, and less autonomy and unionisation rights

(Sasikumar and Sersia, 2020). During the COVID-19 crisis, more low-income and unemployed workers were attracted by flexible gig work, and as more workers joined the digital platform, the platforms could exploit the advantage of having an oversupply of labour and obtain financial advantages in their partnership with the workers. This is exactly what happened in China: from March 2020, when a large number of workers receive income from platforms, they are also exposed to more uncertainties, insecurities and precarities, as explained in Chapter 7.4. A sufficient labour supply means that more workers are put in fierce competition and worried about being replaced. Because of strict algorithmic controls from the platforms, platform workers only have “illusionary freedom” and very limited free time. Due to their “independent contractor” status, they are deprived of social protection such as employment-related entitlements and benefits.

Nevertheless, there is a strong regional divide in terms of the the livelihoods and labour agency of platform workers. As Kloet et al. argue, the platform economy is channelled through “different trajectories along the vectors of infrastructure, governance, and practice” (2019, p. 254), and China presents itself as a distinctive case. Because of the prominent role of the state in contemporary China, the problems and issues of the platform economy in China differ from those in the West, which has been theorised as “platform capitalism” (Srnicek, 2017). The regulatory mode of the government in relation to platform companies in the US, China and the EU show sharp differences: the US’s mode is “neoliberal governmentality”; China’s is “state capitalism” and relies on state-directed economic policy; the EU has a tendency towards increased interventionism (Peck and Phillips, 2020, p. 90). The divergent regulatory mode and work experiences also influence platform workers’ labour resistance. Although the main cause globally for labour protest is pay, in the Global North, mainstream unions and legal challenges play a vital role in advancing platform workers’ interests, especially in western Europe, while unofficial unions and strike actions are more common in the Global South (Joyce et al., 2020). This can be applied to food delivery drivers in Shanghai, who rely on their online communication groups (WeChat and QQ groups) for mobilisation, and episodic protests for grievances. In contrast, in Europe,

on-demand food couriers have forged a transnational solidarity network (Gregory, 2021).

8.4 Broader implications

8.4.1 The prospects for the platform economy in China

The final broader implication of this study of the platform economy in China concerns the development and dynamics of Chinese platform firms. The relationship between the platform firms and the Chinese government has been cooperative and close. Taking two online food delivery platforms and online ride hailing markets as examples, Chen finds that these platform firms actively participate in the anti-poverty programmes and cooperate with the central government in helping “recently laid-off factory workers, veterans, or people from the poverty-stricken regions” (2020, p. 162). In other words, because of the platform firms’ role in supporting policies and absorbing surplus labour by providing employment, discretionary power was given to them by the government. On the one hand, the “state sponsorship” system is beneficial for platform start-ups (Zheng and Huang, 2018); on the other hand, it has dark sides: “party-state actors side with platform operators in labour disputes with gig economy workers, and the internet market is aggressively protected from foreign entrants” (Peck and Phillips, 2020, p. 88). The lax regulation caused the dominance of big companies, the monopolisation of the platform economy and the vulnerabilities of low-skilled platform workers. After a period of cooperation, a shift is under way. The fines imposed by the State Administration for Market Regulation on the big platform companies since 2021 is regarded as heralding a sweeping crackdown across the e-commerce sector and a clampdown on giant platform companies. Currently, the Chinese antitrust watchdogs’ official brief is “supporting, standardising and guiding the sustainable and healthy development of platform economy”.¹¹⁰

Many of these challenges in the platform economy are the same as those in advanced economies, but the differences in starting conditions remind us of the complexity of the

¹¹⁰ See: https://m.thepaper.cn/baijiahao_12137870 加强反垄断监管，促平台经济规范发展 [Strengthen anti-monopoly supervision and promote the standardized development of the platform economy] Accessed on: 21 September 2022

market-state relationship in China. The recent investigations and enforcement actions in Europe against mega-platforms, such as Google, Amazon and Facebook, suggest that policymakers in Europe and America are becoming aware of the power of online platform firms (Kenney et al., 2021). However, unlike the capitalism in the Global North, the market economy in China is closely associated with the socialist system and the party state. This requires the government in China to draw up new regulatory frameworks that can allow the connection, participation and inclusion of all stakeholders within the platform economy, and thus make socioeconomic growth more inclusive, while exercising some restraint so as not to stifle digital innovations (Albert, 2020). At the time of this writing, the future of the platform economy in China is uncertain and unpredictable. What can be anticipated, however, is that market expansion will meet a protective counter-movement, whether through the government's regulation or workers' resistance, as Polanyi warns of in his concept of the "double movement" in the nineteenth century.

8.4.2 Recommendations for future research

This thesis serves as a starting point for further research on the Chinese platform economy and platform workers by addressing the experiences and accounts of food delivery drivers in Shanghai. Due to limited information about and the difficulty of accessing the platform companies and government officers, the study did not include participants directly from the big platform firms and related policymakers. Future research could produce a fuller picture of the mechanisms of the platform economy in China by involving a wider range of stakeholders, including managers and system development engineers of the platform enterprises, and officers from Human Resources and the Social Security Bureau that play an increasing role in managing and providing social protection for platform workers.

Further, I believe that a comparative study which compares food delivery drivers to other groups of platform workers in China would be meaningful. There are different social groups of people in China who are also engaged in various forms of platform work in an attempt to earn a livelihood, such as couriers and truck drivers in the e-

commerce industry, and DiDi drivers in the ride-hailing industry. Identifying their various experiences and livelihood strategies will contribute to finding the similarities and differences among the platform workers' group. Also, research on different parts of China and cities in different administrative levels would be beneficial in order to to garner more general information. Longitudinal projects and quantitative research that aims to study platform workers for a long period of time would provide macro as well as micro analysis of the changes in their livelihoods over time. Such a comparative and quantitative-qualitative combination approach would be valuable to formulate more specific and broader national policies aimed at protecting platform workers' labour rights and interests.

Finally, on platform workers' resistance and labour agency, various forms may be manifested when looking across the board in China. For example, might platform workers organise national or cross-regional online communication groups (QQ and WeChat groups) and utilise them? Might platform workers from different industries support each other and show solidarity because of their similar working conditions? Since the livelihoods of platform workers have recently become a heated topic in China, might other civil society actors, such as lawyers, NGOs and labour unions, participate in their self-protection movement? These questions are not discussed in this research, and the limitations of this study also point to the need for future research. Efforts should be made to examine how factors within and beyond the labour process influence platform workers' collective action and the dynamics of labour contention.

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Appendix A: Questionnaire

关于外卖员工作生活状况的调查

各位骑手：

你们好！我是来自英国利兹大学的博士生，正在从事有关平台经济的研究。本次问卷旨在了解外卖员的工作生活状况，我们将非常感谢您作为外卖员代表参加此次调查活动，请您提供您的真实看法和意见。本问卷答案没有对错之分并受保密，您的个人信息不会泄露,只是对于调查数据和信息进行统计和分析。为了感谢您所付出的时间和辛苦，在填完问卷后，我们将有一份红包赠送。真诚地希望得到您的支持！

1. 请问您的年龄是？

☐	18-20
☐	21-30
☐	31-40
☐	41-50
☐	51-60
☐	大于61

2. 请问您的性别是

☐	男
☐	女

3. 请问您的教育水平是

☐	没有上过小学或小学未毕业
☐	小学
☐	初中
☐	高中
☐	技工学校
☐	中专
☐	大专
☐	本科
☐	硕士

4. 请问您目前的婚姻状况是？

☐	单身
☐	已婚，并与配偶一起生活

☐ 已婚，与配偶两地分居
☐ 离异

5. 请问您的家乡是？

请选择	▼
-----	---

6. 请问您目前的户口所在地是？

☐ 闵行、宝山、嘉定、青浦、松江、金山、奉贤、浦东新区、崇明区
☐ 黄浦、长宁、徐汇、静安、普陀、虹口、杨浦区
☐ 我的家乡
☐ 其他: (请解释)
*

7. 请问您是如何进入外卖行业的？ 【多选题】

☐ 靠自己
☐ 通过亲戚、朋友介绍
☐ 通过外卖公司招聘
☐ 经中介介绍
☐ 政府派遣
☐ 其他: (请解释)
*

8. 请问您进入此行业多长时间了呢？

☐ 不到半年
☐ 半年到一年
☐ 一年到两年
☐ 两年到三年
☐ 已多于三年

9. 请问您从事外卖工作之前的工作状态是？

☐ 受教育中，未就业
☐ 待业找工作中
☐ 有一份全职工作
☐ 有一份兼职工作

☐	有多份兼职工作
☐	其他：（请解释）
*	

10. 请问您目前最多使用的平台是？

☐	饿了么
☐	美团
☐	大众点评
☐	顺丰
☐	盒马
☐	叮咚买菜
☐	每日优鲜
☐	闪送
☐	达达
☐	蜂鸟跑腿
☐	其他：（请解释）
*	

11. 请问您目前在此平台的工作类型是？

☐	全职
☐	众包兼职

12. 请问您决定成为外卖员的原因是？ 【多选题】

☐	工作自由
☐	收入高
☐	赚钱快
☐	工资稳定
☐	相比其他工作（如进厂），工作强度小
☐	进入门槛低，招聘程序简单
☐	这是当时唯一的选择
☐	只是想短时间内尝试下此工作
☐	增加工作经验
☐	其他：（请解释）
*	

13. 请问您平均每天完成的单量是?

- ☐ 小于20单
- ☐ 20-40单
- ☐ 40-60单
- ☐ 60-80单
- ☐ 多于80单

14. 请问您完成一单的平均时间是?

- ☐ 少于15分钟
- ☐ 15-30分钟
- ☐ 30-45分钟
- ☐ 多于45分钟

15. 请问您通过此工作获得的月收入大概是多少钱?

- ☐ 少于4000
- ☐ 4000-6000
- ☐ 6000-8000
- ☐ 8000-10000
- ☐ 10000-12000
- ☐ 多于12000

16. 请问您每天跑外卖的工作时长是?

- ☐ 少于3小时
- ☐ 3-5小时
- ☐ 5-7小时
- ☐ 7-9小时
- ☐ 9-12小时
- ☐ 12-15小时
- ☐ 多于15小时

17. 请问您每周的工作天数是?

18. 请问您一天之内, 外卖工作最繁忙的时间段是? 【多选题】

- ☐ 上午

☐	午饭时间
☐	下午
☐	晚饭 / 夜宵时间

19. 除跑外卖，请问您目前是否还从事其他工作呢？

☐	是
☐	否

22. 请问您是否在恶劣天气（如酷暑、严寒、大雨、大雪、台风天等）跑过外卖？

☐	是的，经常
☐	是的，不怎么经常
☐	没有过

23. 请问您在工作中，经历过驾驶安全事故(如撞车、刮伤、碰伤)吗？

☐	是的，经常
☐	是的，不经常
☐	没有过

24. 请问您在工作中遇到过哪些困难呢？ 【多选题】

☐	顾客的恶意投诉
☐	顾客的不合理要求
☐	顾客态度太差、瞧不起人等
☐	导航路线不准确、定位不准
☐	工作时间不规律
☐	工作量大
☐	配送时间短
☐	和站点内同事关系
☐	和站长的关系
☐	小区保安不让进
☐	警察的监管
☐	没有医保
☐	其他：（请解释）
☐	

25. 请问您计划继续从事此工作多久？

☐	少于半年
-----------------------	------

☐ 半年到一年
☐ 多于一年
☐ 还没有清晰的计划

26. 关于此工作对您生活的影响，请问您对以下观点的认同度是？

	很不同意	不同意	一般	同意	很同意
我可以控制我的工作节奏（如工作时间等）	☐	☐	☐	☐	☐
我的工作压力很大	☐	☐	☐	☐	☐
此工作对我的生活、健康状况产生了消极的影响	☐	☐	☐	☐	☐

27. 对于您工作中的公平性，您对以下观点的认同度是？

	很不同意	不同意	一般	同意	很同意
我的公司对于单量的分配比较公平	☐	☐	☐	☐	☐
我的公司对于装备（如电瓶车、头盔等）的分配比较公平	☐	☐	☐	☐	☐
基于我的努力程度和表现，我对于我的工资基本满意	☐	☐	☐	☐	☐
工作中遇到的问题，我可以及时地向站长等公司领导反应	☐	☐	☐	☐	☐

28. 请问您是否在外卖平台公司参与了以下的保险 【多选题】

☐ 养老保险
☐ 医疗保险
☐ 失业保险
☐ 工伤保险
☐ 生育保险
☐ 都没有

- ☐ 没有合同
- ☐ 有非正式的口头合同
- ☐ 有正式的书面合同

☐ 经历过

☐ 没有经历过

☐ 参与过

☐ 没有参与过

- ☐ 了解，已加入
- ☐ 听说过，不了解
- ☐ 从未听说过

	1	2	3	4	5	0
其他外卖员	☐	☐	☐	☐	☐	☐
网络社区（如QQ、微信群、贴吧等）	☐	☐	☐	☐	☐	☐
NGO组织	☐	☐	☐	☐	☐	☐
政府（如政府机构工作人员、政府的政策保障等）	☐	☐	☐	☐	☐	☐
	1	2	3	4	5	0
工会组织	☐	☐	☐	☐	☐	☐
宗教组织	☐	☐	☐	☐	☐	☐
罢工抗议	☐	☐	☐	☐	☐	☐

34. 请问您是否愿意在您方便时接受进一步的访谈（微信或面对面都可，报酬另付）

☐ 是
☐ 否

提交

[举报](#)

☆ 问卷星 提供技术支持

Translation of questionnaire

Hello,

I am a PhD student from University of Leeds, UK. I am undertaking a research about platform economy and platform workers. The purpose of this questionnaire is to investigate food delivery drivers' work conditions. I am grateful if you can join in this research, and provide your answers. There is no wrong or correct answer to each

question, and your personal information will not be leaked. In order to thank you for your time and work, a red envelope will be given to you after completing the questionnaire. Sincerely hope to get your support!

Part A. Background

1. Age

☐18-20 ☐21-30 ☐31-40 ☐41-50 ☐more than 51

2. Gender

☐Male ☐Female

3. Education

☐uneducated/undereducated ☐primary school ☐junior high school ☐high school
☐technical school ☐technical secondary school ☐junior college ☐university

4. Marital status

☐Single ☐Married and living with spouse ☐Married but not living with spouse
☐Divorced or widowed

5. Hometown Province

☐Jiangsu ☐Zhejiang ☐Anhui ☐Sichuan ☐Hunan ☐Henan ☐Jiangxi ☐Fujian ☐Shandong
☐Hubei ☐Chongqing ☐Hebei ☐Shaanxi ☐Liaoning ☐Jilin ☐Heilongjiang ☐Beijing
☐Tianjin ☐Shanghai ☐Guizhou ☐Yunnan ☐Guangdong ☐Shanxi ☐Gansu ☐Qinghai
☐Neimenggu ☐Guangxi ☐Xizang ☐Ningxia ☐Xinjiang

6. Your original Hukou Classification

☐Shanghai non-agricultural hukou ☐Shanghai agricultural hukou ☐Non-Shanghai non-agricultural hukou ☐Non-Shanghai agricultural hukou ☐Foreign nationality

Part B. Work Conditions

7. how did you find the job as a delivery driver?

☐By myself ☐relatives and villagers ☐through labor contractor ☐sent by local government ☐recruitment by companies ☐others

8. how long have you been a delivery driver?

☐Less than six months ☐six months – one year ☐one year – two years ☐two years- three years ☐more than three years

9. what is the employment status before you commenced working as delivery drivers?

☐In education or not working ☐in paid work ☐unemployed, looking for work ☐in multiple paid activities ☐other

10. Which company are you in?

☐Meituan ☐Eleme ☐Freshippo ☐Dingdong ☐Shansong ☐others : ____

11. Employment types

☐full-time ☐freelance

12. Why did you decide to be a delivery driver? (click all applies)

☐flexibility ☐high salary ☐stable income ☐independence ☐less tiring compared to other job such as factory workers ☐it was easy to start working as delivery drivers, simple recruitment process ☐the only job I could find ☐I only wanted to work for a short period of time ☐to obtain work experience, build CV ☐other:

13. How many orders do you finish on one day on average?

☐Less than 20 orders ☐20-40 orders ☐40-60 orders ☐60-80 orders ☐more than 80 orders

14. How long do you finish one order on average (from accepting orders to delivering to the customers)?

☐Less than 15 minutes ☐15-30 minutes ☐30-45 minutes ☐more than 45 minutes

15. monthly income (*yuan*)

☐Less than 4000 ☐4000-6000 ☐6000-8000 ☐8000-10000 ☐10000-12000 ☐more than 12000

16. How many hours do you work as a delivery driver in a day?

☐Less than 3 hours ☐3-5 hours
☐5-7 hours ☐7-9 hours ☐9-12 hours
☐12-15 hours ☐more than 15 hours

17. How many days do you work in a week as a delivery driver?

___ day(s)

18. what time is the busiest time?

☐in the morning ☐during the lunch time ☐in the afternoon ☐during the dinner time
☐in the evening

19. Do you engage in other income generating activities apart from delivery driver?

☐Yes ☐No

20. What is the form of work in additional job(s)?

☐fixed term contract with an employer/enterprise ☐open ended contract (standard employment)
☐interim work ☐no formal contract ☐student or seasonal job ☐self-employment
☐other

21. The percent of income from delivering food?

☐All income from delivering food ☐almost all ☐around 3/4 ☐around half
☐less than 1/2 ☐almost none

22. Have you ever delivered food on bad weather?

☐ Yes, frequently

☐ Yes, seldom

☐ Never

23. Have you ever experienced traffic accidents (such as crash, bruise, scratch) when delivering food?

☐ Yes, frequently

☐ Yes, seldom

☐ Never

24. What kind of the difficulties you have to face during work? (click all applies)

☐ negative comments from customers ☐ unreasonable requirements from customers

☐ despise from customers ☐ mistaken distances in the Apps ☐ hard to find the location

☐ irregular working time ☐ relationship with boss ☐ relationship with other delivery

drivers ☐ despise from security staff (*bao an*) in the community ☐ have no medical

security if get hurt during work ☐ other: _____

25. How long do you expect to stay in this sector?

Less than six month

Six month to one year

More than one year

I don't have a clear plan now

26. About the influence of this work on your life, do you agree with the following sentences?

5= very agree 4=agree 3=neutral 2=disagree 1= very disagree 0=N/A

	Score
I have control over the pace of my work	

I work under time pressure	
Work has a negative impact on my health and/or safety	
Work is stressful	

27. Views about fairness in working as a delivery driver

5= very agree 4=agree 3=neutral 2=disagree 1= very disagree 0=N/A

	Score
The platform has a fair system of evaluating couriers	
My company adequately contributes to the costs of equipment (motorbike, clothing, mobile phone)	
Considering all my efforts and performance, I get paid appropriate	
I have been able to communicate in a timely and effective way with my company in order to resolve problems	

Part C. Social Protection

28. Do you participate the following insurance? (click all applies)

☐ endowment insurance ☐ medical insurance ☐ unemployment insurance ☐ employment injury insurance ☐ maternity insurance ☐ other insurance ☐ none

29. Do you have work contract?

☐ No contract ☐ Verbal contract ☐ Signed paper contract

30. Have you ever experienced wage arrears problem?

☐ yes, I have ☐ no, I haven't

31. Have you ever participated any collective actions (such as protest, demonstration)?

☐ yes, I have ☐ no, I haven't

32. Have you ever heard the Online Food Delivery Industry Trade Union Federation in Putuo District?

- ☐ Yes, I am the member of this organisation
- ☐ I have heard, but don't know much about it
- ☐ I have never heard about it

33. Facing difficulties in your life and work, how do you think of the help from the following actors?

5=Very useful 4=useful 3=neutral 2=useless 1=very useless 0=have no idea/experience

The help from...	Score
Friends	
Families	
Relatives	
Hometown peers	
Other delivery drivers	
Online communities (such as WeChat and QQ groups, BaiduTieba)	
NGO	
Governments (including public polices, government staff)	
Labour union	
Religion organisations	

Appendix B: Participant Information Sheet

关于我：

你好！我是冯羽，目前在英国利兹大学读博士。现在我们正在做一项调研，关于上海外卖员的工作生活状况，希望可以得到您的支持。

关于此项目：

此项目主要探究上海外卖员的工作、生活状况，以及如何面对工作中的困境。在您决定参与之前，请仔细阅读下面的信息。如有任何疑问，可以随时和我联系。

此项目的意义在于，可以帮助政策制定者更好地了解外卖员的实际需求，进一步促进此行业的良性发展。

本项目的调研对象是？

非本地人，且目前在上海做外卖员

参与是强制性的吗？

不是的。是否乐意参与由您决定。如您同意参与，请在仔细阅读完此表后签字。问卷或访谈过程中，如您不想继续参与，可以无理由随时退出。为了不影响您的正常工作，访谈或问卷的时间将在您的非工作时间进行。

如何参与？

您将会被邀请聊聊您的工作现状（如工作时间、有无社保等），如何面对工作中的困境。问卷将花费您大概 5 分钟的时间；访谈大概 1 个小时。在焦点小组访谈中，您也可以与其他外卖员交流，聆听他人的经历。在访谈过程中，您的发言将会被录音。

参与有什么潜在的弊端吗？

此项目的初衷是不给您带来任何风险，但唯一的风险是，在访谈中，如果您聊到您工作中不顺利的情景，可能会产生负面的情绪。然而，如果您感觉不舒服，可以随时退出。在填写问卷时，如果不想继续，可以直接停下。

参与有何好处吗？

直接的好处有三个：

1) 为感谢您的参与，在问卷或访谈结束后，我将会发一份红包给您（微信支付宝都可）。

- 2) 会有一份小礼物赠与
- 3) 如采用网络问卷，在问卷提交完成后，系统会有一个抽奖活动，有机会抽中奖品。

间接的好处是：你有机会可以聊聊您工作中的经历，与其他外卖员交流。您提供的宝贵信息将有助于我们了解目前的外卖行业，以及外卖员的实际需求。这些信息将来可以帮助政策制定者更好地协调此行业内不同角色的关系，包括外卖平台、商家、顾客等，可以促进此行业更有效率地发展，并保障外卖员的权益。

我提供的信息会保密吗？

您提供的信息（包括问卷、访谈录音）都会做加密处理，不会透露您的个人信息。

此项目的经费来源是？

此项目是自费的，与政府机构或商业组织无关。

访谈录音将会被如何使用？

访谈录音仅用于记录、分析数据。您的相关发言可能出现在以后的论文、会议报告中（您的个人信息会被隐去）。未经您的允许，此项目外的人员不会拿到访谈的原始录音。

联络信息：

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Translation of Participant Information Sheet

The title of the research project

The precarious work conditions and livelihood strategies of app-based food delivery drivers in Shanghai, China

Information paragraph

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the project?

The aim of this research is to explore the living, working conditions of migrant delivery drivers and their livelihood strategies. The investigation could last up to six months, but the work will be equally distributed during this period.

Why have I been chosen?

In order to accomplish the aim of the research, it has been decided to recruit about sixty people to participate the interviews and 200 people to participate the online questionnaire survey, on different criteria: age, working experience and gender. If you have been chosen, you have the requirements for the purpose of the research.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep (and be asked to sign a consent form) and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

What will happen to me if I take part?

You will be asked to talk in your own working conditions (e.g. working time, salaries) and how do you deal with the difficulties during work. The online survey may take you 15 minutes on average; each interview will be about one hour with open-ended discussions. In the group discussions, you are also expected to listen to and communicate with other participants. I will record your stories, experiences and

feelings during interviews. The research will last up to six months, but the hours of work will be equally distributed among the participants.

What are the possible disadvantages and risks of taking part?

Although this research is not expected to place participants in direct risk, there is a risk that you might become distressed during the interview if you are recalling situations in which they felt unhappy. However, participants can withdraw from the research at any point, to terminate the interview or to miss out any questions as is appropriate at the time. In cases where it is deemed appropriate, you will be asked if you require further emotional support and whether other community staff/managers should be contacted. All effort will be made to facilitate further support if required.

What are the possible benefits of taking part?

There are three main types of direct benefits:

- 1) cash equivalents through web-based companies. For encouraging to participate the online survey, I will use the function “sending red envelopes” in QQ and Wechat groups. The amount of money in each envelop will be about what you can earn from one order (about CNY 10 *yuan*).
- 2) small gifts from popular retailers (such as chocolate and candies). For warming up the atmosphere and ice-breaking effect, this will be provided when conducting the interviews.
- 3) lottery tickets that promise financial or produce reward. Participants may can win something from the lottery system after finishing the online survey.

Indirect benefits of the research may occur from providing participants with the opportunity to talk and discuss your working experiences, challenges you negotiate in the workplace and your efforts to protect your labour rights. The information you provided may prove beneficial to the understanding and development of online food ordering industry. It should yield information about the living conditions and strategies of migrant delivery drivers. This information will help government officials understand the needs of migrant workers. Ultimately, clients, employers, policy makers, and other

migrant workers may benefit if information uncovered helps provide more efficient and effective operation in this industry.

What will happen to my personal information?

Data will be collected by online surveys, digital audio recordings in the interviews and by handwritten notes in a field diary. No personal information will be published, except the age, gender, hometown, income and level of education of participants. The results of the project will be stored for five years, enough for their publication and writing of papers.

What will happen to the results of the research project?

All the contact information that we collect about you during the course of the research will be kept strictly confidential and will be stored separately from the research data. We will take steps wherever possible to anonymise the research data so that you will not be identified in any reports or publications.

However, it is not possible to keep everything confidential in the focus group, because full anonymity cannot be guaranteed on behalf of the other focus group participants.

Who is funding the research?

This research is self-funded.

Will I be recorded, and how will the recorded media be used?

The audio recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

Contact for further information

Yu Feng

mlyf@leeds.ac.uk

Mobile: +86 13256877989

Appendix C: Consent Form

上海外卖员工作生活状况的调查

请勾选合适的选项

是 否

关于参与此项目：

在此过程中，我有机会提出问题。

☐ ☐

我同意参与此项目。

☐ ☐

我同意接受访谈，并录音。

☐ ☐

我参与此项目完全出于自愿。如果在参与过程中想退出，我可以随时退出，并不需要提供任何理由

关于我提供的信息：

我的私人信息（如联系电话、住址等）不会被此项目之外的人员知晓

☐ ☐

我明白我的话可能会在相关出版物、报告、网页和研究报告中出现，并且

☐ ☐

（请从下列两个选项中勾选）

我的真实姓名可以出现在上述出版物中

☐

我不希望我的真实姓名出现

☐

关于信息的使用：

☐ ☐

我提供的信息，有且只有保证保密性的情况下，此项目相关人员才可以使用。

☐ ☐

我提供的信息，当出现在相关出版物、报告、网页和研究报告时，应按照此表格的保密原则进行

☐ ☐

如您同意以上信息，请签名：

姓名

日期

如有任何疑问，请联系：

姓名：冯羽

电话：86 13256877989

电子邮件：mlyf@leeds.ac.uk

**Consent Form for The precarious work conditions and livelihood strategies of
app-based food delivery drivers in Shanghai, China**

Please tick the appropriate boxes

Yes No

Taking Part

I have read and understood the project information sheet dated 01/10/2019. ☐ ☐

I have been given the opportunity to ask questions about the project. ☐ ☐

I agree to take part in the project. Taking part in the project will include being interviewed and recorded (audio or video). ☐ ☐

I understand that my taking part is voluntary; I can withdraw from the study at any time and I do not have to give any reasons for why I no longer want to take part. ☐ ☐

Use of the information I provide for this project only

I understand my personal details such as phone number and address will not be revealed to people outside the project. ☐ ☐

I understand that my words may be quoted in publications, reports, web pages, and other research outputs. ☐ ☐

*Please choose **one** of the following two options:*

I would like my real name used in the above ☐

I would **not** like my real name to be used in the above. ☐

Use of the information I provide beyond this project

I agree for the data I provide to be archived at the UK Data Archive. ☐ ☐

I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form. ☐ ☐

I understand that other authenticated researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

☐ ☐

So we can use the information you provide legally

I agree to assign the copyright I hold in any materials related to this project to Yu Feng.

☐ ☐

Name of participant

Date

Contact for further information

Yu Feng

mlyf@leeds.ac.uk

Mobile: +86 13256877989