

The London School of Economics and Political Science

***Nongmingong* Going Online: An Ethnography of the Mediated Work and Life Experience of the Chinese Working-Class in ‘Digital China’**

Yang ZHOU

A thesis submitted to the Department of Media and Communications at the London School of Economics for the degree of Doctor of Philosophy

London, January 2020

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without my prior written consent.

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

I declare that my thesis consists of <85588> words.

Statement of use of third party for editorial help

I can confirm that my thesis was copy edited for conventions of language, spelling and grammar by Dr. James Mason.

Abstract

This dissertation, based primarily on 10-month fieldwork in the Weida factory in Dongguan, China and home visits with workers I met there, explores the subjective experience of *nongmingong*, rural-to-urban migrant workers, confronting China's recent ICTs-driven economic restructuring in both work and leisure. This study contributes to sociology of labour research in China by addressing the new complexities brought about by digital technologies, and internationally to debates of digital labour and the future of work from the vintage point of the subjective experience of working class in Global South developing economies.

Whether supported by the state or driven by market forces, digital technologies are becoming integrated into *nongmingong's* life at an unprecedented pace, adding new complexities to the process of class formation. Incorporating the theory of the mutual shaping of technology and user/society into the larger framework of working class formation, this research takes *nongmingong's* ICTs-enabled practices as the starting place for an intersectional analysis that considers class and gender, in order to understand their ICTs-mediated politics of class formation in terms of work and leisure.

The findings show that ICTs-enabled jobs provide *nongmingong* with opportunities to improve the harsh factory working conditions and contribute to their economic security at a time of economic turbulence, allowing them to address their felt responsibilities and concerns in ways that are classed and gendered, especially as regards the family's subsistence and upward mobility. The findings show further that taking up these opportunities positions *nongmingong* in various technologically-mediated production regimes, engendering different dynamics of exploitation and resistance. Politics of production aside, in the cultural realm the commercially-produced and politically-censored ICTs-enabled media entertainments allow them to negotiate alienating *dagong* (working for a boss) life, but they also confine them in a web of dominant meanings. In face of this discursive domination, *nongmingong* actively select and interpret media meanings, accepting some while rejecting others, according to a bitter and precarious structure of feeling.

Acknowledgements

First of all, I want to thank all my informants in Guangdong where I conducted my fieldwork. This includes not only my lovely colleagues at Weida and Mr. Zhang and Mr. Yuan who introduced me to *Weida* and made access to the field possible, but also labour activists at NGOs based in Shenzhen and Dongguan. Because at the moment, labour activism in China is facing successive waves of crackdown, I will not list their names here.

At LSE, the thesis would have not taken its present form without the endless efforts of assistance, advice and criticism my supervisors Professor Sonia Livingstone and Dr. Bingchun Meng kindly offered. For this reason, I own them an enormous debt of gratitude. Sonia has been an exceptionally inspiring and insightful mentor. Her steady, selfless support and warm encouragement kept me going through the tough times in the PhD process. Her dedication to the academia and the contribution she has made to both the academic field and the policy process also motivate me and encourage me to make a difference. Bingchun has been equally perceptive and kind. She had offered me exactly the kind of support I needed from the beginning to the end, especially in helping me position the project in relation to China studies and the field of media and communications studies.

The thesis also benefited greatly from the comments from Dr. Elisa Oreglia at KCL and Professor Biao Xiang from Oxford who I have been lucky to have as examiners. Their expertise on ICTs and migration in China and globally have guided me to give the thesis a sharper focus.

I have benefited a great deal also from countless discussions with teachers, mentors, colleagues and friends outside LSE. In this regard, my thanks go to Pun Ngai, Bu Wei, Dorothy Solinger, Li Qiang, Cao Jin, Cara Wallis, Min Jiang, Hong Yu, Guo Jianbin, Chris Smith, Paul Willis, Li Guanzhi, Wang Fuxi, Huang Yu, TF Ng, Samuel Yuen, Ma Xinrong, Andrea Pia and specially Professor Qiao Jian.

I feel blessed to have some great friends in Guangzhou, Shanghai and London who walk with me through the intellectual and life journey. I will miss the numerous nights we spent together - this we have playfully given it the name 'Seymour Salon', and later 'Patterdale Salon' - discussing our projects, readings and fields, around a table with hot plates. Far away from home, I appreciate the warm company of: Hao,

Yanning, Mabu, Zexi, Ziyan, Andong, Songyin, Huahui, Shuhuai, Haotian, Ronggang, Ssu-Han, Karin, Xiaoyin, Hong, Tiankai (GONGBrother), Xiang (FANBoss) and Yuqi (NAYangtzeRiverNa), and particularly Eva Yeung. Besides, I have also enjoyed the intellectual stimuli from Liu Guo, Ram, Fabien, Miriam, Ethan, Hang ZHOU Ayòmidé, Ren Juan, Wang Xinyuan, Wu Di, Tang Yan, Yin Siyuan, Lu Wanqi, Yuan Jian, Daniel Fuchs, among others, and warm and much-needed encouragement from those who had sent me messages on WeChat and through Facebook that had lit up the darkest time throughout the entire process.

My PhD research was funded by the China Scholarship Council whose generosity I deeply appreciate. Throughout the journey, I also received funding from Universities' China Committee in London. I am also thankful to the great support from my Department at the LSE: Prof. Terhi Rantanen, Professor Nick Couldry, James Deeley, Leo Beattie and Cath Bennett, and the cleaners at the PhD Academy who have taken the patience to talk to me, teaching me about their lives and strikes.

Finally, special thanks are due to my parents. Without their love and support in the past years, this research would not have been completed.

Table of Content

Abstract	3
Acknowledgements	4
Chapter 1 Introduction	10
1.1 Where this all started.....	10
1.2 Nongmingong: A life in-between	15
1.3 The recent digital transformation of the Chinese economy	18
1.4 Overview of the thesis.....	21
Chapter 2 The Nongmingong Question in China.....	24
2.1 Nongmingong as rational individual.....	24
2.2 Nongmingong as emancipated migrants	26
2.2.1 Mechanisms of social stratification and the guanxi debate.....	28
2.2.2 The emancipated migrant literature revisited.....	31
2.3 Nongmingong as forced workers	33
2.3.1 The state-civil society approach.....	36
2.3.2 The class formation approach	40
2.3.3 Debating workplace conflicts: rightful resistance of the precariat or class struggle?	45
2.3.4 Working-class culture	46
2.4 Nongmingong and the digital transformation of the Chinese economy	48
2.5 Research question	52
2.6 ICTs-mediated politics of production: a theoretical framework	54
2.6.1 Factory regimes and the politics of production.....	54
2.6.2 Technology and the politics of production.....	57
2.6.3 Defining ICTs: between the social and the technological.....	61
Chapter 3 ICTs, China’s quest for modernity and Nongmingong as China’s new working class.....	65
3.1 Introduction	65
3.2 Socialist transformation and ICTs as strategic technologies of self-reliance ..	66
3.3 The start of the reform and ICTs as a means of relinking.....	69
3.4 The export-driven economic miracle and informatisation as an apolitical solution to development	75

3.5 The 2008 global financial crises and restructuring/upgrading through networking	80
3.6 Conclusion	85
Chapter 4 Methods	88
4.1 Overview	88
4.2 Ethnographic field in a globalising and digitalising world	89
4.3 Why Weida factory? Justifying the initial field	91
4.4 Access to the factory	93
4.5 Building rapport and self-positioning	95
4.6 The evolving field	99
4.7 Capturing nongmingong's ICTs-mediated practices, meanings and arrangements	101
4.8 Thematic analysis and presentation	111
Chapter 5 Nongmingong, ICTs and work (I): Between the factory and the platform	114
5.1 Introduction	114
5.2 Why ICTs-enabled jobs? Financial gains and beyond	115
5.3 Multi-jobbing	122
5.3.1 Factory work in a time of transition	123
5.3.1.1 Managerial despotism and the politics of core/periphery and gender	123
5.3.1.2 Heightened control and calculated consent	127
5.3.2 Rijie	130
5.3.2.1 Rijie as an ICTs-enabled, hyper-flexible regime of labour use	130
5.3.2.2 Practicing rijie: Flexibility, marginality and precarity	132
5.3.3 Weishang	134
5.3.3.1 Weishang as networked reseller	134
5.3.3.2 Weishang as a working-class female experience	135
5.3.4 Didi	140
5.4 An interim conclusion	142
Chapter 6 Nongmingong, ICTs and work (II): Platform-based labour, technological despotism and heightened control	145
6.1 Didi as a moving target	145
6.2 Driving Didi as a technologically-mediated capitalist labour process	146

6.3 The lure of freedom and its limits	151
6.4 Didi as an embodied experience: Changing despotism, reconfigured control and multifaceted exploitation	154
6.4.1 Didi in transition and the sense of betrayal and antagonism.....	154
6.4.2 The real face of cooperation.....	156
6.4.3 Technological despotism, extreme control and hyper-exploitation	159
6.4.4 The rider's gaze.....	162
6.5 Struggle and resistance.....	164
6.6 Conclusion	167
Chapter 7 Nongmingong, Popular Media Culture, and the Bitter and Precarious Structure of Feeling.....	171
7.1 Introduction	171
7.2 Alienating dagong life and entertainment-seeking mode of viewing	175
7.3 Watching urban middle class life in shenghuoju	180
7.4 Luogui going viral.....	186
7.4.1 Luogui as a genre	186
7.4.2 The dialectics of moral critique and pragmatic identification	189
7.5 Political infotainment and relationship with the state	193
7.5.1 Political infotainment as a new mouthpiece.....	193
7.5.2 Ideological critique of the state	195
7.6 Negotiating patriarchal families and 'masculine compromise'	200
7.7 Conclusion	206
Chapter 8 Conclusion.....	212
8.1 Summary of the findings and contribution	212
8.2 Reform, ICTs and class formation in China	226
8.3 ICTs, capitalism and the future of work.....	230
8.4 Limitations and future directions	233
Bibliography.....	235
Appendice	271
Appendix I Glossary	271
Appendix II Dongguan and Weida in transition	274
Appendix III Migrant Working Lives: a brief life history of the some of the interviewees	278
Appendix III Interview Guide.....	296

Appendix V Information sheet.....	300
Appendix VI Consent form.....	302
Appendix VII Liker et al. (1999)'s four paradigms of studying the relationship between technology and the organisation of work.....	303

Chapter 1 Introduction

1.1 Where this all started

In this thesis, I examine the subjective experience of *nongmingong*, rural-to-urban migrant workers, confronting China's recent ICTs¹-driven economic restructuring in both work and leisure. My interest in this topic stemmed from the observation of a group of female electric tricycle drivers and how they used ICTs to negotiate the local government's harsh regulations in Shuyang, a small county in Jiangsu, China.

To provide some context, lacking formal employment opportunities, these drivers provided tricycle services for work. Although low in prestige (Li C 2005), as a cheaper alternative to taxis, the tricycle service was well accepted and for decades proved a viable source of income. But more recently, tricycles have increasingly been considered by local authorities to be a symbol of backwardness, blighting the city's urban character, and a major cause of road accidents. To build *wenming chengshi*, civilized cities, and compete for favourable policies from higher-level governments, stringent measures were implemented on a surprise basis to contain its development, including restricted access to the city centre, tracking, vehicle seizure, and hefty fines.

I was deeply intrigued by what the drivers called 'the safety net', a mechanism through which they notify each other about the government's surprise checks so that they could choose a different route to avoid punishment. In a time when smartphones were not yet widely adopted, this safety net was neither organized through anything resembling a social media group that is commonplace today, nor was any trace of formal organization observable. Rather, it functioned by the drivers calling or texting each other individually on an entirely voluntary basis, despite the high mobile costs involved.

Later, during my internship with the United Nations Development Programme (UNDP) in 2015, this topic resonated with me once more. As I read through its archives of past projects and future visions, I began to realize that, across the world, ICTs were a strategic means through which powerful institutions like the UNDP seek to empower marginalized groups. And I was surprised by how commonly these technologies were used to facilitate voting and political participation – rather than

¹ Information communication technologies.

for other purposes – across dissimilar historical and political economic contexts in Asia. This agenda seemed awkward to me when considered alongside the tricycle drivers’ self-organization *against* the government. I wondered whether, for example, villagers in mountainous Khyber Pakhtunkhwa, Pakistan, saw the GIS-based voting system created by UNDP as an effective solution to their long-standing political problems (UNDP 2014). Or could such a system be open to abuse by local officials and hence exacerbate their conditions? It is not my intention here to question these organizations’ visions. Rather, what I was inspired to contemplate is a phenomenon that I find to be ubiquitous: while ICTs are widely recognized and adopted as empowering agents, there seems to always be a discrepancy between the visions of those with the political economic power to set them in motion and those in need.

This further sparked my curiosity about what had been done with *nongmingong*. As with the tricycle drivers, my interest in *nongmingong* also stemmed from my childhood experience in Shuyang, which has been a major migrant-sending city throughout 40 years of reforms. Despite the different migratory trajectories pursued, *nongmingong* and tricycle drivers faced strikingly similar historical conditions that drove their decision to migrate – both groups can be understood as the product of China’s grand reform project. On the one hand, prior to migration, the tricycle drivers typically held a non-agricultural *hukou*² and made a living as *geti hu*, small-scale individual or household entrepreneurs who ran, for example, corner shops and delicatessen stalls, selling daily necessities and homemade food. Experienced in *zuo shengyi*, doing business, and typically more independence-minded, most decided to migrate to the city proper to continue their business and secure better education for their children in the late 1990s, the time when Shuyang welcomed its first reform-minded, Harvard-trained party head and began to pursue radical marketization.³ On the other hand, for most rural *hukou* holders, the pain of market reform was felt earlier and deeper. In the early 1990s they already found it difficult to make ends

² *Hukou* is a system of household registration used in mainland China. According to Lu (2002) and Young (2013), it was first officially signed into law in 1958, but before that a registration system that distinguished rural from urban citizens in order to control the stream of resources moving away from the agricultural sector already existed. This establishment of the system divided the populace into *nongmin*, with an agricultural *hukou*, and *shimin*, with a non-agricultural *hukou*. This division was further linked to the country’s various distribution and re-distribution systems, including but not limited to the welfare programmes, the education system and the housing system. Throughout recent decades, the *hukou* system has raised different disputes at different stages of the country’s capitalist development and has undergone intensive reform. To date, the distinction still exists.

³ The radical market reform led by the then-party head Qiu He had a far-reaching influence on local residents’ lives. It was also widely researched as a case of radical privatisation, especially in the education and medical sectors, for example, Li L (2007), Li L and Jiang (2007). See https://en.wikipedia.org/wiki/Qiu_He for more information on Qiu.

meet by farming alone. Without much capital and experience, *zuo shengyi* was not feasible, hence their decision to leave home to work in the then-mushrooming manufacturing factories and construction sites in the Yangtze River Delta.

After careful research, I was surprised by how little developmental organizations and the Chinese government had done in this regard, especially when nearly 21% of its population were *nongmingong* (National Bureau of Statistics 2018). And looking closely at the few projects underway, I was shocked by how such massive budgets were spent on carelessly designed projects that would appear uninteresting and unhelpful to *nongmingong*. Five years on, I can still recall one project that bewildered me the most. It was a project led by a provincial government through the *dianda*⁴ system to provide online courses for vocational skills like mechanical repair. The idea was to help *nongmingong* improve occupational skills and move forward in their careers. However, in the early 2010s when it was introduced, smartphones had not yet been widely adopted among *nongmingong*, and access to computers was limited (Qiu 2009), not to mention that vocational skills useful in factories were often better obtained through practice rather than lectures.⁵

This is how I became interested in the relationship between ICTs and *nongmingong* and the opportunities and challenges ICTs afford to them. Moreover, these experiences taught me that a satisfactory answer can only be obtained by referring to *nongmingong*'s own point of view. Three years later, on a Sunday evening in late 2018, one month after I started fieldwork, I found myself at a hotpot get-together hosted by Laoganma, my colleague at *Weida*⁶. It was a belated celebration of the Mid-autumn Festival, a national holiday and traditionally a moment for family reunion. We had previously received a last-minute notice from the management that because of a rush order and had to continue working to deliver it just-in-time. It was not until that Sunday, after thirteen 12-hour working days in a row, that we could finally have some rest. Though tired, Laoganma decided to organize the hotpot. Throughout her nine years at *Weida*, this had developed into some sort of ritual in her otherwise tedious and monotonous life.

⁴ *Dianda* stands for China's Radio & TV Universities. First established in 1979 after the model of the British Open University, *dianda* is government initiated and state funded, and offers distance education to its students.

⁵ A detailed discussion of this point can be found in Woronov (2015). Under the title of *Class Work: Vocational Schools and China's Urban Youth*, the author discussed how vocational school students in her research found the curriculum offered in their classroom to be unhelpful as its design failed to combine theory with practical elements.

⁶ *Weida* is the pseudonym I created for the factory in which I conducted my fieldwork.

On that day, the hotpot happened at her sister's rented room, since Laoganma lived in a shared factory dorm shared with seven others. Small and compact, the room fit a double bed, a single wardrobe, a portable induction hob, a 4-seater foldaway table and a toilet, all squeezed in a mere 12 square meter space, leaving little room for other daily activities. For a group of 10, mostly her relatives from the same village in Ganzhou, Jiangxi, the narrow space meant we had to sit shoulder-to-shoulder. This notwithstanding, accompanied by the arresting melody of *Women Buyiyang* (We Are Different) and *Guangdong Aiqing Gushi* (Guangdong Love Story), two top hits on *Kuaishou*⁷, everyone enjoyed the broth cooked with lard and air-dried duck of traditional Ganzhou recipe. The whole room soon filled with the heavenly aroma of pork fat simmering away on the hob, coupled with a savoury, delightful yumminess from the duck.

Over the hotpot, Laoganma and her guests had a lively talk, all speaking Ganzhou dialect that I understood little. Most of the time they had smiles on their faces, while occasionally deep sighs emerged. Thanks to Laoganma's translation, I could have a taste of the talk, and there were several topics I jotted down in fieldnotes. One concerned the recent move of their home village committee to re-demarcate collectively-owned land to make space for a public toilet. This had been the focus of their discussion since they first joined a WeChat group created by village leaders to improve the transparency of local affairs. Another issue concerned a factory worker spending 20,000 yuan buying virtual gifts for a female live-streamer on *Kuaishou* to see her naked on camera. They were very critical, condemning him as irresponsible, frivolous and dirty. Xiaohe, one of Laoganma's cousins-in-law, complained about the lack of overtime work and asked for part-time job recommendations. Wujun, another cousin-in-law, suggested she do *weishang*, micro-business. He believed it was perfect for her since her husband was vice manager of their workshop. Laoganma, on the other hand, lamented that she was too old and illiterate to make money with her cell phone. Other issues included big sales on *Pinduoduo*⁸ and the harsh regulation of mobile phone use on the shop floor. Knowing I was doing a PhD, they turned to me for advice to avoid phone fraud.

⁷ *Kuaishou* is a video-sharing and live-streaming platform that was popular among *nongmingong* at the time of my fieldwork.
⁸ *Pinduoduo* is a Chinese 'team purchase' online shopping hub. Because it offered incredibly low prices, it was very popular among *nongmingong*.

Having spent the first month tightening screws, packaging and moving boxes in the workshop, this hotpot get-together was more than thought-provoking for me. It reminded me of earlier observations on the shop floor, about how my colleagues buried their heads in cell phones during work breaks, watching soap operas and short videos instead of talking to each other; about how they organized an online cardroom by creatively combining WeChat with a card game app; about how young female workers registered via a link they found in WeChat and paid 40-yuan ‘delivery fee’ for a ‘free’ Chanel fragrance set, even when it was proven that the Chanel set was fake and that they were simply trapped by a sales trick common among small fragrance companies.

These observations intrigued me more when compared to the experience of my middle-class friends. Most of them worked white-collar jobs and ICTs made it possible for them to work from home. Some did not even know about *Pinduoduo*, and I doubt if they would consider registering. In WeChat Moments⁹, they actively debate the latest public issues and are used to expressing their own opinions. And I can imagine that they would tell from the web design that the Chanel fragrance set was fake.

When I tried to connect these micro-level observations with macro-level social changes, I began to realise that the influence of the penetration of digital technologies and the digital transformation of the Chinese economy are comprehensive and a qualitative or even paradigm shift is taking place. If previously it is sufficient to talk about mobile phones as a modern object and as a means of network connection that helps them maintain or build social networks and negotiate meaning, social/emotional support and workplace arrangements (Yang 2008; Cao 2009; Chen Y 2010; Ding and Song 2010; Li H 2011; Wallis 2013; Ding 2014; Gao and Yang 2013, 2015; He 2015; Wang 2016), now digital technologies are deeply integrated into the arrangements of every aspect of *nongmingong*'s work and life, whether political participation, work or media consumption.

This prompted me to think further about how the changing techno-social arrangements have impacted *nongmingong*. I wonder, for example, why is the online environment of my fellow colleagues so different from their middle-class

⁹ Moments is a function offered by WeChat that allows users to post images and text, share music and comments.

counterparts? How does this relate to their class location? What is *weishang*? How does it work, how do they experience it and to what extent is it an effective alternative to the backbreaking factory jobs? Why do female workers prefer watching soap operas and short videos than talking to their colleagues during short breaks? What do they choose and prefer, why, and what do they take away? What about male workers? I could go on. But to start to answer these questions, we must first know who *nongmingong* are.

1.2 *Nongmingong: A life in-between*

Mass migration of peasants to urban areas for work is not a new phenomenon in China. It dates to late Qing industrialisation, reaching a climax in the 1930s as China's first *mingong chao*, tidal wave of migrant labour (Chi 1998). In the late 1980s, the term again made media headlines. The two waves were both the product of industrialisation and economic globalisation in China's pursuit of modernity (Lv 2003). But the same term bears very different meanings in different historical phases. In the former, *min* means the general populace, hence *mingong* can be anyone in society who becomes a worker in industry, be they peasants or urban residents (Chi 1998). But in the latter, *min* refers to *nongmin*, peasant, rural hukou holders. *Mingong* here is hence a shorter form of *nongmingong*, the term this project uses to refer to its research subjects. Today, the term is widely used in popular media, government policies and reports and in daily exchanges in China. Although *nongmingong*'s stories have been told differently from disparate positionalities, in most cases the term is used loosely to refer to anyone who holds rural hukou status but ends up working in urban workplaces.

The notion of second-generation *nongmingong* has an even more explicit origin. It was first coined in 2010 in a report of the All-China Federation of Trade Unions (ACFTU) to refer to those *nongmingong* born after the 1980s. They are also defined in terms of their concerns and dispositions, which are distinctive from the first generation. According to the report, they are less experienced in agriculture and rural affairs, enjoy a higher level of material life and education, and yearn more for an urban lifestyle, self-autonomy and individual development (ACFTU 2010; Wang 2010). Similarly, Li and Tian (2011) observed that the second-generation

demonstrated higher sensitivity to structural inequalities and sharper concern for occupational safety but were more optimistic about the future.

According to the annual report by the National Bureau of Statistics (NBS), there are currently approximately 287 million *nongmingong* in China, among whom 50.8% are second-generation (NBS, 2018). Forming the backbone of China's labour force, they are often found in factories, construction sites, restaurants and barbershops, and perform dirty, dangerous, demeaning jobs that their urban counterparts would avoid, earning a disproportionately low income. In Dongguan, *nongmingong* are usually paid the local minimum wage – RMB 1,700 yuan at the time of my fieldwork – which barely affords them a decent life, especially when most have a three-generation family¹⁰ to support. This means they must work overtime to make ends meet. A 2013 report found that on average Foxconn workers in Shenzhen worked for an illegally long working time of 240 hours per month (iLabour 2013). In Dongguan, this was 260-330 hours in 2018 (Zhou 2018). This is consistent with my observation. At *Weida*, my colleagues worked a staggering 328 hours every four weeks, and more than half of their income depended on overtime. To get a job there, I was made to sign a Voluntary Overtime Application Form to help the factory bypass labour law.

Even more problematic is the lack of occupational protection. *Nongmingong* generally receive at best minimal training before working, and to lower costs most factories either discourage them from using protective devices or simply do not provide any. This has resulted in massive occupational injury cases of various kinds. Xie et al. (2005) reported that around 40,000 fingers were cut in a single year in the Pearl River Delta (PRD). Those injured would then face dim job prospects and most ended up going back home, the youngest among them being 13 years old (Zhou 2018). Although in recent years, the government has introduced a series of policies and legislation regarding work injuries and occupational disease, according to Hu – director of an NGO providing legal assistance and social services to injured workers – most workers do not have the time, money and literacy to complete the lengthy and cumbersome legal process of appraisal, as in some cases this might take up to a year (Hu 2018, personal communication).

¹⁰ Three-generation family is a term used in sociology of family to describe the composition of Chinese families, especially those in rural areas. The three-generation family consists of the core family – children and parents – as well as four grandparents. In the absence of an effective pension system – especially for the rural population – this means that two parents must cover all expenses for 6-8 family members.

As non-local residents, they also have no access to local public health and educational services and can only resort to private services at a significantly higher price (Chen and Gallagher 2013). For some of my colleagues at *Weida*, the lack of inexpensive public health services meant that they had to go back to their places of origin for medical treatment of diseases like acute appendicitis. For less severe ailments, like colds and coughs, most simply bought medicine from a local pharmacy or went to private, informal clinics, some of which were not properly equipped for medical practices.

The insurmountable institutional barrier to educational services in urban areas, on the other hand, has led to the separation of most *nongmingong* families, with parents working in urban workplaces under always tight schedules and children left behind with their grandparents in rural areas, studying under the heavy hopes of the family. I was surprised to learn from Dang, founder of an NGO of female *nongmingong* empowerment, that it afforded *nongmingong* parents 28 certificates for their children to enter a local school (Dang 2018, personal communication). Yanzi was an NGO veteran working with migrant children. For her, the sudden separation from parents and radical change in living environment at a time key for the left-behind children's formation of the sense of self, life philosophies and world view have created alarming psychological and social problems (Yanzi, 2018, personal communication).

What makes matters worse is the alienation of industrial life. In industrial zones, everything is designed for the industrial purposes of commodity production and reproduction of cheap labour power. *Nongmingong* hence must endure, for example, higher noise standards, expensive electricity bills and a rather limited range of available services. Also painfully felt is discrimination from urban locals and mass media. One thing that struck me most was that when I showed my *Weida* colleagues a WeChat article where the author criticized the use of the term *diduan renkou*, low-end population, in media reports and governmental documents on the Daxing fire and forced evictions in Beijing, one of them actually cried.

Particularly relevant for this thesis is that *nongmingong* are active ICTs users. Within workshops and outside them, ICTs are used for work, entertainment, shopping, networking, reading news, political participation etc. As reported by NBS (2008), thanks to the growth in the domestic smartphone industry and reform of the

telecommunications sector, by 2017 approximately 92.1% of *nongmingong* had access to the Internet, through personal computers or smartphones.

To summarise, *nongmingong* are now online and floating at the margins of Chinese society, economically at the bottom of the income ladder, socially as low *sushi* (quality), institutionally as second-class citizens, and spatially in dusty, noisy, unsafe and overpopulated non-residential industrial zones. Deeply exploited and marginalized, in recent years, China's cities have seen growing worker activism, with the China Labour Bulletin Strike Map recording a total of 8,696 cases for the four years since 2013.

1.3 The recent digital transformation of the Chinese economy

This section further sets the stage for the project by providing an overview of the *recent* digital transformation of the Chinese economy, its domestic and international context, strategy, scope and latest developments. Digital technologies have always been a core component in China's quest for modernity. If in the Maoist era it was more of a strategic technology of national defence, after Deng's open-door policy, where China began to pursue its own brand of market reform under global digital capitalism, ICTs have always been a means through which the Chinese government seeks economic growth and social development (see Chapter 3 for a fuller historical account).

The recent digital transformation of the Chinese economy has taken place in the context of a larger, paradigmatic structural change in China's economy: the shift from a labour-intensive economy to a more capital-intensive and technologically sophisticated one. The shift started in 2004 and had close relations with the imbalance in China's economic growth pattern, domestic social crisis and changes in the global economic landscape (Huang 2008; Naughton 2010, 2018; Hung 2013, 2015). On the one hand, problems of overproduction crisis, industrial overcapacity and overreliance on exports and investment plagued the Chinese economy. Because wages were low, there was a deficit in domestic demand. All of this had to do with China's failure in negotiating technological import substitution, which left it no choice but to pursue a labour-intensive, export-driven growth model. It also had to do with the roles different types of capital played in the Chinese market, especially

China's unique financial system and its relationship with state-owned enterprises (SOEs).

On the other hand, the crisis brought about by economic imbalance was already being felt in the early 2000s, including the *sannong* crisis, labour unrest of all sorts in world factories and heavy environmental pollution (O'Brien and Li 2006; Lee 2007; Chan and Pun 2009; Chan 2010, 2013; Gallagher 2014). Internationally, during this period, southeast Asian and African countries began to pursue their own brand of industrialisation, providing cheap labour and ideal land, tax and resource policies for international industrial transfer (Fan 2018). On the other hand, the 2008 global financial crisis resulted in faltering demand from the global north¹¹ (World Trade Organisation 2009). All these urged the Chinese government to continue and accelerate its step in the structural adjustment of its economy.

In response, the strategies the Chinese government employed included shifting the economic growth model to rely less on investment in certain sectors, especially in the heavy industry, and more on its accumulated technological innovation and its now well-educated labour force. In the meantime, it continued investment in infrastructure and sought to boost domestic consumption in order to reduce reliance on global demand. In this context, the pursuit of economic digitalisation was a means through which the Chinese government sought to address its crisis and upgrade its economy, improve its productive force and the quality of economic growth by exploiting the digital infrastructure it had spent enormous efforts to build in the past decades (Naughton 2018).

The transformation saw the ascent of informatisation as a 'leading force in driving modernization', and the scope was broad. Given the rapid expansion of its corporate-run cyberspace, ICTs as a set of complex and interactive technologies, and the Internet industry as a slew of Web-oriented technological, business, and innovation models, have been deliberately deployed by the Chinese government to crosscut and catalyse reforms and to help upgrade the quality and composition of its economic

¹¹ According to the World Trade Organisation (2009), although the 2008 financial crisis began in the US, financial institutions and economies throughout the world were severely affected. The deteriorating economic situation took a toll on both consumer and business confidence. Declining asset prices, faltering demand and falling production translated into dramatically reduced – and in some cases negative – production and trade growth in many countries. China was no exception in this regard: China's exports to its top six trading partners represented 70% of the country's total exports in 2007. All these trading partners are currently experiencing economic contraction or slowdown and are likely to exhibit weak import demand for some time. In February 2009, China's exports were down 26% compared with the same month in the previous year and 28% compared with January.

growth and social development (Hong 2017). This is explicitly stated in the *Outline of the National Informatization Development Strategy*, where a package of reform policies aimed at the wholesale informatization of society was proposed,

- 1) *Fostering the information economy, stimulating the transformation of development, including manufacturing, agricultural and service industries, through decentralization of power and upgrade of information infrastructure;*
- 2) *Deepening e-governance, moving forward with the modernization of state governance, including the party, the government, law and public order maintenance;*
- 3) *Letting online culture flourish, strengthening national soft power, including boosting and diversifying cultural industry while persisting in the progressive orientation of advanced Socialist culture;*
- 4) *Innovating public services, guaranteeing and improving the people's livelihood, including education, scientific research, medical service, employment and social security, and poverty relief;*
- 5) *Serving the construction of an ecological civilization, helping beautiful China;* and
- 6) *Accelerating a strong information army, building a modern military forces system. (Central Committee General Office and State Council General Office 2016)*

On the ground, policies like Made in China 2025, 'Internet Plus', and Mass Entrepreneurship and Innovation have been devised to promote 'restructuring through networking' (Wang 2016; Hong 2017). Whereas Made in China 2025 seeks to upgrade the manufacturing capabilities through technological advancement and innovations – for which ICTs are a strategic component part – the Internet Plus policy aims to promote industrial reorganisation and upgrade and create new economic and production forms (State Council 2015). Mass Entrepreneurship and Innovation, on the other hand, seeks to mobilise the mass uptake of entrepreneurship. In the meantime, the deployment of digital technologies was carried out alongside other measures, for example, the gradual opening of hitherto state-monopolised sectors to the market, for example, the cultural sector, and the adjustment of capital structure in the domestic market – in this regard, a bigger role was granted to domestic private capital and international financial capital.

It is the joint force of these measures that has underpinned the rapid rise of the digital economy in China. It did not take the digital economy long to take a

significant share of the Chinese economy, and China to ascend to global leadership in digital economy. According to a recent report from the China Academy of Information and Communications Technology (CAICT) of the Ministry of Industry and Information Technology, in 2019, China's digital economy was worth a total of 35.8 trillion-yuan, accounting for 36.2% of its total GDP (CAICT 2020). Among these, the total GDP produced by the digitally-enabled reorganisation of traditional service, agricultural and industrial sectors was 28.8 trillion, accounting for 29%. Globally, China, together with the US, is reported to lead the economic geography of the digital economy, as they account for 90% of the market value of the world's 70 largest digital platforms (UNCTAD 2019). Similarly, a 2017 report from McKinsey & Company described China as “a leading global force” in the global digital economic landscape (Woetzel et al. 2017). Thanks to its large, young market, and the government's active support, it is now a global leader in e-commerce and digital payments, a leading global investor, a major player in global data flows, and home to one-third of the world's unicorns.¹² It is exporting digitally-driven business models and enabling foreign partners.

The rapid rise of the digital economy also has precipitated profound changes in productive force and employment in China. On the one hand, data become a new raw material of production while traditional agricultural, manufacturing and services sectors were reorganised through digital technologies, giving rise to such new models like platform economy, sharing economy, crowdsourcing, among others, and news forms of employment like self-employment, freelance work and part-time employment. According a 2017 report from Didi, leader in China's e-hailing market, a total of 21.08 million registered and work on it, among them over 5 million were rural migrants (Xue et.al 2017). A more recent from CAICT (2018) shows that in 2018, the digital sector creates a total of 191 million jobs, which is an 11.5% increase from 2017, accounting for 24.6% of the total amount of jobs of the same year. Among them, 178 million were in digitally-reorganised manufacturing and service sectors.

1.4 Overview of the thesis

¹² Defined as privately-held start-ups valued at over US\$1 billion.

Above I have introduced the main concern of the thesis: to understand *nongmingong*'s subjective experience of the recent digital transformation of the Chinese economy, or ICTs-driven economic restructuring, in both work and leisure. I then introduced who *nongmingong* are and provided a brief overview of the digital transformation of the economy. I pointed out that the recent economic transformation was part of the larger paradigmatic shift of the Chinese economy – from a labour-intensive economy to a more capital-intensive, and technologically sophisticated one – before setting out the domestic and international context, strategy, scope and latest developments of the digital transformation.

Chapter 2 provides a review of sociology of labour research in China, both before and after the digital transformation of the economy. The goal was to position the project within the field. Through this discussion, I state that I will follow the left-leaning tradition and provide an explanation. I then identify gaps in current literature, before unpacking the overarching research question raised at the very beginning of the thesis. This chapter ends with a brief discussion of the theoretical framework I use to address these questions.

Chapter 3 is a historical account of the changing relations between China's approach to ICTs, its economic development strategy and changing class relations in order to provide the historical context for the thesis. It shows how China's ICTs-driven developmentalism has repeatedly marginalized, if not failed, *nongmingong* as China's new working class since the economic reform in the 1980s.

Chapter 4 introduces the methodological approach employed to conduct the research. I start with a discussion of the epistemological and methodological challenges the increasingly globalised and digitalised world has brought to ethnographers. Informed by this, I then provide a narrative of the journey of the fieldwork itself, detailing the strategies I used and decisions I made on the one hand, and how the fieldwork evolved, and the focus narrowed on the other. Throughout the narrative I highlight how my positionality might have impacted on the scope of the project as well as the ethical issues that emerged. I go on to demonstrate my analytical framework and consideration of the presentation of the data and results.

Chapters 5 and 6 examine *nongmingong*'s experience of production under economic transition by exploring how they respond to it. I focus on three forms of ICTs-mediated work popular among *nongmingong*: *rijie*, *weishang* and Didi. I discuss the configurations of the party-state-market, labour market conditions and managerial autonomy that gave rise to these forms of work; I also discuss how *nongmingong* occupying different class positions (diverging in management status and levels of skill) and with different gender identities experience the changing labourscape differently. Chapter 5 deals with those who engage in multi-jobbing practices and Chapter 6 turns to those who quit their factory jobs and switch entirely to the platform-based Didi. In each of these chapters, I explore how labour processes are organised, how they are experienced and make sense of the relations in production, as well as their resistance and non-resistance at both individual and collective levels.

In Chapter 7 I turn to workers' everyday life. The focus here is on the rising digital content industry, whose popularity among and penetration into *nongmingong*'s everyday lives make it a powerful force in mediating their perceived relationship with 'others' within the society. The articles and videos discussed in this chapter derive from their self-reported preferences – what they find interesting, inspiring or impressive. Based on this, I discuss the relationship between their preferences and modes of viewing with their working-class way of life. I also discuss what kinds of understanding and ways of seeing are proffered and advocated by the dominant actors in these pieces, as well as how they, by drawing on their bitter and precarious structure of feeling, actively interpret them.

Chapter 8 concludes the thesis by summarising the findings and detailing the contribution the thesis made to understanding labour conditions in China. This allows me to reflect on China's ongoing reform as well as its techno-driven developmentalism and modernity in general. Beyond the immediate case of China, the discussion sheds light on the debate of the future of work from the vintage point of the implications of digital capitalism on the working class in developing economies. I end the chapter with a reflection on the limitation of the research and some suggestion for future research.

Chapter 2 The *Nongmingong* Question in China

the criticisms... I had described the logic of industrialism, not capitalism... this... require comparing capitalist with non-capitalist production, but what non-capitalist production? I decided to study work in Soviet societies... It was dishonest to simply dismiss the Soviet Union as a form of state capitalism (or a degenerate workers' state) and then project "real" socialism as some unexamined and idealized utopia that contrasted with the ugly realities of capitalism. This was no more acceptable than launching attacks on the Soviet Union by comparing its brutality and inefficiency with idealizations of capitalism put about by apologists and ideologists. These false comparisons of the idealization of one society with the reality of the other had to be replaced with comparisons of ideal type with ideal type, reality with reality. Best of all would be a comparison of the relations between idealization and reality in the two worlds! (Burawoy 2008, p.13)

In the previous chapter, I discussed how I came to concern with *nongmingong*'s subjective experience of the recent digital transformation of the Chinese economy. I also provided a brief picture of *nongmingong* in terms of demographic composition, generational division, work and living conditions, and their main concerns and struggles. In the past decades, this mass phenomenon of migration, especially the inequalities they face, has generated continual and conscientious attention from the academia. In this chapter, I present a review of the field. The goal is to position this project within it.

2.1 *Nongmingong* as rational individual

Whereas rational individual is the figure underlying most economic theories, in the study of *nongmingong* it can be found mostly in the works of demographers and sociologists influenced by economic sociology. What puzzled them is the reason behind *nongmingong*'s massive migration.

Some tries to provide a macro-level explanation. Among them, the push-pull-obstacle model first outlined by Chicago demographer Donald Bogue was the most widely invoked framework. For Bogue (1969), migration is a highly situation-dependent response of the human organism to economic, social and demographic forces. All voluntary migration ultimately results from migrants' evaluation of two subjectively interpreted socioeconomic environments: the home/destination societies in terms of push and pull factors, and intervening obstacles whose influence depends on the impedimenta with which the person is encumbered. Following this model, they have explored the complex macro-level push, pull and intervening factors behind *nongmingong*'s mass migration (Du and Bai 1997; Cai 2001; Bai and He 2002; Li 2003; Zou 2005; Guo and Wang 2011). A widely cited study in this regard was Li (2003). Based on four large-scale surveys and interviews in Beijing between 1999 and 2002, he argued that economic motivation was the main reason behind *nongmingong*'s migration, which was consistent with findings of the 'international studies' he used as a yardstick to evaluate the Chinese case. For him, economic motivation was at once a rural push factor (extreme poverty, lower income and lack of work opportunities) and an urban pull factor (higher income and broader horizons). His data also revealed a pattern inconsistent with 'international studies', that is, while most who he surveyed saw the *hukou* system as a strong push factor, they still chose to stay in cities, even when jobless or completely broke. His explanation was that the *hukou* system rendered the model ineffective in explaining the Chinese case because it led to *nongmingong*'s cognitive distortion in terms of life expectations and goals. Guo and Wang (2011) surveyed second-generation *nongmingong* and suggested that economic factors continued to motivate their migration. But compared to ten years ago, urban economic pulling forces were stronger and rural pulling forces weaker. This, they argued, had to do with the younger generation's preference of urban modern lifestyle over rural backwardness. They further pointed out that urban pushing forces was growing, as the pain of institutional discrimination and that by local residents and mass media was increasingly felt.

The micro-level analysts, on the other hand, found the then-mainstream discourse of *nongmingong* as *mangliu*, blind flow, problematic. They drew on rational choice theory and tried to establish the nature of the rationality driving this migration

(Huang, 1997; Du and Bai, 1997; Cai, 2000; Wen, 2001; Tan, 2003). A consensus across the literature was that whereas in the West, migration was a rational decision-making process by migrants to maximize *individual* interest, *nongmingong* differed because the decision-making process happened on a family basis, although Tan (1997) offered a counterargument. They argued most families saw migration as an investment of human resources and considered gender, age and educational level when investing. While some saw behind this investment the desire to increase income, others argued that it was better understood as existential needs (Huang 1997). Wen (2001) further enriched the literature by exploring the ‘social rationality’ behind migration. This line of research provides some insight into the reasons behind mass migration. By inviting *nongmingong* themselves to justify their decisions to migrate, it recognised their agency and forcefully refuted popular stigmatisation of *nongmingong* as blindly and irrationally flowing around the country, ruthlessly seeking personal financial gains.

However, in much of this research, *nongmingong*’s agency is undertheorized. Their rationality is understood in only limited – and predominantly economic – terms. This betrayed itself when Li (2003) resorted to the cognitive to explain where economic rationality failed, leading to his appalling argument that *nongmingong* were cognitively distorted. This was also manifest in the essentialist argument that the decision-making of Chinese *nongmingong* differed from their Western counterparts because it happened at the family level, for consideration of family as part of the migrant individual’s rationality was not recognized. Besides, from this literature one gets no sense of *nongmingong* as living in social relations of some kind. Although all informants in these studies were assembled under the same category of *nongmingong*, in analysis, the sense of collectivity – shared position within social structure of some kind – embodied in the term is missed. As a result, one gets no sense of how, for example, being undereducated or low-skilled, or not owning means of production, imposes constraints on decisions to migrate.

2.2 *Nongmingong* as emancipated migrants¹³

The second strand of literature relates to what I call the *emancipated migrant*, which is based on a critique of the leftover labour assumption underlying the rational

¹³ For Marx (1843), emancipation distinguishes between political and human emancipation. Political emancipation entails the equal status of individual citizens, whatever their property, religion and other psychological characteristics, in relation to the

individual thesis. The leftover labour argument, according to Sun (2003), implied that land-owning peasants chose to migrate only when sufficient labour power was spared for agriculture, which failed to explain the mass abandonment of arable land in China since the 2000s, and the fact that most *nongmingong* were actually rural elites. Based on a historical analysis of China's transition, they argued that *nongmingong*'s self-reported economic motivation should be understood as response to absolute poverty in rural China, which in turn had to do with institutional discrimination against rural areas (Sun 2003; Lu 1991, 2007, 2009).

According to them, in Maoist era, China faced a divided and closed international environment because of the Cold War. To consolidate the hard-won autonomy and pursue socialist construction, lacking in primary accumulation and resources, the Chinese government turned inward to prioritize urban industrialization at the cost of rural development. Central to this strategy was the *hukou* system that was invariably linked to the country's (re-)production and (re-)distribution systems in order to secure industrial raw materials provision and the livelihood of the urban workforce. As a result, peasants' freedom of migration and work in cities was constrained (Lu, 2003). Most of the time they were effectively tied to rural areas and agriculture and were asked to hand in a significant proportion of their production. (Lu 1986; Zhang 1998). During the reform era, whereas rural reform was soon stagnated, in urban areas, socialist institutions were gradually marketized by the state to release and develop productive forces, and this was believed to be congruent with the fundamental interest of the overwhelming majority of the people (Lu 2006, 2008). In this process, the straitjacket of *hukou* became loosened, and peasants were allowed to migrate to become part of the urban workforce.

In this analysis, Maoist socialism represents mere constraints on peasants and has led to their absolute poverty before migration. The post-1978 market-oriented reform, on the other hand, was a fairly positive endeavour by the central government to gradually remove these constraints. *Nongmingong*'s migration is therefore understood as their spontaneous move to shake off poverty. After years of repression, they were finally emancipated and allowed to "lift themselves out of poverty through sweat and toil, pursue their own happiness and change their own

state and before law, and is the final form of human emancipation within the existing world order. In this section, I use the term not in this strictly Marxist sense, but more generally to refer to the process of giving people social or political freedom and rights.

and their children's fate, with their humble labour, at their free will" (Qiufeng, cited in Lv, 2003; p 253).

Guided by this understanding, this strand of literature covers a range of topics, e.g. mechanisms of social stratification; institutional and social discrimination and inequalities; and *nongmingong* crimes and social control; from an 'agent-practice' (Tan, 2006) perspective, scholars have investigated among other topics patterns and non-economic motivations of migration, the ways in which they negotiate inequalities and discrimination, and the impact on rural China (Wang 1995 ; Wang et al. 1997; Murphy 2002; Li 2003 ; Li 2004 ; Xiang 2004; Lan 2005). In both threads, gender is a main concern (Jin 1998, 2000; Ke and Li 2001; Tan 1997, 1998, 2001; Tang 1996; Tang and Feng 2000). In what follows, I briefly present two topics belonging respectively to the two threads: mechanisms of stratification, and the *guanxi* debate. The aim is to deliver a sense of this literature in order to discuss its strength and weakness, particularly in terms of conceptualising *nongmingong*'s agency.

2.2.1 Mechanisms of social stratification and the *guanxi* debate

In evaluating the impact of state and the market on *nongmingong*, the literature is mostly dominated by the Weberian approach to class analysis. This was a conscious choice because the Marxist framework 'reminded people of the old socialist politics of *hua jieji, ding chengfen*, determining class status of individuals and the family, and the mobilization of one class to publicly criticize and humiliate the other' (p.15), while the Weberian approach was constructive and conducive to social integration (Li P et al. 2005 p15; Liu and Tian 2018)

Informed by Weberian class analysis, along with his colleagues at the China Academy of Social Sciences (CASS), Lu Xueyi, 'the prime architect of the current structure of class in China' (Goodman, 2014, p.4), carried out a three-year national survey, and presented a 10-strata hierarchical model of the overall social structure in China by occupation. In their model, *nongmingong* belonged to the industrial worker strata and ranked 8th. Others' findings echoed Lu's. Li P (2003) and Li Q (2004) argued that although *nongmingong*'s wealth increased through occupational change, it did not result in upward mobility in the overall social ladder. Li C (2005) examined prestige stratification by occupation and found that *nongmingong* ranked

77th among her 81 categories, higher only than tricycle drivers, small vendors, porters and domestic helpers.

As for institutional arrangements behind the model, a central mechanism they identified was what Li Q (2004) called the dual labour market, consisting of a primary sector and a second sector. It was in the second, informal sector that was low in income and social security and degraded in work environment that *nongmingong* were mostly likely to be found. For him, this was because employment remained closely linked to the *hukou* system, creating an insuperable hurdle for *nongmingong* to enter the primary sector. Li C (2006) compared *nongmingong* and urban workers. She found that although *nongmingong* changed jobs more often and worked harder, their opportunities for upward mobility were slimmer. As she wrote,

normal factors and formal institutions do not impact them in a normal way, rather, formal institutions have a decisive effect on their social mobility – squeezing them out of the realm of formal institutional arrangements to the social margin. They are hence not able to achieve upward mobility through normal ways, but do it in their special way. (p.105, my emphasis)

Zhao and Wang (2002) focused on the role of the market. Drawing on notions of human capital and social capital, they analysed survey data collected from a sample of 7,500 in Beijing, Zhuhai and Wuxi, and found that the correlation between both human/social capital and income were statistically significant, with more training/education leading to higher income. Focusing on gender, Jin (2000) examined how ‘developmental resources’ were distributed between and had an impact on both genders. Based on her research in South Jiangsu, she argued that the new industrial system gave rise to gendered industries, allowing males to reconfigure domination over females with advantages in technology-related skills and inherited social resources. Others observed a feminization of the agricultural workforce. Whereas for some this was a rational choice of the family under the global optimal principle (Du and Bai 1997), they attributed this to the dominant gendered ideology (Tang and Feng 2000). Tan (2000) echoed this latter position as she found women were more likely to find labour-intensive, low-skilled, long-hour yet low-income jobs.

Whereas the abovementioned studies approached the phenomenon from a structural perspective, ‘the *guanxi* debate’ took *nongmingong*’s day-to-day practice as the point of departure. Building on the emancipated migrant thesis, the *guanxi* debate examined 1) how *nongmingong* mobilized *guanxi* to negotiate structural constraints and the lack of social and emotional support during and throughout migration, and 2) the potential of the new social relations and social forms – e.g. new forms of community, new gender relations – as alternative forms of social organization thus emerged¹⁴ (Li 1996, 2004; **Qu, 2001**; Xiang, 2004; Lan, 2005).

A consensus across the debate was that for most *nongmingong*, unlike urban workers, the social resources they relied on came not from the government or the market, but from *xiangtu guanxi*, those networks they brought with them from places of origin. A term coined to describe this phenomenon was *lianshi liudong*, chain migration. Despite this, researchers have diverged in understanding the nature of this reliance. For Li (1996), *xiangtu guanxi* consisted of a primary level that existed prior to migration and a secondary level they built after migration. Bian (1997), reconsidering Granovetter's weak-tie theory, established that in China jobs were acquired more often through strong ties than through weak ties. A similar pattern was also found among *nongmingong* (Qu, 2001; Li H, 2003) with the strength of ties defined in terms of blood relations and place of origin. Xiang (2004) focused on small business vendors, a group loosely defined as *nongmingong* in this literature. Based on the reflection of the market hype¹⁵ within Chinese society in general and academia in particular, he presented a bottom-up thick description of how the Zhejiangcun community formed and developed in different stages from various clusters of interactive relations among those migrants, different levels of governments and urban residents. For Xiang, *guanxi* should not be understood in an essentialist way as unique to the Chinese context, nor should it be reduced to such notions as ‘social capital’, ‘tie’ or ‘network’, as these capture only part of this rich concept. He articulated a position that saw *guanxi* as ‘simultaneously related to interpersonal relations, individuals and social structure’ (p.3) and called for a return

¹⁴ Similar research could also be found on other groups of rural-to-urban migrants, for example, the Zhejiangcun research on those small business vendors of Wenzhou origin in Beijing (Wang C, 1995; Wang H et al., 1997; Zhou, 1998; Xiang, 2004). In terms of gender, within this tradition, Li Y et al. (2000), Jacka (2006) and Lin (2013) have discussed *nongmingong*’s gendered lived experience.

¹⁵ Xiang started his book with a critique of two prevalent phenomena in 1990s China. One was the adoption of the Western market-driven modernity as the standard to evaluate Chinese society and its people; the other, associated with the first, was the blind faith in the market as the solution to all problems.

to the process in which migrants themselves mobilized *guanxi* to deal with others and negotiate institutional constraints. In *Transcending Boundaries*, this thick description led him to reflect on the potential of the ‘non-state space’ – the social space Zhejiangcun migrants created with *guanxi* – as a ‘new social space’ (p.500) to provide a reference point for reforms in other social realms.

2.2.2 The emancipated migrant literature revisited

Compared to the rational individual literature where *nongmingong* were conceptualized as rational individuals operating in ideal market conditions, the emancipated migrant thesis considered the workers as a social group, tracing its origin to the larger historical institutional contexts. It analysed how these arrangements shaped their experience, and how they negotiated the constraints.

In explaining mechanisms of social stratification, much of the literature has criticised the government solely. Informed by their historical and institutional analysis, scholars tended to attribute *nongmingong*’s problematic conditions to the residue of the old institution-driven rural-urban duality to which the *hukou* system was central. For them, this was a symptom of the disrupted optimum deployment of resources by the market, due to the government’s failure to create a healthy and free market resembling that in the West. Even when evidence showed that social/human capital had an influence on income, they did not see it as a problem with the market *as-it-was*, but attributed it to the workers’ failure in preparing themselves for the market. In the *guanxi* debate, there is a similar lack of attention to the constraints imposed by the market. Attention is overwhelmingly paid to the use of *guanxi* for purposes like expanding personal networks, getting emotional support, building romantic relationships, and dealing with government regulation. Even Xiang’s thick description, where he highlighted ‘market as a social construct’ (Xiang, 2004, p.xvi), ‘falls sadly short in providing sufficient information on the production process: how workers were organized and controlled in workshops to transform their labour into material commodities’ (p.xv).

In much of this literature adopting a top-down approach, underlying this lack of attention to the market is a functionalist - and essentialist - understanding of the state, the market and the workers. Here, market functions as the mechanism of resource distribution of the society: the state regulates the market, secures production

and manages the society, while *nongmingong* function as the labour power that executes production. Their roles within the society are considered separately, rather than through their interconnections. Besides, both top-down and bottom-up approaches share a similar preoccupation with the market. For most authors, with a few exceptions (e.g. Xiang 2004), the effectiveness of the market system is assumed rather than examined, with a fully-fledged free market considered congruent to the interests of the state and *nongmingong* alike. The state-market relationship is assumed to be antagonistic, and the state-*nongmingong* relationship is also assumed, with the state always considering *nongmingong*'s fundamental interests. The intention of the state's reformation of the market is hence not contextualized and linked to, for example, the operation of the market *as-it-is*, the global market economy, and its changing relationship with *nongmingong*. Finally, *nongmingong*'s decision to migrate to and their predicaments in urban areas are not explained in relation to the market but are ascribed to old institutional barriers as much as their own inability to meet market demand. This is associated with a teleological view of the history, or as Xiang (2004) put, the use of Western realities to evaluate Chinese realities.

Based on this discussion, I argue that in this extant literature, the conceptualization of *nongmingong*'s agency is inadequate, for it fails to thoroughly consider it within its intricate, mutually constructive relationships with the state and the market. Considering preoccupations among intellectuals with market mechanisms solving every problem, and with modernization and development over people's actual wellbeing, I further argue that in much of this literature *nongmingong*'s voice is actually systematically repressed. It is not difficult to find statements suggesting that *nongmingong* do not care much about the inequalities of *hukou* because they do not want to settle down in urban areas. Most of the time, the impoverishment of *nongmingong* is not investigated in its own right, but became the focus of inquiry only when it is considered an urban ailment. The following quotes are telling:

The nongmingong problem is important because it relates to the fundamental question of China's sustainable development and long-term stability and sustained economic growth in the next 50 years... The logic of nongmingong's life is simply 'to survive'. However, some wrongly took risks and committed crime for wealth... [this] needs some action, since unemployed

and impoverished nongmingong can be a real threat to urban residents. (Li 2002)

Nongmingong... promotes urbanization and modernization by gradually bridging the massive economic and cultural gap. However, this migration is massive, disorderly and unsafe, and puts the destination society into potential instability and structural tension. (Li 2003)

Based on the analysis so far, to adequately theorise *nongmingong*'s agency necessitates a framework thoroughly addressing the state-market-*nongmingong* interrelations whilst transcending the teleological view of the history. This leads me to the work of China's new left¹⁶.

2.3 *Nongmingong* as forced workers

Actually, the above discussed understanding of *nongmingong*'s historical and institutional roots is associated with a liberal-leaning understanding of Chinese modernity. This view saw the pre-PRC China as a century of humiliation for the Chinese people and nation, while Maoist China - particularly the decade of the "Cultural Revolution" - represented a failed attempt of modernisation. Their appraisal of Mao considered his contributions as far outweigh mistakes. While acknowledging his contribution as a great Marxist and a great proletarian revolutionary, strategist and theorist, they nevertheless criticized his "left errors", of which the erroneous theory and practice of taking class struggle as the key link and the gross mistake of initiating the cultural revolution were epitomic (Wang 2005; Zhu 2007; Qin 2013; Wu 2017). This, for the new left, is far from convincing, for in this view, market economy, liberal democracy and nation state are taken as *the* defining hallmarks of modernity. Anything deviate from this model are deemed as lack of modern content. Capitalism is taken, whether explicitly or implicitly, as *the* globally irresistible trend and the only imaginable historical horizon.

For the new left, this is symptomatic of the "intrinsic difficulties in attempting to grasp the idea of China in familiar social science language" (Lin 2013; p5).

Although Wang Hui, a core member of this collective, openly dismissed this label

¹⁶ The Chinese new left is a heterogenous group that emerged in the mid-1990s in a debate concerning the future direction of China's reform. While each scholar may have their own opinions on different issues, what they share in common was that they embraced leftist theories, ideals and traditions ranging from Marxism to socialism, postmodernism and other schools criticizing neoliberalism.

because it risks conflating them with the old left, one thing that distinguishes them from the liberals is their appraisal of Maoist China and its historical (dis-)continuities with Republican and post-Mao China, for they found in their narratives an inadequate understanding of the historical specificities and continuities. On the other hand, while they certainly appreciate the efforts of localist turn advocates among China historians to “decenter national history” (Daura 1991, 1997), they nevertheless consider their efforts as flawed, not least because of their failure to appreciate the entirety and trans-local complexity of modern Chinese development. For them, a thoroughgoing narrative of Chinese modernity requires taking issue with the whole “China/West” binary. Such an endeavour cannot be fulfilled unless one distances her/himself from the Eurocentric historical narratives that identify modernity with the nation-state and capitalism, and starts to grant China its due historical recognition as neither “nation” nor “empire”. To borrow Burawoy’s quote above, while the liberals wrongly compare the reality of China with the idealization of the West, the new left try to correct this by establishing China as an ideal type, before assessing its reality against this idealization.

Guided by this rationale, they date the birth of a cohesive self-consciousness of modern Chinese identity back to the rise of revolutionary nationalism after the 1840s when China was forced to open its door to the world market during the Opium wars. For them, pre-PRC China was a century of humiliation; it also represented a self-conscious exploration of the form and path of *Chinese* modernity by the Chinese people and elites - loyalists, warlords, republicans, anarchists, nationalists, Marxists or communists/internationalists etc. - in face of imperialist powers and complex domestic social relationships and interests (Dirlik 1989). Thanks to the well-founded articulation of the enemies of the revolution as “imperialism, feudalism, and bureaucratic capitalism”, it was the communists who finally brought China to independence, through its strategic reliance on not only - as orthodox Marxism would suggest - the industrial working class, but social forces from rural margins with mixed ethnicities. Thus, they reconfirmed that the communist revolution in China was at once an epic struggle for national independence and a radical social revolution that aimed to “liberate its internal minorities from traditional ruling class chauvinism” (Lin 2013; p6). Meanwhile, they see the Chinese revolution as part of the struggle against imperialism, colonialism and fascism across the world. It drew

lessons from but never blindly follow the West or the Soviet in institutional arrangements, policy generation and implementation techniques and revolutionary visions, and it bore intricate connections with national independence movements in capitalist third world but distanced from them with its insistence on socialism and internationalism (Selden 1995; Tsou 2002; Lin 2013; Heilmann and Perry 2011; Wang 2011).

New China then pursued its own brand of socialist transformation and industrialization. Here, the new left urges us to recognize its modern content, e.g. egalitarianist principles and people's democracy, and remind us of its profound continuity - rather than rupture - with the collective search for national and social liberation, equality, and prosperity in previous years. For them, policies in the socialist phase were unprecedented, adventurous and ultramodern. By contrast, Dengist reform, much applauded by the liberals, represents an abandonment of socialism in the name of reform.

It is this state-orchestrated *de facto* betrayal of its socialist promise that concerns them most. Hence Lin Chun (2013) in her widely-read *China and Global Capitalism* wrote, "the politics of debating Chinese socialism is not about restoring any past but about learning lessons for its rejuvenation" (p55). Similarly, Huang and Cui (2005) called for an exploration of whether and to what extent is China positioned to construct a more equal and justice society than the West as it is, and in so doing asserts local alternative to resist and eventually take over global capitalism as *the* dominant form of modernity. Born into a rural background, Wang drew our attention to questions of social stratification and rampant inequalities, for example, the ever-expanding wealth gap, the commercialised social welfare system, environmental degradation, particularly what these mean for workers and peasants.

With specific reference to *nongmingong*, the new left rejected the emancipated migrant thesis. For them, throughout 40 years of reform, with hitherto socialist relations of production shattered, China is now incorporated into the global capitalist system, and it is the market and the private sector, rather than central planning and the public sector, that now dominate China's economy. In this process, *nongmingong* as a social group have undergone a process of unfinished proletarianization (Pun and Lu 2010). Instead of willing migrants, most do not have much option but to migrate to big cities, since rural areas fail to provide even faint promise for their livelihoods

and ambitions. Far from being emancipated, migration, while providing better income and opportunities, re-inserts them into the exploitative capitalist relations of production. Domestically, they face a similar situation as laid-off state workers and together they have formed China's new working class (Pun 2016).

Based on this proposition, for these left-leaning sociologists, the *nongmingong* question then became a labour question. Their research in the past decades has traced how capitalist relations of production have played out in the historical context of China and under the neoliberal expansion of global capitalism, the politics of production and how this in turn contributed to the making of *nongmingong* as China's new working class. This can be divided roughly into a state-civil society approach and a class formation approach.

2.3.1 The state-civil society approach

The state-civil society approach employs a top-down perspective. It asks how the authoritarian state in China, through its institutional and legal apparatus, interacts with transnational and domestic capital, and how this interaction gives rise to historically specific and constantly changing configurations of capitalist relations of production throughout the reform, while shapes the space of agency for labour NGOs and worker self-organisation from below.

A central issue in the field is employment relations. Two consensuses across the field are: first, after decades of marketisation, a contract-based employment system is gradually established; and second, employment in China is undergoing radical informalization, with *nongmingong* the most precarious group (Kuruvilla et al. 2011; Tomba, 2002). This, as Kuruvilla et al. (2011) have argued, is part of the global trend of precarisation under neoliberalism and flexible accumulation and is decisively shaped by national circumstances and institutions. They divided the development of China's employment system into three stages. Before 1995, the socialist permanent employment system – of which *nongmingong* was historically not a part – dominated. Legally and institutionally unprotected, growing in numbers, most *nongmingong* were employed by foreign-invested enterprises whose competitive advantage stemmed from labour-intensive production without formal contracts.

The launch of the 1995 labour law smashed the ‘iron rice bowl’, marking the start of the second stage. Although it aimed to reduce exploitation by ‘enshrining certain rights and responsibilities’ in law, the inability of the state to adequately enforce it, plus employers’ labour flexibility strategies, resulted in intensified ‘commodification and casualization of labour’ (Friedman and Lee 2010, p.510). According to Friedman and Lee (2010), by 2007, only 12.5% of *nongmingong* worked under formal contracts with key employment-based social welfare. In this context, Zhang L (2008, p.28) observed the rise of ‘temporary workers in permanent jobs’. Swider (2015) found ‘permanent temporariness’ in the Chinese construction industry, and Kuruvilla et al. (2011) observed a growing trend of ‘formalization of informalization’ through vocational schools and labour dispatch agencies.

The third stage is marked by extreme insecurity and informalization. Although the Chinese government introduced several new major labour laws (such as the 2008 labour contract law and the pension law) – much to the consternation of employers (Frazier 2010) – and have made substantial efforts to enforce them (Gallagher et al. 2015), employers and labour agencies continue to invent new informal arrangements to evade the law.

Given the destabilising effects of extreme precarity, how does the Chinese government manage to prevent massive social uprisings and maintain social stability without democratising employment relations? Writing in the mid-2000s, Gallagher’s (2005) answer to the question was the particular sequencing of the reform in terms of corporate ownership structure, for different types of capitals carry with them distinctive sets of power relations, thus giving rise to different social consequences across different contexts. More specifically, she argued that key to China’s stability is the state’s choice to introduce FDI before privatising state sectors and allowing the domestic private sector to rise, for this allowed social change to take place at the periphery and prevent the rise of a large domestic capitalist class. This in turn enhanced the power of the party-state for the time being and avoided the pressure for political change. It also brought different types of capital into competition, thus fragmenting the population, weakening the union and delaying demand for political change.

The absence of massive social upheaval does not mean that workers are not protesting. Lee (2007) documents the struggles of both the laid-off state workers and

nongmingong. She argued that despite the different historical and discursive resources drawn into the protest, both groups are responding to China's 'decentralized legal authoritarianism' by developing a unique form of protest in which the centrality of law and legalism is salient. Specifically, she observed that *nongmingong* were protesting mainly locally against the discrepancy between the promise of the law and how it was actually enforced, particularly wage arrears and occupational injuries. For Lee, this is because '[t]he labor law and the legal contract have given migrant industrial workers crucial institutional leverage in their contests with employers about violations of labor rights' (p.191). That is to say, *nongmingong*'s protest is first and foremost shaped by the legal-institutional system and better conceived as legal mobilization for full citizenship, or 'rightful resistance' (O'Brien and Li 2006; O'Brien 2013), rather than class struggle.

While worker activism in China has yet to present a serious threat to destabilise the regime, levels of insurgency are high and have been increasing over the past decades. *Nongmingong* are emboldened too and become more experienced in taking radical actions, in both covert and incredibly overt ways (Chan 2001; Pun 2005). These cellular and sporadic protests did engender a response from the state, mainly the trade union and legislation, and from the civil society.

China's trade union, the hierarchical national organization of the ACFTU, has long been derided as a corporatist yellow union (Chan, 1993). For Chen (2003, 2010), the union is caught between the state and the market and assumes a double institutional identity as both a state apparatus and a labour organization. For this reason, he argued that an industrial conflict solution in China is actually a quadripartite process, involving the government, employers, trade union and workers. In this process, the union derived its power from the government whose priority was to control labour unrest and prevent its escalation and played more of a mediating role according to only general and vague rules. This in turn helped enhanced its role in relation to employers and allowed them to lean toward the workers' demands when possible. However, he warned that this is far from the rise of associational power or independent representation of workers.

Friedman and Lee (2010) disagreed with Chen's double identity theory. They argued that unions are better understood as government agencies, for they seek not to reorganize power relations from below, but to legislate and administrate from above.

Notwithstanding this disagreement, they agreed with Chan's observation that union activities had contributed to the state's efforts at individualizing and institutionalizing labour conflict resolution through non-judicial means like arbitration. For Friedman (2014), it is this self-imposed political constraint that has trapped the central state, leading to the failure of its effort to promote class compromise through ACFTU. For Friedman and Kuruvilla (2015), this institutional straitjacket has posed great constraints on the state's recent move to reform labour relations in response to growing labour unrest and an unstable labour market that has impeded economic development.

Apart from the union, the state has also resorted to legal means to channel *individual* worker grievance and formalise and restructure labour relations to reduce social conflict, address growing economic inequality and prepare for the transition from unregulated capitalism to a Fordist model of high consumption (Friedman and Lee 2010; Hui and Chan 2014; Friedman and Kuruvilla 2015). This legislative process, as shown by scholars, is a power-laden process involving mainly foreign chambers of commerce and government agencies. Friedman and Lee (2010) told a story of labour-protective clauses watered down by employer lobbying of EU and US chambers of commerce. Hui and Chan (2014) documented local labour legislation contested by Hong Kong chambers of commerce in Shenzhen and Guangdong. They observed that two factors determined this process: the position in global production chains of the firms they represent; and the relevant industrial relations model. Chan (2011) and Gallagher et al. (2014), on the other hand, focused on the effects of legislation. Whereas Chan was optimistic about the long-term effects of labour law in setting the patterns of industrial relations, Gallagher et al. showed that the 2008 labour contract law and its enforcement had variably influenced workers' propensity to have a contract, awareness of law content and likelihood of initiating dispute, according to education level.

Li C (2015) divided labour NGOs into three categories: service-oriented; rights-protection oriented; and activism-oriented. As regards the role of labour NGOs in state-labour relations, the consensus is that although they have contributed to the state's legal project to automate labour grievances and shepherd it to arbitration, they nevertheless faced constant harassment and surveillance by the state and were limited in scope of action. To understand NGOs' changing space of agency, Howell

and Pringle (2019) developed the conceptual tool of ‘shades of authoritarianism’ by which they defined ideal types of approaches of authoritarian governments to state-labour relations. The ‘shade’, according to them, is blurred at the edges and operates within ‘a broader political-economic environment shaped by globalization, development strategy and leadership approach and motivated by the need for regime stability and sustaining stable capitalist development’ (p.240). Four ‘shades’ that they identified in China include: exploitative; protective; open and encapsulating – each having distinctive impacts on the role that labour NGOs can play in state-labour relations.

2.3.2 The class formation approach

The class formation approach employs a bottom-up perspective. Theoretically, it is inspired by Marxist class theorists and historians like Dahrendorf (1959), Thompson (1980) and Katznelson and Zolberg (1986). For them, as for Marx, class is a relational concept and distinguishes between class-in-itself and class-for-itself. Working class is defined in a shared relationship to the means of production and in its antagonistic relationship with other classes that own, manage and control capital accumulation and profit maximization. Class formation entails the transition from class-in-itself to class-for-itself.

Katznelson and Zolberg (1986) advanced a four-element framework to analyse class formation: class as structure of capitalist economic development; class as ways of life defined as social organization of society lived by actual people in real social formations both at and off work (p.15); class as shared dispositions, as ‘cognitive constructs map the terrain of lived experience and define the boundaries between the probable and improbable’ (p.17); and class as collective action – self-conscious action and organisation through movements and organisations to the position of the class within the society. Guided by this framework, scholars have explored all four interconnected layers.

Concerning the first, the focus is on how the dynamics of history, the state, the market and globalization in China put *nongmingong* into what ‘objective position’. For these scholars, China’s reform is a state-led process of radical marketisation, commodification and privatisation in order to incorporate its previous socialist system into the global economy. For *nongmingong*, this means proletarianization.

They are deprived of means of production and subsistence and turned from land-owning peasants into industrial workers. A shared process among working classes of the world, the Chinese case is peculiar as industrialization and urbanization are highly disconnected. Because of the market mechanism as much as the legal-institutional systems – particularly *hukou* – that continue to deepen the rural-urban chasm, *nongmingong* are never granted the legal and social right to reside in the city. The state retreats from social reproduction and protection, delegating it to unregulated capital. *Nongmingong* are hence trapped in a liminal status of ‘unfinished proletarianization’ (Chan et al. 2010; Pun and Lu 2010).

The second and third levels are often examined interrelatedly. A key analytical tool is ‘factory regime’ developed by Marxist sociologist Michael Burawoy. Unsatisfied by Braverman’s (1974) singular focus on the ‘objective’ side of the labour process, Burawoy held that the essence of the labour process was the simultaneous securing and obscuring of surplus labour, and any process as such had an objective and a subjective side. With the notion factory regime, he aimed to bring workers’ subjectivity back in to capture ‘the overall politics form of production, including both the political effects of the labour process and the political apparatuses of production’ (Burawoy, 1979, p.15).

Inspired by this notion, Lee (1998) compared two factories in Hong Kong and Shenzhen. She was intrigued by how labour control over women workers was accomplished differently when managerial structure and relationship to the state were similar. Problematizing Burawoy’s class-first construct with feminist theories, she proposed a theory of gendered politics of production and argued that gender was crucial in shaping workers’ condition of dependence. Whereas in Hong Kong, ‘matron workers’ prioritised family over factory jobs and wages, in Shenzhen, ‘maiden workers’ travelled far and competed with many others precisely to pursue higher wages. Consequently, whereas matron workers participated in a management system of familial hegemony, maiden workers confronted an internal power structure of localistic despotism where the crux was regional politics and kin connections.

Lee (1999) turned to reforming SOEs and argued that the neo-traditional organized dependence¹⁷ observed by Walder (1986) had disappeared. The newly-gained autonomy of the enterprise led to unfettered disorganized managerial despotism for the state failed to provide viable alternatives that undermined workers' bargaining power. Similar market despotism was found by Peng (2007) in a handbag company in the PRD where most workers were *nongmingong*. Writing at a time when labour relations were more volatile than ever before, Chan (2010) suggested that while despotism still characterised Chinese factories, 'contested despotism' better captured the reality. Smith and Pun (2006) and Pun and Smith (2007) focused on the linkage between the production and reproduction of labour power. They argued that what they call the 'dormitory labour regime' represents a powerful labour management regime, for the provision of a dormitory facilitates continuous access to fresh labour reserves from the countryside, and discourages wage demands and collective organization in a confined, highly-disciplined space.

Zhou (2007) and Pun and Lu (2010) focused on the construction industry, where they found a hierarchical labour subcontracting system¹⁸. Regarding the labour regime, they observed a 'relation (*guanxi*)-based hegemony' in which *guanxi* (relatives/co-villagers) were mobilised by subcontractors to inspire loyalty, impose control and discourage resistance. But this was effective only when wages were paid. In the garment industry, a similar subcontracting system and *guanxi*-based hegemony existed that facilitated 'games of making out' or 'the boss game' (Huang 2012; Zheng et al. 2015).

Concerned with female domestic workers, Yan (2008) compared the structural and ideological conditions that en-/dis-able their workplace autonomy in pre-/post-reform eras. She argued that a crucial enabling condition for this autonomy in the pre-reform era was the valorisation of rurality by Maoist egalitarianism. After Mao, urban monopoly of modernity created a crisis of subjectivity for migrant domestic helpers and subjected them to both wage-labour and the gaze of supposedly more

¹⁷ To put it simply, in a neo-traditional regime, the state is the monopolistic redistributor who provides employment security, adequate material support and superior political and social status for factory workers in exchange for their political allegiance. This is characteristic of Maoist Chinese factories.

¹⁸ According to Pun and Lu (2010), this subcontracting system usually starts with a well-known real estate developer responsible for land reclamation and project design. Under them is usually a state-owned construction company that is responsible for project management, and equipment contractors, who in turn subcontract to several big contractors and then small contractors responsible for supplying labour. At the bottom of this subcontracting hierarchy is labour-use facilitators, usually someone from the countryside who would recruit their co-villagers or relatives to work.

modern, high *suzhi* urban employers whilst working. Recently, Fu et al. (2018) argued that the unholy marriage of the ‘citizenry discounting’ engendered especially by *hukou*, and the entrenched and pervasive gendered familialism were consequential to their wellbeing and dignity in work.

Until recently, this line of inquiry continues. New forms of labour organization and domination and new dimensions of worker subjectivity across different industries have been unveiled, with the empirical focus extended from full-time factory workers of Han nationality to student interns from vocational schools (Su 2011; Lu et al. 2019), dispatch workers (Feng 2019a, 2019b), workers of ethnic minorities, especially the Yi minorities (Liu 2016; Ma 2019), and from mechanisms of the labour market to that of reproduction of labour power (Woronov 2016; Pun and Koo 2018).

Regarding class action and collective struggle, scholars have examined the forces turning workers into class-aware actors, forging solidarity and activating the formation of class. Pun and Lu (2010) mapped second-generation *nongmingong*’s structure of feeling under ‘unfinished proletarianization’. Drawing on workers’ narrative and ethnographic studies in Guangdong from 2005 to 2008, they argued that trapped in the vicious circle of the rural-urban dichotomy and the relentless exploitation of capitalist production, the *nongmingong* experience yields anger, trauma, and a profound sense of unfairness and hopelessness. Without retreat, and without effective means to air and solve their grievances and problems, they are caught in a politics of resentment, awoken from illusions with the state, and gradually becoming aware of its class position, participating in a series of collective actions.

Specifically, Chan and Pun (2009) traced the impact of labour regimes on collective actions, based on a range of labour protests they observed between 2004 and 2007 in the PRD area. They argued that these protests were mostly interest-based, accompanied by a strong anti-capital sentiment and a discourse of workers’ rights. Meanwhile, the dormitory labour regime is instrumental in forging solidarity on the basis of locality, ethnicity, gender and peer alliance, both in a single workplace and in cross-factory strike tactics.

Focusing on workers' associational power per se, Leung and Pun (2009) discussed mechanisms of mobilization and the role of the state in resistance, based on the observation of the collective action of a group of silicosis-afflicted gemstone factory workers. They argued that capitalist exploitation and state inaction transformed workers' class consciousness and dictated collective action. Strategies involved in the struggle were not limited to legal stipulations, but negotiations, filing compensation claims, picketing, staging demonstrations, road-blocking and cooperating with the media and NGOs. Out of these struggles, a shared class identity as *nongmingong* and occupational disease victims was reaffirmed. Although employment-based internal divisions existed, overall cross-factory alliances were forged and actions taken, foretelling a gradual class formation.

Chan (2009, 2010), on the other hand, explored the role of place-of-origin based networks. A long-time observer of working-class struggles in China, he argued that while previously the place-of-origin based worker-gangster networks had divided and pacified workers, their role underwent a dramatic change to become a source of associational power during strikes. Li (2006) complicated this argument by stressing the divisive effect of managerial practices. Wang (2015) argued that, original-place-based network aside, *nongmingong*'s everyday lives also had political and ideological effects, which in turn influenced workers' associational power, for example, life history, lifestyle, social network, vision, and the use of the internet.

A trade union is traditionally a class organisation that facilitates and fosters collective bargaining and class consciousness. But in China, its role is highly compromised, not least because of the 'socialist legacy' of the state-led union (Chan 2010). Nevertheless, *nongmingong*'s awareness of the trade union as a channel for articulating class interests is increasing, as manifested in the growing demand for independent unions (Chan 2019). Recently, the state has stepped in to promote collective bargaining. Overall, driven by surging labour unrest, collective negotiation in China has undergone a transition from 'collective consultation as a formality', through 'collective bargaining by riot', and towards 'party-state-led collective bargaining' (Chan and Hui, 2014).

In contemplating an alternative for *nongmingong*, they considered not only space of agency in terms of collective action, but also social economy. In this regard, Gu et al. (2014) edited a volume in which contributors discussed the challenges faced by the

only living People's Commune and collective economy in Zhoujia and Yakou villages. They also analysed existing experiments of social economy in China, figuring out how they practiced rules of fair trade, non-exploitative production and community-centeredness.

2.3.3 Debating workplace conflicts: rightful resistance of the precariat or class struggle?

The two approaches discussed above do not contradict. Both see *nongmingong* as forced workers under the dual repression of the state and the market. However, the two radically diverge in their assessment of the nature of *nongmingong*'s struggles and resistance. Do the surging worker militancy and favourable policies suggest rising class consciousness and worker empowerment? Or are *nongmingong* actually confronting new global tendency of precarisation?

Lee (2016) is pessimistic, disaggregating the empowerment thesis into four points: 1) increase in mobilization and activism; 2) growing class awareness as a trait of the second-generation, for they were ICTs-savvy and felt a stronger sense of anger, pain, and exclusion at the point of production; 3) a maturation and radicalization of labour activism from defensive, mere economic, legalistic and right-based to offensive, political, interest-based and transgressive; and 4) promulgation of favourable policies are taken to be products of worker struggle and signs of empowerment.

Lee refuted this optimism as not sufficiently evidence-based and subjectivist. She began by pointing out recent institutional changes in China's 'authoritarian precarisation' that weakened working-class power against state-capital alliance – for example, opportunistic instrumental use of the law by the state to fulfil its economic and political priorities, employer activism, the marketization of land use rights, long-term leasing of collective land to agribusiness corporations since the 1990s, and more recently the ambitious state-led project of 'National New Type Urbanisation Plan' that aimed to transfer *nongmingong* into consumers. Against this backdrop, Lee argued that compared to the 1990s, strikes at the recent stage dropped in number, and that the second-generation stand out not in terms of legal knowledge, but in consumption patterns. Citing Zhang (2015), Lee pointed out that the causal connections made between social media use and effective mobilization were more assumed than demonstrated. Higher wages should not be understood as a state

concession, but because they fitted in well with the state's strategy to rebalance the economy to a consumer-driven one. Her fourth argument stated that qualitative changes in class capacity and consciousness observed by the optimists are based on sensational moments of mobilization without recognizing reversals in union representations that followed. All these led her to conclude that informality continued to characterise *nongmingong*'s lives, that there was little attenuation in their structural subordination, and that little evidence supported significant changes in mobilization pattern, organizing capacity and formation of class subjectivities.

This rather pessimistic diagnosis about the character of radicalism among second-generation migrant workers sparked a defence from the optimist camp. Smith and Pun (2018)¹⁹ contended that Lee's work adopted the problematic concept of precarity that defines class through employment situation. They agreed with her observation of legislation and *de facto* land ownership but disagreed with her analysis that such changes necessarily disrupt or reverse class formation. For them, these are the latest trend in 'unfinished proletarianization'. Instead of unmaking class solidarity, these changes accelerate the proletarianization of *nongmingong*, further blocking their route to economic security back home, putting them in an even more precarious situation, and helping to ignite in them a deeper sense of anger, dissatisfaction and indignity. Thus, they reaffirmed their optimistic stance toward the forging of a class force at the national level (Pun 2019).

2.3.4 Working-class culture

If production and collective action have interested labour sociologists, inspired by cultural Marxism (Williams 1973, 1977; Hall, 1986, 1997, 2000; Paul and du Gay 1996; Spivak, 1988), critical media scholars have joined the debate with a focus on culture as a relatively autonomous realm in which class relations are lived, class domination played out, class identity contested, class struggle fought, and the possibility for a collective political consciousness emerged.

Zhao and Wu (2014) wrote about the political economy of China's television drama industry. They argued that the ideological orientation of propaganda organs, the constantly changing censorship of the government, the profit-seeking capital, and the agency of television drama producers and targeted audiences together constitute a

¹⁹ See also Chan (2012) for a similar critique of Lee's generalisation of workers' protests with the notion of citizenship.

dynamic, highly complex and multi-dimensional popular television culture, making television drama one of the most developed subcategories of the media industry and the most contested spaces of meaning production. They claim that the television drama industry actively participated in the evolution and re-composition of class relations in China, demonstrating a neoliberal orientation that favours middle-class culture, making the question of who constitutes the ‘mass majority’ and represents the ‘advanced socialist culture’ an urgent question to be answered.

Others have focused on the text, digging deep into its discursive structure. Inspired mainly by Hall’s work on representation (1997), Li (2006), Huang (2017) and Zhang (2014) have respectively considered the representation of *nongmingong* in market media, state media and popular cultural texts. According to them, between the 1980s and 1990s, *nongmingong* were addressed in official and mainstream discourses as *mangliu* (blind flow). Historically, this pejorative term had portrayed them as a rapacious and irrational crowd, as troublemakers, invaders and a source of potential crisis to the more civilized and orderly urban society. In the late 1990s, advanced by some liberal-minded non-fiction writers, *mingong chao* emerged as an alternative to *mangliu*. By comparing it either with the US Westward Movement, or the Down to the Countryside Movement in socialist China, or the then-craze among Chinese university students to study abroad, these authors described *mingong chao* as a historically progressive force, signalling the departure from a primitive, agriculture-dominated mode of production and the pursuit of modernity. In TV plays, a parallel discourse of *wailaimi* could be found. Like *mingong chao*, it suggested progress, for she was brave and heroic enough to transcend moral and social prejudices in backward rural areas and achieved individual success through individual efforts in civilized urban areas. In official discourses, images associated with the term at this stage were ‘symbol of modernity’, ‘agents of economic and social transformation’ and ‘creators of their own life’ on the one hand, and ‘disadvantaged group’, ‘low *sushi* (quality)’ and ‘waiting to be saved’ on the other. Popular urban media generally resonates with this. Diverse as it might seem, as these authors argue, most are based on a teleological view of history and fail to recognize *nongmingong* as self-determining and self-transforming agents.

Zhang (2012) and Sun (2008, 2014a) turned the spotlight on *nongmingong* themselves. Zhang analysed media production by a group of *nongmingong* of Miao

ethnic minorities from Guizhou, China, and how these were circulated and consumed among themselves. This allowed her to contemplate the relations between grassroots media production, identity construction and social transition. Sun (2008), on the other hand, zeroed in to the living room of urban homes where female domestic helpers worked. She was intrigued by the growing popularity of maid stories and wondered how the differentiated capacity to resonate and identify with the characters among ‘maid’ and ‘master’ viewers contribute to the cultural politics of class and gender in the post-Mao era (Sun 2014). In that book, she explored how two sets of controlling gazes – every day and televisual – reinforce and justify each other. Her more recent book brought her out of the living room to the labour NGOs. There she met and talked to NGO leaders and their active *nongmingong* followers. Based on this fieldwork, in *Subaltern China*, she examined *nongmingong*’s cultural practices, both production and consumption, in their intricate relationship with the voices of cultural elites and with the mainstream culture shaped by the joint hand of the state and the market, bringing the hegemonic and the marginal into confrontation, putting cultural forms back into the historical experiences from which they emerged.

Sun (2014b) and Yin (2018), on the other hand, have evaluated labour cultural activism and its effects. Sun traced the emergence of *dagong* literature in Guangdong. She argued that these hitherto unavailable cultural spaces provided female *nongmingong* with alternative views on everyday situations and morality, allowing them to counter the hegemonic portrayal of their sexuality as inexperience, vulnerability, criminality, immorality and incivility. Yin looked at two types of ICTs-enabled worker media. Drawing on interviews with editors and authors, she analysed processes of production and distribution and the content published. Yin argued that while communal support could mobilize *nongmingong* to participate in alternative media production for social inclusion and equality, such transformative potential should be contextualised rather than inferred.

2.4 *Nongmingong* and the digital transformation of the Chinese economy

So far, my discussion has been limited to research in a factory setting, and most of them do not consider the impact of economic digitalisation on *nongmingong*. This is because most of them are done in between 1990s and 2000s, a time when although many workers began to use mobile phones, but generally belonged to what Qiu (2009) called low-end working-class ICTs, for example, little smart (Qiu 2007),

internet café (Ding 2009) etc. It is not until the recent decade, with the spread of network infrastructure, the reform of the telecommunications industry and consequent decline in tariffs, the rise of domestic smart phones manufacturing industry, and the acceleration of network convergence, that *nongmingong*'s access to the internet at low price in their chosen time and place become commonplace. The state-led, market-driven digital transformation of the economy further propelled the penetration of ICTs in *nongmingong*'s life, mediating not only the realm of consumption and reproduction, but also that of production.

In response, scholars holding the liberal leaning view of Chinese modernity have produced insightful analysis. For example, Wang (2016) examined how social media and *nongmingong* mutually shape each other. For her, *nongmingong* are 'a relatively digital have-less population, still in the process of becoming modern' (p.187), and social media development in China is pushed by 'a very deliberate policy of the party-state, carried forward by a vast domestic market demand and accelerated by the booming growth of smartphones' (p.56). Based on the rich ethnographic data collected during 15- month fieldwork in an industrial town near Shanghai, Wang presented a brilliant analysis of how *nongmingong* use social media in daily life to navigate relationships, discuss politics and gender and practice religion and modern life, and how they make sense of these practices, drawing on their cultural resources and lived experiences.

Research based on the left-leaning view can also be found. Qiu (2009) is a pioneering work in the regard. It draws intensively on Castells' network society theory (1996, 2010) which holds that ICTs have given rise to a society where key social structures and activities are organised around electronically processed information networks. Qiu contended that China had undergone a similar fundamental shift in social organisation. This had led him to redefine the notion of class by theorising ICTs as a new dimension of social stratification. Rather than the shared position within relations of production, for Qiu class is defined by 'shared techno-social positioning in the marketplace of ICTs' (p.8). This allowed him to announce the death of the 'old industrial proletariat' and the rise of a 'new Chinese working-class' (p.15), consisting of 'low-end ICT users, service providers, and labourers who are manufacturing these electronics' who, 'compared to the upper classes, have limited income and influence in policy processes, although they have

begun to go online and use wireless phones' (p.4), within the 'new techno-social emergence' (p.12) generated by working-class ICTs²⁰.

It is through this new way of seeing that Qiu came to study *nongmingong* as a subgroup of the new working-class. In *Working-class Network Society* (2009), his focus was on the question of class formation, which he defined primarily in Marxist terms as the transition from class-in-itself to class-for-itself, that is, the process wherein people of a class become aware of their shared class position and interest. Building on this theoretical edifice, based on the rich empirical evidence he collected across different provinces in China in the 2000s, Qiu examined the 'organizational, cultural, and political processes that produce collective identity, class consciousness, solidarity, and empowerment' (p.12).

More recently, Qiu boldly announced 'a fourth phase in the making of the Chinese working class' (2018, p.5), a phase that is distinctive because of the all-encompassing centrality of ICTs-enabled networks in social organisation. For him, this calls for a new framework to study class formation. Drawing on recent debates on ICTs and labour, he argued that existing attempts, like theories of audience labour, (im-)material labour, affective/emotional labour, free labour and 'playbour', were insightful but scattered. In arguing for a new model to understand class formation, Qiu linked all these concepts in a 'circuit of labour' model, consisting of a formal circuit where the body and capital form a class-based hierarchy of constraint and an informal circuit where networked labour draws on internal resources and self-made networks to develop new avenues for pleasure, survival and resistance.

If for Qiu the composition of the working-class and the external conditions of class formation have undergone a radical shift because of ICTs, for neo-Marxists, mainly in labour sociology and communication studies, capitalism continues to define social relations in the now ICTs-saturated world, and the notion of class defined by shared relative position in relations of production is still relevant. Under this framework, they continue to debate questions of capital structure, forms of production, labour control, workers' experience and forms of and potentials for class action.

²⁰ In working-class ICTs Qiu defined a growing category of low-end ICTs products and services.

Focusing on labour control, Liang (2017) and Wu and Li (2018) argue that labour control under platform is multiplied, but disagree about whether the labour control is based on workers' consent (Burawoy 1975). Both Liang (2017) and Wu and Li (2018) identified three levels of labour control, namely, surveillance by platform owners or delegators, control through payment system or incentive schemes and that through customers. For them, these mechanisms generated a mixed sense of active identification and passive acceptance among the workers. In this sense, labour control in platforms is based on consent. By contrast, Liang (2017) and Sun (2019) do not observe consent in this process. Liang (2017) identifies a similar three-level control, but understood it within the context of the asset-light business model common among platforms, which allows it to sustain what she called "weak contract". With her domestic workers, she finds that they actually actively resist this control, either by "voting with feet" or reversing the control of their clients by building emotion links with them. Similarly, Sun (2019) focuses on algorithm, and investigates how food delivery workers experience algorithm as a mechanism of labour control and how they create labour algorithm to negotiate control.

Chen (2017; 2018) also looks at the platformisation of service jobs on Didi, China's leading e-hailing app, and the unfolding new grounds for digital labour activism. Her work distinguished from others' in that she did not take the development of Didi as granted but documented how its technological power took shape by reinforcing inequalities facing informally employed taxi drivers at the early stage of its development. Earlier this year, Chen, Sun and Qiu (2020) provide a worker-centred overview on this theme. Focusing on ride-hailing and food-delivery, drawing on a national survey and a systematically reviewed local and national government policies and regulations, their findings suggest that young, migrant, and informal workers dominate the platform-mediated on-demand service industries in China; that platform workers face intersectional labour control from algorithms designed and used by the digital platforms – the so-called "invisible boss", as well as traditional human managers and a rapid expansion of third-party labour agency; and that workers engage in an array of formal and informal organizations to survive and thrive in the platform economy, ranging from forming social media support groups to exchange mundane tactics, to organizing collective actions like protests and strikes.

Platform work aside, scholars have also noted developments in the manufacturing sector amid the recent digital transformation of the economy that have an implication on *nongmingong*, that is, the introduction of lean production and *jiqihuanren*, to replace human workers with machines. In this regard, important critical insights into the state's 'intelligent manufacturing' initiative – of which the *jiqihuanren* programme is an ambitious part – concerning its sectoral deployment and progress, and the disempowering influence on *nongmingong* have been generated (Zhang L 2008, 2015; Butollo 2014; Butollo and Lüthje 2017; Huang and Sharif 2017; Huang and Sharif 2019). For one thing, although vigorously supported by the state and the neoliberal ideology of innovation, automation for individual capitalists was only one way to survive global economic volatility, and the decision to automate was contingent on a range of other factors (Sharif and Huang 2018). In Dongguan, three years after the policy was introduced, only 2,303 out of the over 80,000 manufacturers received government funding. Even Sharif and Huang (2018, p.72) admitted that “by far, despite the high work replacement rate we recorded in our study, robotization might still seem a lesser evil than factory shutdown and relocation to Southeast Asia”. More recently, Xu and Ye (2020) offered a microsociology of changes in labour control after automation. Based on their fieldwork in three factories, they argue that as the result of automation, workers now face more informal labour relations, while technological control is reinforced as the task is now further deskilled.

2.5 Research question

So far, I have discussed three strands of research about *nongmingong* in Chinese sociology before the recent digital transformation of the Chinese economy. I provide an account of their burning questions, concerns, as well as the historical and institutional roots of the *nongmingong* phenomenon these approaches are based and how this relates to different views about Chinese modernity. With this discussion, I point that in this project I follow the left-leaning tradition, given my concern with workers' own point of view, my commitment to studying the inequalities they face in its own right and my interest in an alternative for the workers. I then discuss labour research after the digital transformation, which I argue continues to revolve around questions of structures of capitalist domination and workers' subjective

experience of domination, resistance and struggle. My project joins this collective effort. Employing a worker-centred perspective, I contend that current debate can be advanced by addressing the following four points.

First, most existing research has centred on platform jobs as *the* archetypical ICTs-enabled arrangement of production. This is well-founded, for in China, the platform economy represents a strategic move by the state to restructure old industries, spur economic growth and create jobs, and its development is propelled by the joint force of the state and the capital. It is gaining momentum and will continue to do so in the future. But a worker-centric perspective would prompt us to ask and explore also other ICTs-enabled arrangements of production. In their real life, *nongmingong* actually participate in all kinds of ICTs-enabled jobs that do not fall into the umbrella category of platform work, for example, *weishang*, livestreaming and as I will elaborate in chapter 4, *rijie*. besides, most of them actually do more than one job at a time, and platform jobs are actually sidelines for them.

Second, a key debate in the field is to understand the changing nature of labour control in platform work. So far, scholars have focused on new forms of *employment* in platform enterprises and new ICTs-enabled managerial practices in the labour process. But as Burawoy demonstrated, labour control and the politics of production was actually enabled and bore intricate connections with the production regime as a whole. A holistic perspective is lack, and an analysis of how ICTs are integrated into the new production regime and generate new forms of labour control is needed.

The third point concerned their subjective experience of production. Again, studies so far have centred disproportionately around platform sectors, which ignores the diversity of their mediated work practices, for example, multi-jobbing. Besides, in their actual analysis, the approach is worker-centred, but the drivers are defined more often as employees in terms of employment precarity and market status, than as workers in terms of the position within capitalist relations of production. This leaves important questions like who platform workers are, why they choose to work with platforms in the first place, and how their class, gender and generational identities, digital literacy and life/work history relates to their experience of production - including that in the immediate labour process and that of domination, struggle and resistance - unanswered.

Finally, so far, we know little about *nongmingong*'s everyday life experience outside production under the changing labourscape, especially how it relates to their experience of production and what are the new possibilities of political consciousness, contentious politics and the transformation of labour-capital relations emerging.

Based on the discussion so far, this thesis captures the transitional moment of the digital transformation of the economy and asks how *nongmingong* as China's new working-class actually experience this transition. Specifically, what are the new mediated arrangements of production emerging? How do *nongmingong* experience these new arrangements? What kind of actual and social practices exist around them? Whether, to what extent and how do these new mediated arrangements of production represent for them opportunities or challenges?

2.6 ICTs-mediated politics of production: a theoretical framework

In the discussion of existing literature so far, I referred to many concepts - labour process, production regime, the politics of production, consent, mediation, among other, but did not unpack them. In what follows, I will explain each of these concepts in order to piece together a useful framework to answer the research questions above.

2.6.1 Factory regimes and the politics of production

First proposed by sociological Marxist Michael Burawoy, the central tenet of the framework of labour regimes and the politics of production is to bring worker subjectivity back into the analysis of capitalist control in the context of the labour process. It is based on a critique of Braverman's seminal work in the labour process debate, *Labour and Monopoly Capital* (1974).

A powerful indictment of managerialism and Taylorism, in his book Braverman sought to unravel the nature and mechanisms of capitalist control by delving into the labour process. Indebted to Marx, for Braverman the relations of production distinguishes capitalism. Under capitalist relations of production, the labour process is distinctive in the sense that workers as direct producers sell labour power to capitalists, that is, the capacity to labour, rather than labour as crystallized in use/exchange values thus produced. The defining problem of the capitalist labour

process is then to translate the former into the latter. It is through this lens that Braverman explains the general decline of skilled labour under monopoly capitalism: for him, the secret lies in managerial strategies to expropriate skills and knowledge from workers and reserve it with themselves, that is, the separation of conception and execution. Workers were thus alienated from their productive activities.

For Burawoy, this exclusive focus on the objective side of the labour process reduces the managerial problem of control to that of the alienation of the labour process from the labourer through confiscation of mental labour, for it makes unwarranted assumptions about the interests of both managers and workers. Following Gramsci, Poulantzas and Althusser, building on Braverman's distinction between labour power and labour actualised, Burawoy argued the essence of the capitalist labour process was to simultaneously obscure and secure surplus labour, and an analysis of the dynamics as such needs to bear workers' and managers' subjectivities in mind.

Specifically, for Burawoy, any labour process involves an economic dimension (the production of things), a political dimension (the production of social relations) and an ideological dimension (the production of an experience of those relations).

Capital's intention to control and workers' condition of dependence depends on and takes form in relations *in* production, that is, relations on the shop floor into which workers enter, both with one another and with the management. In this light, we cannot begin to fully understand the capitalist labour process without examining in detail workers' lived experience of relations in production, a process in which they articulate their interest by subscribing to or rejecting certain ideologies.

As such, Burawoy inserts his microsociology of workplace politics into the labour process debate. In *Manufacturing Consent*, based on a 10-month stint in a Chicago factory, he showed in painstaking detail how institutions of collective bargaining, grievance machinery, internal labour market and the 'internal state' (regulating apparatus) materialized a power balance in production by affording workers a space of self-activity, setting constraints on worker struggle while reining in the management from authoritarian impulses, thus giving rise to a game of 'making out' where workers and managers cooperated to pursue capitalist profit (Burawoy 1979).

This microsociology, as Burawoy (2008) himself reflected later, presumes an unjustifiable focus the factory, irrespective of the external forces engulfing

production. Precisely for this reason, upon its publication *Manufacturing Consent* was criticized for describing industrialism, not capitalism. This drew Burawoy's attention to the 'actually existing socialism' in the East Bloc. Instead of unfairly dismissing it as state capitalism and simply attacking it for its brutality and inefficiency, he found it productive to compare the relations between ideal types and realities in the two worlds. In *The Politics of Production*, he compared factories in England, America, the Soviet Union, Hungary, Zambia and South Africa, each representing a distinctive stage or variant of capitalism and socialism (Burawoy 1985). He found that, whereas these factories shared the same array of drills, mills and lathes, powered by the same barbarous relic of the assembly line and operated with similar payment systems, the ways in which consent and coercion were organised and the dynamics of class struggle were nevertheless different – this could be explained by a constellation of determinants of factory regime, including labour processes, enterprise relations to state and market, the mode of reproduction of labour power, and wider political economic forces of an international character.

This dialectical approach brings workers back in, pushing the Marxist framework as far as it can go. But Ching Kwan Lee, Burawoy's feminist student, still found this problematic, for she was confounded during her fieldwork by how similar state-enterprise relations and technological and organisational settings in two factories in Hong Kong and Shenzhen could generate vastly different modes of control and distinct workplace cultures. A relevant anomaly identified by Lee was gender. She challenged Burawoy's class-primacy formulation by arguing that gender was also constitutive of workers' conditions of dependence, and it was the intersection of class, gender and other factors that best explained the dynamics at the point of production. In *Gender and the South China Miracle* (Lee 1998), she proposed a feminist politics of production by synthesising Burawoy's framework with Scott's (1988) tripartite conception of gendered control and resistance: gender symbolism and ideology, gender organization, and gender identity.²¹

Except for Lee and other feminist interventions (Milkman 1987; Salzinger 2003), other scholars have examined the politics of production in various political-

²¹ According to Scott, gender is an organizing principle of the labour process; gender as a power process is also latent in common-sense notions about who women workers are and what they need, in the workshop and in extra-shop floor social institutions of reproduction (labour market, family, kinship and the state). Finally, women and men are active agents; their actual lived experiences diverge from each other and from the hegemonic constructions of femininity and masculinity.

economic and socio-cultural contexts, including socialist Cuba (Fuller 1992), Taiwan amid international industrial transfer (Shieh 1992), China in the heyday of the export-oriented, labour-intensive growth regime (Lee 1998), Hungary (Burawoy and Lukacs 1992) and East Germany (Fuller 1999) in capitalist transition, and South Africa under Apartheid (Von Holdt 2003; Webster and Von Holdt 2005). Beyond the manufacturing sector, Hoshschild (1979) highlighted the extraction of emotional labour in the service sector labour process. Leidner (1993) brought us the McDonalds and spatially-dispersed workspace of insurance salespeople and pursued a Bravermanian project to dissect how service jobs were organized and routinised.

2.6.2 Technology and the politics of production

While these developments enrich our understanding of capitalist control at the point of production across various national, historical and sectoral contexts, curiously, the role of technology, also central to the debate, has been relatively ignored.²² In Braverman and Burawoy's debate, this concerned the relations between technology and the historical evolution of the labour process, or more specifically, between Taylorism, scientific-technical revolution and America's post-war transition from competitive to monopoly capitalism.

Taylorism denotes principles of scientific management, which according to Braverman (1974, p.119), comprises the gathering and development of knowledge about the labour process, the concentration of such knowledge as the exclusive province of the management, and the manipulation of it to control workers' execution of tasks. For him, Taylorism was inherent in the management consciousness, and its domination in the US industrial scene owed to ecological factors, particularly the growing size of the enterprise. The scientific-technical revolution, on the other hand, was the product of capitalistic competition to increase productivity through mechanization. The design of new machines was invested and carried out by managers and engineers, drawing on their exclusive knowledge of the labour process, to enable the further breakdown of the manufacturing process among cheapest operators, or to 'proletarianise labour' (Mandel 1980, p.28). In this link, the historical evolution of the labour process was marked by the ever-increasing

²² The questions of to what extent and in what ways a society's technology determines political, social, economic, and cultural forms are always highly contested, especially among Marxists. See Mandel (1975, 1980) for the relationship between 'long-waves' of capitalism and technological revolution, and Roe Smith and Marx (1994) on technological determinism.

efficiency and the incremental separation between conception and execution as the means of control, which in turn contributes to the monopolization of American capitalism.

For Burawoy, this was unconvincing, for workers' attempts to sabotage Taylorism were missing from the picture. Highlighting workers' class subjectivity, he saw Taylorism as at once a dominant managerial practice and an ideology. Unlike Braverman's identification of Taylorism with top-down separation of conception and execution, he observed under Taylorism a separation of workers' and managers' conception: workers were never docile victims of managerial conception, but actively recreated theirs to make factory work more endurable. He pointed out that historically, Taylorism at its nascent stage fostered antagonism and struggles between labour (organised as burgeoning trade unionism) and capital by marshalling them into hostile camps. It was not, as Braverman assumed, in the managers' interest to push it thoroughly. Rather, the dynamics between labour and capital set limits on the separation of conception and execution, and technological advancement must be seen as managers' response to increasing labour costs, but also workers' increasing power and struggle emanating from their lived experience of production that is also determinative – rather than derivative – to capitalism.

Furthermore, Burawoy argued that the rise of Taylorism could not be satisfyingly explained by the growing enterprise size, for it could not be widely adopted until enterprises were large enough to support it, and that the argument was based on unjustified assumptions about the interests of and collusions between managers and capitalists, and their unchallenged ability to impose it on workers. For him, what was really widely accepted by managers and society was the social philosophy of scientism underlying Taylorism. He observed that in post-war Western societies, as the previous free and equal market mechanism increasingly failed in mediating class relations, the state stepped in and assumed a larger role in regulation. In the US, Taylorism was promoted by the state as an ideological attack on trade unionism, as it stressed conformity to the management for the common interest; elsewhere, political parties used it to mobilise scientism and put across a utopian future to transcend ongoing political crises and intensifying class struggle. These in turn helped legitimate state intervention and mask the political question of the preservation of capitalist relations as one of science and technology.

gradually improve modes of production to facilitate capital accumulation (Thompson 1997). Most within this paradigm agree that technology can enhance or extend labour control over workers. Except for Braverman's formulation of the separation between execution and execution and his deskilling argument, Edwards (1979) distinguished between bureaucratic control and technological control. He argued that while the application of technology does not necessarily entail technological control, mechanization itself is often accompanied by technological control, as mechanization can lead to a loss of worker control over the pace and flow of work. For him, the application of a particular technology is the result of managers' choice and design of technology, and that this choice is based not only on consideration of cost and efficiency, but also labour control, that is, how to better translate labour power purchased into surplus labour.

Thompson (1997), on the other hand, did not see bureaucratic control and technological control as two distinctive modalities of control. For him, technological advancement in the organisation of labour process gives rise to a new form of control that goes far beyond, for example, the acceleration of task performance by machines. It is inseparable from bureaucratic control, but contributes to its reconfiguration. Thompson's argument was based on his observation of the role of modern information and communication technologies, which he believed constitute a "digital panopticon" through which the management strengthened labour control.

These, as Liker et al (1999) summarised, provide a static understanding of the relationship between technology and the organisation of work, distinguished from what they identified as interpretivist tradition, which conceive the labour process as a dynamic process that depends on socially constructed meanings. What I am curious is why they did not mention Burawoy's work discussed above, for from my point of view, he provided an approach that considers both socially constructed meaning and the materiality of technology.

Following this discussion, I agree with Thompson's argument of the inseparability of technological control and bureaucratic control, but think this should be understood within the dynamics of relations *in* production and the socially constructed meanings. how technology helps reconfigure labour control is nothing static, but is a power-laden process where different actors within the production regime - including the state, capital, labour market and particularly the workers - try to leverage the

power of technology to achieve, negotiate and contest labour control. the question we encounter now is then how to theorise this process. As the focus of this thesis is on ICTs, I will now turn to It is from here I turn to theories about the relationship between ICTs, its users and the society.

2.6.3 Defining ICTs: between the social and the technological

When I turn to the literature, I find an extraordinary muddle in terms of terminology. As ICTs are now studied across disciplines, specialities and perspectives, in the literature I surveyed, terms like ICTs, digital ICTs, network technology, computing technology, digital technology, internet, new media and digital media are often used interchangeably. The surface mess notwithstanding, most scholars use these terms to refer to a loose set of technological innovations and developments that are closely associated with the invention of the microprocessors in the 1960s that allows information to travel long distances instantaneously (Abbate 1999; Avgerou et al 2007).

ICTs have always been a moving target and have undergone rapid banalization across the globe. Along this process, social scientists have been active in addressing the phenomenon from their own perspectives. Avgerou et al. (2007) provided a succinct review in this regard, where the editors identified mainly four strands of research, each theorising ICTs in diverging ways. They started with the Diffusions of Innovations research, epitomized by Everett Rogers's (2003) classic *Diffusion of Innovations*. In this tradition, ICTs are defined as technical features and channels. The main concern is the rate and direction of adoption, with the social and ethnical consequences of technological innovations unattended.

Three other strands of literature they identified all started by establishing the link between ICTs and the macro socioeconomic system and defined ICTs in relation to information, though in different ways. Daniel Bell and his followers link information with occupational structure. Their empirical focus resides with the growing contribution of information services to economic activity, measured in terms of quantitative shifts of employment in manufacturing and service sectors. The suggestion is that with the advent and rapid penetration of ICTs, the preponderance of occupations is now found in non-manual informational work, which announces

the arrival of an information society and a knowledge economy distinctive from the industrial society.

The 'network society' literature, on the other hand, links information with spatiality and the reorganization of time and space. It announces our departure from the mass society that is shaped by groups, organizations and communities organized in physical co-presence. In this literature, ICTs are defined as electronically processed information networks that have the capacity to organize key social structures and activities at individual, organization and societal levels (Castells 2000). Research in this strand focus on the relationship between networks, information flows and time-space reconfigurations. The aim is to understand the implications of ICTs that offer new means of creating and interacting with digital information in the context of network society (van Dijk, 2006).

A last approach the editors identified is political economy of communication. Here, the connection between ICTs as information and the social economic structure is understood in a holistic and historical manner, informed by Marxism. Unlike the previous two that proclaims a new sort of society, these neo-Marxists argue that the form and function of information conform to the long-established principles and practices of capitalism. Using Herbert Schiller's work as an example, Webster (2002) identified three key characteristics of this approach: an emphasis on structural features behind media messages; an insistence on systemic analysis of information communication, locating it within the functioning of capitalism and assessing it with reference to its operation; an emphasis on history.

In stating their principles of editing, the editors pointed out that much of the research failed to link the technological thoroughly with the social, the everyday and the historical, because of either an assumed individual autonomy, or ignoring of the power relations that shape ICTs in the first place. To transcend this dichotomy, in that volume they tried to bring together 'insights into the embeddedness of ICTs in different contexts to show how mediation processes are influenced by ICTs' with 'research that acknowledges power as a factor in all socially and technologically mediated relationships' (Avgerou et al 2007; p5)

British Sociologist Frank Webster (2002) evaluated a similar set of scholarship in terms of to what extent can the idea of an information society sustain. He argued

these approaches, except for the neo-Marxist one, failed to provide a satisfactory definition of the key concept of information, for they all jettisoned the commonsensical dimension of information: the semantic. For him, this explained their unconvincing claims of radical social change on quantitative grounds. The neo-Marxist approach, on the other hand, seemed to him convincing because it considered information as meaningful and had a quality - or in his own words, 'information is meaningful; it has a subject; it is intelligence or instruction about something or someone' (p24), rather than something fully mathematically tractable. He argued that this prompted neo-Marxists to ask who had produced what kind of information with what consequences, thus allowing them to consider the role of information in a fully sociological manner.

Following these two leads, a working definition of ICTs that seems to me useful can be found in Lievrouw and Livingstone (2006). The two editors, inspired by Silverstone's mediation theory (2000) and Star and Bowker's (2006) on infrastructure, define ICTs as infrastructures that mediate the society with three layers: the artefacts or devices used to communicate or convey information; the activities and practices in which people engage to deal with information; and the social arrangements or organizational forms – discursive or material - that develop around those devices and practices. By invoking the term 'infrastructure', they remind us although the dynamic links and interdependencies among these components 'can and do become routine, established, institutionalized and so taken-for-granted', these are 'by no means neutral and natural' (p3). Behind them are power-laden processes await to be disentangled. For them, the dynamic links and interdependencies among artefacts, practices and social arrangements are what should guide our analysis.

To summarise, in this section, I propose a three-part theoretical framework. While the labour process theory allows us to understand *nongmingong's* subjective experience of production in the context of the immediate labour process and in its interconnections with external actors like the labour market and the state, i.e. the production regime as a whole, the technology and the organisation of work debate provides us a clue to understand that technology is integral to the production regime, the labour process in particular. The mutual shaping of ICTs and society framework

discussed in 2.6.3 further allows us to theorise – and operationalise - how technology is integral to the production regime and contribute to labour control. A theoretical framework as such requires us to fully map the specific configurations of and the intricate power relationships between the three layers, namely, *nongmingong*'s ICTs-related practices, the specific forms of ICTs-enabled arrangements they engage, and the social arrangements and organisational forms developed around *nongmingong* and these techno-social forms they engage in the particular context of China's economic digitalisation. It is from here I turn to the method chapter. but before that, I provide a review of the relationship between ICTs, China's quest for modernity and *nongmingong*'s changing class position to provide a historical background for the project.

Chapter 3 ICTs, China's quest for modernity and *Nongmingong* as China's new working class

3.1 Introduction

As discussed in Chapter 2, ICTs in this thesis refer to a set of technological innovations and developments closely associated with the invention of semiconductors, integrated circuits and microprocessors in the 1960s that allow information to travel long distances instantaneously (Abbate 1999; Avgerou et al. 2007). For economists, ICTs fall into the category of general-purpose technologies (GPTs) that have the potential to drastically alter societies through their impact on pre-existing economic and social structures. This is because GPTs afford human beings the ability to perform generic functions vital to productive activities within a society, and because they are capable of constant advancement through continuous innovation by complementarities with the application sectors (Bresnahan and Trajtenberg 1996). Or in Marxist terms, GPTs have the potential to transform the elements and processes of productive and reproductive activities within a given society, for example, raw material, social forms of production, or the organization of labour process (Mandel 1975, 1980; Braverman 1974; Burawoy 1985). Thus, GPTs are distinguished from other technologies and are often put on a par with such technologies as the steam engine, electric motors, machinery and automation that were central to the Industrial Revolution, especially the profound changes in social relations throughout the historical period (Landes 1969).

In this chapter, I treat ICTs as GPTs and trace how it has always been central to China's state-led pursuit of its own brand of modernity in a constantly changing international environment. Specifically, I trace how ICTs have been deployed by the state, in the context of its other reform strategies, to transform productive force, reorganise productive activities, privatise and marketise new sector and construct new developmental infrastructure, in order to finally achieve economic growth and social progress, as well as how this effort is enabled or conditioned by the neoliberal expansion of global capitalism. I also discuss how class relations actually changed, with a focus on how *nongmingong* are constantly marginalised throughout this process.

3.2 Socialist transformation and ICTs as strategic technologies of self-reliance

If the founding of the PRC in 1949 marked the success of Chinese communists in leading the struggle for national independence against imperialist powers, global and regional Cold War contenders from the free world continued to contain the new-born communist state. Meanwhile, as the CCP transformed from a revolutionary party to a ruling position, it took on the new historical tasks of first continuing the radical social revolution to liberate internal minorities from traditional dominant powers, and second rising above national backwardness and catch up with the West. This triad of nationalism, socialism and developmentalism had deep implications for the political economy of Maoist socialist transformation and the role of ICTs within this development (Lin 2006).

The transformation started with rural land reform. The aim was to gradually eradicate (semi-)feudal forms of land ownership, exploitation and power and finally establish more equal relations of production among the peasantry. Meanwhile, a parallel process of agricultural collectivization took place. The dismantling of old powers did not lead to private land ownership. Rather, the state became the uppermost owner, and peasants were allowed to cultivate their designated proportion. They were then organised into production brigades, teams and communes, and formed the backbone of the socialist collective agricultural sector, producing agricultural products not only for their own use but to support urban industrialisation (Li 2009; Wen 2013). These dual processes of land reform and agricultural collectivisation were also a cultural process of political socialization where peasants began to shake off their subordinate status and mentality and attain a new social subjectivity through “speaking bitterness” (Guo and Sun 2002; Hershatter 2011).

In urban areas, the transformation took the form of the nationalization of the *shougongye*, the handcraft industry, and *zibenzhuyi gongshangye*, capitalist industries and commerce, paving the way for more systematic, state-planned industrialization that started from as early as 1953 when its first Five-Year Plan was released. The grand aim of industrialisation at this stage was to achieve ‘four modernisations’ of agriculture, industry, national defence and science and technology. This effort was socialist in that the purpose of production was not for profit, but to satisfy broad social needs from the viewpoint of equality. This was

reflected in the institutional arrangements of (re-)production and (re-)distribution activities, to which public ownership, the *danwei* system²³ and redistributive justice overseen by the state were central components. The *danwei* system operated with workers' workplace self-management and was at once a production unit and a rudimentary social security system, while the state as the authoritarian monopolist of power operated according to the perceived public good it generated by such working methods as mass line²⁴ and 'working groups' (Lin 2006; Heilmann and Perry 2011). The socialist nature of the endeavour was also reflected in the fact that it followed the Soviet model and defined productive activities in terms of material production that serves basic human needs – agriculture and manufacturing – whereas services, culture and communications did not count as 'industry' (Wu 2017).

In a matter of a few decades, the socialist industrialisation succeeded in laying an industrial foundation without the typical costs of primitive accumulation like slavery or colonialism. To provide the material, energy and machinery basis for future development, concerned by threats to national security and sovereignty imposed by external economic and policy blockades and military actions, this industrial foundation consisted of primarily heavy industries, spanning military, metallurgy, chemical industry, machining and energy (Wu 2017; Lin et al. 1996). The lack of colonies and an international blockade left the party-state little choice but to sacrifice and exploit the peasantry, subordinating the countryside to urban demands through an administrative-driven rural-urban segregation to which the *hukou* system and state monopoly over the procurement of agricultural produce were central (Wen 2013). Besides, Maoist China also saw the rise of a rudimentary social security system that prioritized citizen well-being and provided universal and accessible public services, and a 'people's democracy' that organized and engaged citizens in urban *danwei* and rural commune systems as well as work groups and mass campaigns to ensure effective participation in decision-making for social change. Its record of gender equality was also outstanding, although state socialism was not without its pitfalls (Wang 2005, 2017).

However, the communist endeavour was not without its dark side. Socialist China did suffer from great upheavals during, for example, the Great Leap Forward, the

²³ *Danwei* is a work unit.

²⁴ This worked via the institutional infrastructure of mass organizations like women's unions, trade unions, and the youth league.

Great Famine and the Cultural Revolution, and more chronic and recurrent problems like internal purges and female political under-representation, leading to thousands of civilian deaths and wrongful convictions. While liberals and victim's memoirs and autobiographies have attributed this to Mao's brutal dictatorship (Chang and Halliday 2006; Dikötter 2008, 2011, 2013; Gao 2008), more serious and comparative social science and historical studies revealed that this owed much to the intersection of the persistence and adaptability of old, privileged powers, formidable geopolitical adversities and the intrinsic contradictions of the new system (Walder 1986; Howard 1988; Lin 2006; Wemheuer, 2014). At the latter stage of this phase, the complex workings of this triad planted the seeds that allowed a 'new bourgeoisie' to emerge within the Communist Party. The Cultural Revolution launched in the first place to rectify this development with a genuinely democratic impulse for realizing the creativity and self-organization of the masses was premature and hence doomed to fail. The bureaucratic capitalist class was consolidating its power, and a great reversal was soon to be seen.

Perhaps incongruent with the impressions of many, already at this stage, ICTs as defined in this thesis had become a strategic element in the state-led pursuit of modernity, almost in synchronicity with the West. In the Cold War context of high-tech warfare and the nuclear arms race, ICTs were embraced and prioritized by the state mainly as part of the national defence industries of aviation and nuclear weapons, with no intention for civilian use. Thus Feigenbaum's (2003: 4) comment about military technologies also applies to ICTs: technology as a matter of grand strategy and self-reliance as a strategy of technological development. Whereas some technological innovations within the factories were then informed by proletariat politics (Wang 2015), informed by its military-led techno-nationalism (Zhao 2007), the decision-making power in ICTs development resided exclusively with scientists and specialists of the highest technical stature, with the outcome evaluated by universal standardization and by comparison with international technical developments.

It is worth noting that at this stage, based on inherited arrangements and networks from the Republican Era, the state started to build its own mass communication and telecommunication institutions and infrastructures. Specifically, forms of mass communication, including newspapers, radio, television, films and literature, were

not seen as part of ‘industry’. For example, journalism was essentially a weapon for class struggle and was inseparable from propaganda. This was bitterly defended by Renmin University Professor Gan Xifen, founder of the Party Journalism Theory in China, against Fudan Professor Wang Zhong’s more liberal position throughout the entire phase (Liu 2019). Instead, they were part of the political culture and state welfare, operating according to a party-mandated public interest principle. The role of mass communication was fundamentally pedagogic, often used for political mobilisation and the making of new Man and a more modern China (Pye 1978).

On the other hand, the telecommunications system, consisting mainly of telegram and telephone, was a means of elite political communication. The construction of these networks was coordinated by the Ministry of Posts and Telecommunications (MPT) and overseen by the State Council. All investments came from the national government’s budget, and no private carriers were allowed. Like the urban bias in many other areas, the rural-urban gap in telecommunication infrastructure was massive, not to mention that most telephones in the countryside were for military commanders, leaving virtually nothing for residential use. They had little choice but to rely on the extensive post office network that was then part of the public service (He 1991; Harwit 1998; Wu 2008).

3.3 The start of the reform and ICTs as a means of relinking

Until the late 1970s, China was close to the developed world in its heavy industry, but the command economy equilibrium was broken, leading to *chifan wenti*, food provision crises, in rural areas, and low efficiency and prevailing bureaucratic corruption and privileges in urban SOEs. Internationally, because Brezhnev’s Soviet Union actively sought military expansion in Asia, posing threats to China’s national security and sovereignty, long-term contradictions between the two in terms of national interests and revolutionary ideology broke out, hence the Sino-Soviet split and the CCP’s open dismissal of the Soviet as *suxiu*, social imperialism, in the 1960s. The CCP then actively ‘exported’ its own version of socialist revolution to third-world countries²⁵, while strategically forging international alliances to fight against *suxiu*. Historically, this cleared the way for the establishment of Sino-US

²⁵ This includes communist parties in Indonesia, Malaysia, Vietnam, Cambodia, Laos, Myanmar and Cuba, among others.

diplomatic relations and China's re-linking with global capitalism that began to reconstitute itself around transnational information networks (Halliday 1999; Lin 2006).

In 1978, the 3rd Plenary Session of the 11th Central Committee of the CCP marked Deng's ascent to leadership and kickstarted the reform. It discredited revolutionary democracy, put an end to the era of revolution exportation and *yi jiejidouzheng weigang*²⁶, and ushered in a new era where the 'four modernizations' of agriculture, industry, national defence and science and technology were considered the Party's key tasks and development its ultimate principle. Developmentalism began to override socialist principles. Economic development no longer prioritized broad, equal social needs, and profit became a legitimate pursuit – to become rich was glorious. But this does not mean that socialism and nationalism were entirely abandoned. The goal of development was set to construct a *xiaokang shehui*²⁷, achieve common prosperity and strive for the great rejuvenation of the Chinese nation. The state retained a planning role through its arm of the National Committee of Economic Reform and oversaw "the market while the market leads enterprises" (Gan and Cui 1997; Lin 2006).

In the shadow of *chifan wenti*, reform started in rural areas. Two main policies established the household responsibility system and supported the expansion of TVEs. State monopoly over the procurement of agricultural produce was removed and peasants were free to trade in the market. This gave rise to a petty peasant economy where the individual household was the basic economic unit, while TVEs pursued market economy and provided non-agricultural jobs in slack seasons.

Rural reform became stagnated when the urban-centric market-oriented reform kicked off in the mid-1980s. The goal was to correct the socialist 'high-goal, high-accumulation and lousy-efficiency' regime of growth that the new ruling elites held responsible for its various social problems, and to rebalance the economy by strengthening agriculture, service sectors and light industry (Lin 2011). Central to this plan was the decentralization of power and interests, where the state strategically relinquished its control over industry and commerce by reorganizing previously state-owned/controlled social advantages, resources and interests into autonomous,

²⁶ Taking class struggle as the key link.

²⁷ Moderately prosperous society.

profit-making units (Huang 2008; Wang 2004, 2009). Four crucial developments in this regard were: first, an adjustment of central-local relations in which the local government gained more autonomy over its own interests and development plan; second, SOEs and TVEs reform in which the state “gave a measure of power back to the enterprises” by “permitting them to close, freeze, combine, transfer, or redistribute, and finally, alter the mode of management, transforming productive relations” (Wang 2009: 25); third, the gradual replacement of centrally-set fixed prices by floating market prices; fourth, the establishment of the market for a number of productive factors and public services. Besides, to mitigate the employment pressure engendered by the return of *zhiqing*²⁸ of the *shangshan xiexiang* movement²⁹, *getihu*, individual household economy, previously banned because of its capitalist nature, was revived (Wu 2017).

Externally, from 1979, foreign businesses were allowed to invest in SEZs³⁰ in coastal areas and set up export processing businesses outside. Because official reserves had dropped to virtually zero, the *sanlai yibu*³¹ model that allowed enterprises to import duty-free materials for the production of export goods was established to attract investment and earn foreign exchange. New central government trade and investment corporations and greatly expanded operations of Chinese corporations in Hong Kong created new opportunities for Chinese domestic firms not under the government’s direct command (Lin 2011; Wu 2017).

Political reform at this stage focused on party-government relations and deliberately kept a distance from wholesale liberalisation. The aim was to tackle redundant government bureaucracy that was too large and expensive but moved slowly, and to improve administrative efficiency. The leadership of the Party was reconfirmed, while its division of labour with the government was more clearly demarcated and their operations made more independent³² (O’Brien 2008).

Predominantly domestic in scope, reform at this stage brought to end most of the Maoist communes and *danwei*, and the free public service associated with it. The

²⁸ Educated youth.

²⁹ The Up to the Mountains and Down to the Countryside Movement.

³⁰ Special economic zones.

³¹ *Sanlai Yibu* means processing with imported materials, processing according to foreign model, assembling by using foreign parts and compensation trade.

³² Political reform saw a reversal. In the early 1980s, a reform proposal to liberalise and democratise the party-state was proposed by Liao Gailong, a senior party official. This was later set aside after the disintegrations and economic hardship in the aftermath of the velvet and violent revolutions in the 1980s in the Eastern Bloc.

iron rice bowl began to be smashed and social security became associated with labour contracts. Market opportunities and consumer economy became the new norm (Hung 2013). In rural areas, the household registration system, the collective ownership of TVEs and the lift of trade restraints all boosted productivity. Explicitly private entrepreneurship in the non-farm sectors developed vigorously and rapidly (Huang 2008). Living standards were substantially improved and the prosperity of TVEs even provided the long-overdue social welfare, making the 1980s a rare decade when rural-urban inequality was retrenched (Lee and Selden 2007).

In urban areas, the lack of effective check-and-correction mechanisms in SOEs reform and the interim dual-track price system gave rise to hyperinflation and unfettered corruption. Hitherto state-owned resources became privatized – legally and illegally – to benefit a small minority, while cadres and their associates quickly aggregated vast wealth through price scissors. This twin process consolidated the power of the bureaucratic capitalist class (Sun 2003; Wen 2004) – or the “bureaucratic-comprador bourgeoisie” (Lin 2015: 35), and created alongside it a working class comprising mainly laid-off SOEs workers who used to be entitled to lifetime benefits in exchange for loyalty to the party-state (Walder 1986; Lee 1999). Between them, new ‘middle’ categories such as *getihu* and managerial, technical and professional staff in businesses and social organisations began to emerge (Goodman 2015).

It did not take long for the economic volatility, corruption and class polarization engendered by this paradigmatic shift of the economy to culminate in social crisis and unrest as massive and momentous as the 1989 Tiananmen protest. Long portrayed by the mainstream Western and Chinese media as a pro-democracy movement led solely by liberal-minded students and intellectuals to demolish the Maoist socialist system, urban industrial workers nevertheless actively contributed to the movement (Walder and Gong 1993). In Beijing, they organised themselves around the *gongzilian*.³³ Instead of demolishing the Maoist system, they demanded a return to that system to end bureaucratisation, job insecurity and rampant inequalities. Against the backdrop of the fall of communism in the Eastern Block,

³³ Beijing Workers' Autonomous Federation.

this first wave of the post-reform labour movement was soon quelled, with its leaders fleeing outside mainland China.

At this stage science and technology were elevated to ‘the primary productive force’ and their modernisation key to Chinese modernity. In promoting science and technology, the advancement of the productive force and economic growth were the guiding principles, hence the dual emphasis on applied technologies and basic research. This is best manifested in the introduction of the ‘863 plan’ in 1986 to “above all yoke technological achievements to strategic goals of the state” (Feigenbaum 2003: 163). To date, it remains China’s premiere hi-tech development plan, focusing mainly on applied technologies to quickly translate research output into productive force and economic efficiency, and nurturing next-generation technology talents (Zhao 2007).

ICTs constituted a substantial part of that plan, taking up 2/3 of the total budget, and their role was no longer limited to military use. This owed much to also the centrality of ICTs to the then Western capitalism – or the emerging digital capitalism – as these economies had to either restructure themselves around transnational information networks for low production costs elsewhere, or turn ICTs-related activities and demands into a major growth outlet (Schiller 1999, 2010; Nolan 2001). In 1984, a national-level government body was created – the Leading Group for the Revitalization of the Electronic Industries – and its action plan called for the wider application of ICTs in various economic and social spheres.

Wide-ranging in scope, its implementation was nevertheless limited by domestic economic and technological backwardness. Because a fully-fledged national market was yet to be established and the domestic market was believed to be too underdeveloped to match the speedy global expansion of ICTs, for fear of being left behind, gaining access to the latest – however downstream – technology and industrial investments in the ICTs sector seemed to the then Chinese leadership a prerequisite and premium strategy to relink with the global market. While nurturing a larger domestic market was still on the agenda, state policy gradually shifted from import substitution toward an export-oriented mode (Hong 2008). In 1986, the *Decision of Encouraging Foreign Investments* was released. Preferential policies allowed foreign-invested enterprises in export processing and high-tech sectors to operate in China as joint ventures and through contractual agreements. As a result,

infant domestic enterprises were left with limited space to develop their R&D and market capacities. Hence, the role of ICTs was limited to that of a new manufacturing sector and a means to relink with the global market as a manufacturing base downstream in the global value chain.

Another way ICTs were integral to China's economic and social development was the construction of a telecommunication infrastructure that was increasingly seen as an infrastructure for production and a new sector of the economy. Led by the central planning of the Ministry of Post and Telecommunications (MPT) and driven by the market incentives of local posts and telecommunication bureaus (PTBs), the state offered little investment, but provided support with preferential policies in access to domestic and foreign loans, access to foreign exchange to import advanced technologies and the permission to charge high installation fees to customers. This created strong regional and rural-urban disparity, with east coastal urban areas, supported by the need of foreign investors, flourished very quickly (Zhao 2000; Zhao and Schiller 2001).

Yet another development related to ICTs was the commodification of information and the creation of an entire media and cultural sector. The Gan-Wang debate discussed earlier resurfaced in the early 1980s and was somewhat settled, with news information recognized as a commodity, especially for its role in providing information for economic exchange (Liu 2019). Market-oriented popular newspapers and broadcasters, alongside party media, began to flourish and vowed to provide facts and news to cater to the needs of readers/audiences, rather than the *qunzhong*, the mass, although institutionally it remained part of the party organ. The *sijiban* model was proposed, with the media organised at national, provincial, city and county levels to expand coverage and the scope of propaganda. Foreign TV dramas and films were imported while domestic productions expressed sharp concern about social injustice and appealed greatly to the general public (Zhao 2003; Sun 2008; Huang et al. 2008; et al. 2008). Cultural system reform set out to commercialise formerly state budget-supported institutions without losing state dominance. Under the auspices of the Ministry of Culture, the reform permitted market-oriented re-organization of production, personnel, and distribution on a project-by-project basis and was relatively peripheral and sluggish due to ideological rigidity, institutional conservatism and intellectual resistance (Hong 2014).

3.4 The export-driven economic miracle and informatisation as an apolitical solution to development

If the previous stage resulted in imperilling old socialist workers' job security and social welfare and created a corruptive bureaucratic capitalist class above them, reform since Deng's 1992 Southern Tour deepened this neoliberal attack: it further accelerated the proletarianization of land-owning peasants (Pun 2016). To ease inflation and break from international isolation after Tiananmen, under the mantra of *'buzhenglun'*³⁴ and *'yu guoji jiegui'*, join the international track, aided by its uncompromised authoritarian rule, the state embraced the Washington consensus, followed the advice of US financial experts, and pursued a neoliberal reform agenda (Huang and Cui 2005; Huang 2008; Hung, 2013).

Three interrelated lines of development took place. Reform of SOEs into profit-oriented corporations continued in selected fields. What was distinctive about this stage was the active and strategic engagement with transnational industrial and financial capital, particularly US investment banks, in restructuring some of the biggest SOEs, allowing them to float in domestic and international stock markets (Huang 2008; Hung 2013). Other SOEs and TVEs underwent a similar process, albeit mainly in collusion with local elites (Wang 2006). As such, SOEs and TVEs no longer lived up to the socialist promise of full employment and workers' wellbeing. The second line of development concerned the development of non-public or private sector economy owned by domestic capital; the third concerned the introduction of a large-scale, labour-intensive, export-oriented, FDI-dependent manufacturing sector.

Alongside these processes, reforms in the exchange rate regime and foreign trade system were implemented to adapt to the neoliberal international rule. China's accession to the WTO in 2001 deepened and accelerated this process. Transitional flexibilities and the manoeuvring space of the state were gradually phased out, and the accession was based on broad concessions, to the extent that "domestic and foreign capital effectively operated within different legal parameters" with "the more

³⁴ No arguing. The 'no arguing' principle was put forward by Deng to put a brake on the debate about the origins of economic and political turbulence in the late 1980s, with some attributing it to *xing zi*, the market orientation of the reform, or *xing she*, the socialist legacy.

favourable laws applied to foreign, not domestic capital” (Branstetter and Lardy 2008; Panitch and Gindin 2012: 296). On the other hand, SOE/TVE reform provided some of the much-needed labour force for the mushrooming workshops across the country, particular in the PRD, as did policy changes in agriculture and in rural areas, for example, cut-backs in favourable policies for TVEs, further reform of grain procurement policy and price regime, the opening of the agricultural market to the US in exchange for WTO membership, and the reform of land policy favouring agricultural industrialization. In line with modern corporate management, a fully-fledged labour market was in the making, with labour laws promulgated, the labour contract replacing the socialist contract and labour-related information services flourishing. The state continued to retreat from public services; healthcare and pension systems became linked with labour contracts; while housing was now entirely subject to market provision (Lü 2012; Wen 2013; Lee 2016; Pun 2016; Wu 2017).

At this stage, the Chinese economy saw striking growth, with an average annual rate of 10%, and it managed to lift the majority of its population out of poverty. The economy itself also underwent a paradigm change. The fundamental role of market mechanisms was enhanced as the price of most commodities and services – land, natural resources, labour power, public services – were now set by the market. The domination of public ownership as the foundation of a socialist economy faded away. The proportion of GDP generated by the private sector – directly fostered by the state and the SOEs– grew at a spectacular rate, reaching 60%, while the state-owned sector fell to around 1/3, retaining its leading role only in basic industries (Gao 2009, cited in Pun 2016).

The dependence on the external market became more entrenched, and its economic and financial autonomy was eroded by swelling foreign control, especially after it imported US inflation. In 2007, its 68% trade-to-GDP ratio was well above the world average (Panitch and Gindin 2012), and the export trade was highly concentrated in the US consumer market, which absorbed more than 30% of China’s total exports (Roach 2006). The situation was further exacerbated by weak domestic consumption due to intense labour exploitation. Figures from the World Bank suggested that the share of wage income in China’s GDP declined from 53% in 1998 to 41.4% in 2005 (He and Kuijs 2007). This was in line with Pun’s (2016) observation that before

2005, despite lowest wage standards being established across China, *nongmingong*'s income did not see a meaningful rise. The dependence also became more deep-seated because of its failed attempt to exchange market for advanced technological transfer. Despite R&D breakthroughs in SOEs, China's high-tech exports remained controlled by multinationals and foreign companies (Nolan 2012).

Domestically, this development was imbalanced in rural-urban and regional terms. Rural reforms bankrupted and privatized TVEs under bureaucratic-capitalist logics while local markets were inserted into larger national and global markets and severely undermined. In the meantime, FDI-invested manufacturing industries, the main engine of China's economic miracle, were mainly deployed in eastern coastal areas. In terms of the central-local relationship, the central government gradually lost its grip over entrenched local interests reaping enormous short-term profits from the investment boom, while anarchic competition among localities resulted in uncoordinated construction of redundant production capacity and infrastructure (Hung 2016). Rawski (2002) observed that idle capacity in such key sectors as steel, automobiles, cement, aluminium and real estate had been soaring ever since the mid-1990s. Similarly, Rajan (2006) estimated that over 75% of China's industries were plagued by overcapacity by 2006.

These enduring trends pushed the rural economy and that of China's hinterland to a dead end and helped stabilize an enduring pattern of economic growth – excessive investment, overproduction in manufacturing, deficiency in domestic demand and high dependence in demand from the north, making it particularly vulnerable to global economic changes (Lü 2003; Huang 2008; Hung 2013).

Socially, significant changes in social structure gradually materialized and inequalities deepened. SOEs/TVEs reform consolidated the bureaucratic-comprador capitalist class in both power and scale. Alongside it were what Wang (2014) called the urban new poor, comprising of mainly three subgroups: a new class of white-collar workers, made up of well-educated youth doing office jobs in first-tier cities but constantly struggling to make ends meet in the lure of omnipresent consumerism; proletarianized SOEs workers who continued to lose the iron rice bowl and were left in precariousness, with some ending up in coastal industrial complexes; and peasant-turned *nongmingong* mostly working in labour-intensive industries in eastern coastal areas. At the bottom were those who remained in rural areas because of their

inability to sell their labour power. In recent decades, these political economic transformations have led to a range of protests from below, both self-organised and NGO-facilitated, among which *nongmingong* and peasant were perhaps the most active participants (O'Brien and Li 2006; Lee 2007; Chan and Pun 2009; Chan 2010; Chan 2011, 2013; Gallagher 2014).

At this stage, the technocratic and techno-nationalist elite's pursuit of modernization continued to drive the deployment and development of ICTs in China. What was distinctive was the strategic significance of ICTs in the overall modernisation programme, its perceived relationship with industrialisation and scope for socioeconomic development, and the leverage of domestic consumerist drive.

Just as the scientism of machinery and Taylorism had particular ideological appeal to post-war Western capitalist states (Burawoy 1985), the scientism and economism beyond social division and political conflicts theories that information society posited (Schiller 1996) had similar appeal to China's ruling elites after the Cultural Revolution and Tiananmen. Rhetorically, informatization was declared to be the mother of all modernizations (Zhao and Schiller 2001). Priority of the post-Mao developmental state was given to the construction of a national information infrastructure, the expansion of information industries and the application of ICTs in all areas of socioeconomic development. Alongside the expansion of telecommunication networks, starting in 1993, the various 'Golden Projects' were a concerted state effort to connect its governments, families, businesses and banks following the 863 Plan (Feigenbaum 2003). In 2001, the strategy of 'using informatisation to propel industrialization' was written into China's 10th Five-Year Plan; in 2002 the 16th Party Congress reconfirmed this focus, postulating ICTs as the logical choice for the acceleration of industrialization and modernization. The intention and determination of the state to exploit the technological potential of ICTs to achieve leapfrogged development in its productive force was manifest, and a digital revolution was in the making (Zhao 2007).

In its actual unfolding, as Zhao (2000, 2003, 2007) and Hong (2011, 2017) observed, China's informatisation at this stage was contested by a constellation of factors and powers. These included the state's imperative of economic development, its consideration for network expansion, military, surveillance and national integration,

technocratic rationality³⁵, elite interests, market orientation, civilian uses, and the intention of transnational capitalism to exploit China's world's-largest consumer market and cheap processing base while protecting their technologically advantageous position. Two decades into its development, the outcome has been substantial.

Identical to the general trend of China's economic development, the export-oriented regime in the electronic communications manufacturing sector was brought even further in line with the WTO's neoliberal regulatory lines. The sector itself saw the highest growth rate (40-50% between 1992 and 1998), contributing significantly to the country's overall growth, making China one of the biggest exporters of telecommunications devices. ICTs soon became the most popularized and commercialized hi-tech in China. However, the sector was predominantly foreign-owned, and domestic industry remained downstream in the value chain and weak in R&D and marketing capacity. By 2005 more than 70% of its value-added profits was controlled by foreign capital and the drift has not since halted. Its role in industrial upgrade was limited to facilitating communication between economic functions (Hu and Jefferson 2008; Lin 2016; Wu 2017).

In terms of network expansion and ICT diffusion, it has allowed China to build up its network infrastructure at an unprecedented pace. By 1998, a fibre-optic backbone connecting all major cities and the second largest fixed line public telephone network in the world was in place. The 'Golden Projects' gradually took shape and 1999 was declared the year for 'government on the net'. In 2010, a nationwide broadband fibre optic network supporting high-speed Internet access was in use. In rural areas, the 'Cuncun Tong Project', which aimed to extend radio, TV and Internet coverage to all villages, was implemented from 2004, achieving telephone access in 94.5% of the natural villages and broadband connections in 83% of the administrative villages in 2011. But this development was not without its biases. Incentivized by the demands of foreign business and middle-class consumers, the more state-of-the-art, value-added network links and devices were made available more in east coastal and urban areas than in rural areas and the hinterland (Zhao 2000; Zhao and Schiller 2001; Hong 2013).

³⁵ What the elite define to be China's 'national interest'.

The media and cultural sector underwent further market-oriented reorganization. News and broadcasting organizations underwent conglomeration and tried hard to strike a difficult balance between the party line and the bottom line. Popular media foregrounded the day-to-day needs and concerns of an audience as citizens and middle-class consumers (Huang et al. 2008; Sun 2008; Zhao 2008). Television and film industries saw short-lived innovation and a diversification in genres (Zhu et al. 2008). Video-on-demand websites emerged in 2004 and allowed users to upload pirated foreign productions and UGCs to increase viewer traffic and market share. Although China promulgated its copyright law in 2001, in much of this phase it did not prohibit infringement behaviours and penalties were low. Cultural reform emerged from a peripheral to a central position, and the culture and creative industries become part of the national economic restructuring scheme, especially after 2005 (Montgomery and Fitzgerald 2006; Montgomery 2009; Hong 2014; Wang et al. 2016; Keane and Chen 2017). Throughout this development, the state's stake to exert influence and control to maintain stability and construct what it defined as the 'advanced socialist culture' were high. Either the reform was to set out to consolidate a powerful economic base to enhance party propaganda, or measures like licensing and pre/post-release censorship or national planning informed by such aspirational slogans like the Chinese dream were implemented. As such, the media and cultural sector demonstrated a neoliberal orientation that favoured middle-class culture and political elites, and contributed substantially to shape class relations: it created a new (middle-)class of knowledge workers, while contributed discursively to redefine the meaning of class (Hong 2011; Wang 2011; Yao 2014; Zhao and Wu 2014).

3.5 The 2008 global financial crises and restructuring/upgrading through networking

By the mid-2000s, the particular regime of growth that precipitated China's economic miracle also drew it into a looming economic, social and environmental crisis. In response, since the mid-2000s, the Chinese government has taken a number of precautionary measures to pre-emptively rebalance the economy, shift the growth model while address its social and environmental crisis (Wu 2014; Naughton 2006; 2018; Hung 2015).

To reduce excessive production capacity and reduce dependence on foreign capital, SOEs reform was redirected to bring domestic private capital in to form a mixed-ownership regime while resource tax system reform sought to curb the investment frenzy in resource-intensive sectors. To enhance market competition, non-public capital³⁶ was allowed and encouraged to invest in traditionally state-monopolised areas, with roles limited to non-controlling shareholder in areas of natural monopoly. Meanwhile, agricultural taxes were abolished and *dibao* and *xinnongbao*³⁷ were introduced as part of the initiative to improve development prospects and living standards in rural China. To stem mounting labour unrest and increase wage share in the economy, two pieces of pro-labour legislation³⁸ in this phase for the first time officially recognized *nongmingong* as China's industrial labour along with their contribution to its modernisation. The establishment of a rural-urban unified labour market was proposed to protect migrant rights and enhance public services through stricter implementation of minimum wage standards and a labour contract system.

The 2008 global financial crisis brought these efforts of structural adjustment to a halt. As global demand dropped, China's export engine stalled and the PRD area saw a high tide of factory relocation (Fan 2018). In response, the Chinese government introduced a sizeable stimulus via state bank lending to speed up and expand infrastructure constructions. While it enabled China to rebound swiftly from the initial fallout of the global crisis, in 2011–2012, it started to lose steam, and local government's heavy indebtedness resulting from the stimulus began to hamper growth. It is in this context that Xi Jinping came to power (Hung 2013).

Three interrelated lines of development took place in Xi's era. Mixed-ownership reform in SOEs continued and the role of *minjian ziben* was further enhanced. Apart from participation in SOEs reform, it is now permissible to invest in areas previously exclusive to state-owned capital, for example, infrastructure and basic industries, social housing and public services, social services, financial services and even national defence. Measures were also taken to balance China's relationship with foreign capital and markets in trade, investment and demand. Both state and *minjian* capital were encouraged to 'go out' to participate in international competition and seek international expansion. A flagship policy in this regard was the Belt and Road

³⁶ Individual and private economy and foreign capital.

³⁷ Lowest Living Standard Guarantee and New Rural Pension Scheme.

³⁸ The Opinions of the State Council on Resolving the Problems faced by Migrant Workers and the 2008 Labour Contract Law.

Initiative (BRI). A global development strategy adopted by the Chinese government in 2013 involving infrastructure development and investments, the BRI aims to “construct a unified large market and make full use of both international and domestic markets, through cultural exchange and integration, to enhance mutual understanding and trust of member nations, ending up in an innovative pattern with capital inflows, talent pool, and technology database” (Cai 2017; Jones and Zeng 2019; Lin et al. 2019).

Political reform at this stage focused on central-local and party-government relations. On the one hand, the anti-corruption campaign, widely criticized as a ‘political purge’ and ‘fractional war’, actually helped Xi clean up entrenched vested interests, curb corruption, and restore public confidence in the CCP’s mandate to rule, paving the way for larger structural reforms. On the other hand, the government was reformed to be service-oriented, assuming a lesser role in market regulation, while the role of the party became ever more central, as manifested by the removal of presidential term limits and the return of “ensuring party leadership over all work” in the 19th Party Congress (Li and McElveen 2014; Fenby 2015).

Also central to the development strategy at this stage is the reliance on technological innovation and network leadership – rather than applied technologies and its quick translation into productive force in the previous stage – to improve the quality and efficiency of economic growth and move the country up in the global value chain. A flagship plan in this regard is the US\$300-billion Made in China 2025 plan. The plan focuses on high-tech fields including pharmaceuticals, the automotive industry, aerospace industry, semiconductors, IT and robotics, which are presently the purview of foreign companies, and the goal is to comprehensively turn China into a more technology-intensive manufacturing powerhouse. While in the previous phase most high-tech innovations were achieved in SOEs, private capital and entrepreneurial spirit are now also identified as a driving force of innovation.

Throughout this process, the state has made some progress in promoting redistributive justice, although this may be equally underpinned by the imperative to boost domestic consumption to divert the economy (Lee 2016). Reform of the *hukou* system to gradually remove the *hukou*-based distinction has always been the central locus of media and public attention. Related to this, rural-urban unified public services (pensions, basic medical insurance, education, housing) were well under

way. Rural reform emphasized the modernization of agriculture and experimented with new forms of land ownership and organisational forms (family-run, cooperatives, collectively-owned and corporatisation), as well as new technologies to nurture new products and connections. Priority was given to the improvement of agricultural infrastructure and the development of economies of scale.

Regarding ICTs, this stage saw the ascent of informatisation as a ‘leading force in driving modernization’. Given the rapid expansion of its corporate-run cyberspace, ICTs as a set of complex and interactive technologies – and the Internet industry as a slew of Web-oriented technological, business, and innovation models – are deliberately deployed by the Chinese government to crosscut and catalyse reforms and to help upgrade the quality and composition of its economic growth and social development (Hong 2018). This is explicitly stated in the *Outline of the National Informatization Development Strategy*, where a package of reform policies aimed at the wholesale informatization of society was proposed,

1) Fostering the information economy, stimulating the transformation of development, including manufacturing, agricultural and service industries, through decentralization of power and upgrade of information infrastructure; 2) Deepening e-governance, moving forward with the modernization of state governance, including the party, the government, law and public order maintenance; 3) Letting online culture flourish, strengthening national soft power, including boosting and diversifying cultural industry while persisting in the progressive orientation of advanced Socialist culture; 4) Innovating public services, guaranteeing and improving the people’s livelihood, including education, scientific research, medical service, employment and social security, and poverty relief; 5) Serving the construction of an ecological civilization, helping beautiful China; and 6) Accelerating a strong information army, building a modern military forces system.

On the ground, policies like Made in China 2025, ‘Internet Plus’, and Mass Entrepreneurship and Innovation have been devised to promote ‘restructuring through networking’ (Wang 2016; Hong 2017). Whereas Made in China 2025 seeks to upgrade the manufacturing capabilities through technological advancement and innovations – of which ICTs are a strategic component part – the Internet Plus policy

aims to promote industrial reorganisation and upgrade and create new economic and production forms (State Council 2015). Mass Entrepreneurship and Innovation, on the other hand, seeks to mobilise the mass uptake of entrepreneurship.

The promise of communications for economic recovery and self-repositioning should not be taken-for-granted. In Hong's (2017) state-centred story of the political economy of China's emerging communications sector, she showed in detail how the state – itself constitutive of self-serving bureaucratic interests and complex central-local and inter-regional relationships – in conjunction with market forces and fragmented class interest, constructed and realigned its digitalized sectors by juggling state socialist principles with capitalist fundamentals. The works of Xia and Fuchs (2017), Jia and Winseck (2018), and Tang (2019) reveal the heavy hand of transnational financial capital and the dialectical role of the Chinese state as more constitutive than constraining in this development.

Under this nexus of power, the Chinese state is currently orchestrating a society-wide deployment of networked ICT applications in traditional industrial and service sectors, as well as a sweeping corporatization and reorganisation of the culture, media and communications sectors. The telecommunication industry was repurposed to be capital friendly, which, together with the massive electronics manufacturing sector, allows consumer ICTs, especially smart phones, to expand quickly and penetrate to virtually every corner of Chinese society. It is reported that by March 2020, 904 million of China's population are online, among whom 897 million get connected with mobile phones, and its Internet penetration rate reached 64.5% (Hong 2013).

In a time of dwindling orders, rising labour prices, large-scale factory relocation, increasingly stringent environment policy, and government-led efforts to automate labour-intensive industries and promote high-tech, value-added manufacturing (Lüthje et al. 2013; Huang and Sharif 2017; Fan 2018; Sharif and Huang 2019) in the manufacturing sector, this has led to the westward transfer of the unwieldy export-oriented ICTs manufacturing industry, bringing capitalism to its hinterland. As a result of the 'Internet Plus' policy and the mass entrepreneurship campaign, coupled with the discourse of innovation, scientism and 'job creation' (Chen 2019), traditional service industries like transportation, domestic services, takeaways, delivery and retail are undergoing a process of reorganization and are now managed

and transacted increasingly through online platforms, rather than, for example, factories. ‘Platform’ became a new buzzword for venture capital investors and government reports while the platform economy became one of the fastest growing sectors (CNNIC 2020). In rural areas, ecommerce has a strategic role in the state’s poverty alleviation initiative and boosting local development (Lüthje 2019; Zeng 2019).

The cultural and media industry has also gained new momentum, although it continues to be heavily censored and regulated by the government and has conferred upon it the new task of promoting socialist core values. The joint forces of ICTs, politics, market forces and relevant legislations (especially the copyright law) have had an impact on content creators, the apparatus and logic of content production and distribution as well as business models in the sector. The neoliberal orientation that favours middle-class culture and political elites that characterised the sector in the previous phase has altered little, but the role of audience-user-consumer has become more prominent, and the market more segmented. The integration of media content with niche consumption market has deepened, making the question of how to seize certain niche markets a pertinent question for many content entrepreneurs to consider. The digital content industry is on the rise and the multi-channel network model has emerged dominant (Montgomery and Fitzgerald 2006; Zhao and Keane 2013; Li 2019; Topklout 2019).

ICTs are also a key element in China’s global expansion and a digital silk road or ‘digital empire’ is emerging. The expansion of Chinese digital connectivity and business empires along the BRI is driven by the state imperative to mitigate industrial overcapacity, facilitating international industrial capacity cooperation, enable going out 2.0 and construct a China-centred transnational network infrastructure with its own technological standards, through capitalist imperatives for new markets and profits as well as a civilization mission that dovetails with the state’s ambitions to promote a Chinese version of new world order of “shared destiny” (Shen 2018; Keane and Yu 2019).

3.6 Conclusion

Past explanations of China’s phenomenal economic growth since 1970s have focused on its unique, context-specific local institutional innovations, such as

ownership by the local state of TVEs, decentralization, and selective financial controls. Others highlighted the role of private ownership, property rights security, financial liberalization and reforms of political institutions. Still others stress the hard work of the Chinese working-class (Naughton 2006, 2018; Huang 2008; Lin 2011; Lin et al. 1996; Pun 2016; Wu 2017). In this chapter, my emphasis is on the integral role of technology, especially ICTs and its related innovations, in this process. As I have demonstrated, ICTs have been integral to China's development strategy from the very start of the reform. And this has to do with the particular timing of the reform: the 1970s saw the rise of digital capitalism in the West when these economies began to either restructure themselves around transnational information networks for low production costs elsewhere, or turn ICTs-related activities and demands into a major growth outlet (Zhao and Schiller 2001, Hong 2011).

At the early stage of the reform, there was an attempt by China to follow the East Asian model of import substitution, and foster a relatively autonomous domestic ICTs sector, but this was failed due to the underdeveloped domestic market and the lack of capital. It is worth noting that at this stage, the role of ICTs in the Chinese society underwent a dramatic change, as it began to evolve from a means of national defense, political communication and public service in the Maoist era to a means for production, a drive for economic growth and a means for relinking with global capitalism. It is at this stage China's techno-driven developmentalism began to take shape.

The failure in the attempt to follow the East Asian model also have to do with the social and political crisis in the late 1980s and early 1990s, both domestic and international. A more radical strategy of marketisation was pursued thereafter and an export-driven growth regime was put in place. At this stage, the ICTs sector was listed as a strategic sector and ICTs became an apolitical solution to development and economic growth. 20 years' development has turned China the world's ICTs manufacturing base and the world's biggest exporter in ICTs hardware (Hong 2017). In the meantime, China managed to build a massive national information infrastructure that span across its rural and urban areas, to boost economic development and provide economic service. On top of these, innovation was on the agenda but paled when compared to manufacturing. This has its roots in the

overemphasis on immediate economic growth in the innovation process, as well as the regime of innovation.

Since mid-2000, especially after 2010, China's export-oriented growth regime was increasingly challenged by global economic crisis and new trends in international industrial transfer on the one hand, and domestic social and environmental crisis and protests on the other. Hence pursuing economic upgrade and reducing overreliance on external demands became a pressing issue for the Chinese government. It is in this context that ICTs become ever more central to economic restructuring, to the extent that it is possible to talk about the digital transformation of the Chinese economy.

Throughout this process, this state-led, market-oriented, techno-driven developmentalism, as I have outlined, has repeatedly marginalized, if not failed, Chinese working class since the economic reform in the 1980s. If the transformation of the 1970s turned *nongmingong* from the country's master to commodified labour power, ICTs-enabled and facilitated development since then did not improve the workers situation, but turn them into hands that manufacture communications hardware of all kinds. It also helps create above a better-educated middle class who are ICTs literate and can work in digitalised environment of marketised urban industries. The communicative power afforded by ICTs further contribute to the discursive redefinition of the meaning of class, reinforcing their subordination.

The more recent digital transformation of the economy continues to be market-driven. The role of financial capital and domestic private capital are enhanced to participate in the reorganisation of traditional agricultural, manufacturing and service jobs and to turn data into a new raw material of production. This will precipitate further changes in class relations in China and *nongmingong's* class location, whether in production or reproduction.

This sets the stage for discussion of *nongmingong's* subjective experience of the digital transformation of the economy in China in the chapters to follow. But before that, I provide an account of the methods and research design of this project.

Chapter 4 Methods

4.1 Overview

This chapter sets out the methodological considerations, design and processes of this research. As stated earlier, the aim of this thesis is to understand the subjective experience of *nongmingong*, rural-to-urban migrant workers, confronting China's recent ICTs- driven economic restructuring in both work and leisure. In Chapter two, I further unpack this overarching question into three sub-questions, namely

- 1) what are the new mediated arrangements of production emerging?
- 2) How do *nongmingong* experience these new arrangements? What kind of actual and social practices exist around them?
- 3) Whether, to what extent and how do these new mediated arrangements of production represent for them opportunities or challenges?

As discussed in previous chapters, my approach to ICTs follows Lievrouw and Livingstone (2006) who drew on the 'social shaping' tradition in STS studies and understand ICTs as the totality of three component processes: artefacts, practices and social arrangements. For them, ICTs are not self-generating, but are invented within certain societal circumstances, arising from particular practices and social arrangements. ICTs thus take on certain forms and qualities, offering specific possibilities and constraints, enabling or disabling certain social capabilities. While this approach has its own logic, this does not determine its uses and consequences. Rather, its consequences arise from the actual practices of use as those possibilities and constraints are taken up, rejected, and reworked by its users operating within specific social arrangements.

And my approach to *nongmingong* defines them as forced workers. If we follow Sewell (1992: 21) to think of one's agency as one's social positioning, 'laden with collectively produced differences of power' and thus conditioned by the social groups one belongs to, in this thesis, *nongmingong*'s agency is understood in relation to their class position – their position within the capitalist relations of production – in its intersection with their gender and other identities.

Then, methodologically, to address the thesis' main concerns demands a framework that acknowledges *nongmingong*'s agency while at the same time – to avoid the interpretivist trap (Hammersley 1992; Schnegg 2015) – addresses the various

structural constraints, local and global, that they face. This in turn calls for data collection and analysis methods that can best capture, record, analyse and represent *nongmingong*'s own practices and viewpoints as they use ICTs in the 'natural unfolding' of their daily lives to respond to life circumstances on the one hand, and methods that can generate insights into the practices and social arrangements that give rise to the technologies on the other. This leads me to ethnography and semi-structured in-depth interview as the main methods of data collection.

It should be noted that by observing and documenting the 'natural unfolding' of lives, I do not intend to invoke a naïve realist position that understands social phenomena as objects existing independently of and external to the researcher (Hammersley and Atkinson 2007). Rather I follow a critical realist position that necessitates reflexivity as a device to explicate the role of the researcher in ethnographic fieldwork and representation. The concept of reflexivity contends that researchers are themselves an inevitable part of the social world under investigation and acknowledges that the orientations of researchers are shaped by their socio-historical locations and the values and interests these locations confer upon them (Hammersley 1992; Madison 2012). In the following sections, I address these methodological points by illustrating how I tried to achieve them throughout the research process.

4.2 Ethnographic field in a globalising and digitalising world

Conventionally, within the discipline of anthropology, the very idea of the 'field' has often been beyond reflexivity, and the field-site often took the form of a bounded and disconnected space like a village (Gupta and Ferguson, 1997). Underlying this was the assumption of a bounded space as containing a whole culture. In recent years, this assumption has been increasingly challenged by changes in the structures and interconnections in late capitalism that have increased the scale and complexity of social processes.

In an attempt to address this challenge, Marcus (1995: 97) observed that "empirically following the thread of cultural process itself impels the move toward multi-sited ethnography", for empirical changes in the world – by which he meant globalisation – blur the distinctions between subjects' life worlds and the system, and the cultural

logics sought after by ethnographers become multiply produced. This call for multi-sitedness helped frame and reify a methodological trend. Ethnographers were freed from the limitations of the bounded site, and allowed to follow movements of people, ideas, objects and metaphors, to trace and map complex networks.

This “research imaginary” (Marcus 1995) marked by freedom, complexity and expansion, according to Candea (2007), has been the main source of novelty in ethnographic theories and methodologies in recent years. Not necessarily disagreeing with Marcus, he prompted us to rethink the effectiveness of moving towards multi-sitedness as a methodological response to empirical changes. Examining Marcus’ original article and later debates on the nature and bounded-ness of the field closely, he pointed out that underlying this methodological move is an implicit holism, not of “the world system as a totality” (Marcus and Fischer 1999), but of “the imagined totality of cultural formations”, for “the desire to break out bounded sites in itself presuppose a totality *out there*, which the bounded sites prevent us from studying” (Candea 2007: 178). That ethnographically produced knowledge is a partial truth, as argued by postmodernists (Clifford et al. 2010), and hence becomes a matter of incomplete account that can be resolved through good research design and unbounded following. The role played by ethnographers during the fieldwork – “bounding, selection and choice” (Candea 2007: 169) – that is integral to the production of the final meaningful ethnographic account is thus not adequately accounted for. In so doing, even though the multi-sited imaginary enables researchers to expand their horizon, it also imposes upon them a sense of illicit incompleteness, especially when the fieldwork process is always one of reducing initial indeterminacy.

Thus, Candea reconsidered the value of ‘arbitrary location’, by which he defined an existing instance whose messiness, contingency and lack of an overarching coherence or meaning serve as a contingent window into the complexities of a broader abstract object of study. He aligned himself with the postmodern view that “the fragmentary and the partial as the specific province of ethnographic knowledge” (Tyler 1986, cited in Candea 2007: 179), and argued that ethnography is about setting up such arbitrary locations, for doing so allowed us to “posit wholes by showing their fragments”. For him, focusing on arbitrary locations can better respond to the methodological challenges facing ethnographers as it assumes no

implicit holism of cultural formation external to the ethnographer. By defending arbitrary location, however, he did not mean to call for a return to traditional practice, but urged us to recognize any single site as profoundly multiple, and prompted us to appreciate ‘self-imposed restrictions’ and ‘self-limitation’, to be self-critical and reflexive about these decisions as well as about what is included or excluded (Candea 2007).

From my understanding, Candea’s critique is not a total negation of multi-sitedness. His article can be best read as an epistemological and methodological reflection on multi-sitedness. His defence of single-sitedness is thus more a showcase of the potential of single-sitedness as qualified by researcher self-reflexivity on the process in which the field is constructed. The two authors identify two important questions for ethnographers in defining their field: one about ‘multi’ relating to where to go, and the other about ‘siting’ relating to the field itself as shaped by the ethnographer’s preoccupations, theoretical curiosity and what may be interesting about their chosen topic and discipline. There need not necessarily be only one, or many. Rather, it is shaped by the tension between the very culture under scrutiny and the ethnographer themselves as the research tool, and hence is inherently fluid, reflexive and pragmatic.

These insights apply equally to an increasingly digitalising world, for the digital and the Internet are not a singular object within one site that could be captured in its entirety, but are profoundly embedded and embodied, and thus integral to and constitutive of the complexities of social processes.

4.3 Why *Weida* factory? Justifying the initial field

Following the epistemological and methodological position discussed above, my fieldwork began in *Weida*, a medium-sized factory in a small industrial town in Dongguan in the Pearl River Delta area (PRD). I chose the PRD area because until recently it remained a major destination for second-generation *nongmingong*. In 2017 there were reportedly over 47 million workers in PRD, among whom 65% were second-generations, accounting for 40% of the total national migrant population (National Bureau of Statistics 2018). As such, the PRD promised rich material for research and analysis.

The decision to go to work in a factory instead of a Non-Governmental Organisation (NGO) – as many scholars have done before – came from my pre-fieldwork visit to Shenzhen in the summer of 2016. There I was welcomed by its staff who were influenced by left-wing thoughts. Through their introductions I met and talked with a group of workers and was surprised by the strong affiliation they had developed with the NGO and how they tended to describe their work and life concerns in a way that was significantly shaped by it, using a language that resembled less my *nongmingong* relatives and more like that of left-wing students. This alerted me to the sharp difference between *nongmingong* who actively engaged with NGOs and those who did not.

The particular NGO I visited was no exception in this regard, for labour NGOs in Guangdong had always been strongly influenced by left-wing scholars and international civil societies, both intellectually and in terms of sources of funding (Li C 2015). The work these NGOs had done was no doubt incredible and talking to *nongmingong* inspired by them offered further inspiration. But for this project using an NGO for fieldwork would only offer a very biased picture, for the research interest lies in the lived experience of ordinary *nongmingong*. Engaging with these NGO-inspired workers would likely risk academic self-reproduction, rendering a much larger group invisible.

Working in a factory with the research subjects also has other benefits that staying at an NGO does not have. As *nongmingong* typically work on very tight schedules, spending most of their time and living most of their daily life in the factory, working in a factory affords more time and good opportunities to closely observe their life, talk to them about it, experience it on my own and to forge relationship with them. The understandings thus generated will allow me to better understand their feelings and predicaments and, based on this, raise more relevant questions when collecting data and better put their words back into the context and interpret it from their own perspective when analysing the data.

On top of these reasons, *Weida* is itself in many ways an ‘ordinary’ factory. The manufacturing plant of a Taipei-headquartered electronics dealer, *Weida* was first established in the late 1990s, a time when the local state tried hard to attract FDIs into the labour-intensive manufacturing sector. It operated a time-rate payment system, and like other foreign-invested enterprises, at the top of its hierarchical

management team were a group of *taigan*³⁹ who oversaw the factory's overall production, administration and communications, where the only mainlander was a Hubei local who managed government relations with little role in production. Like other factories, from the early to mid-2010s *Weida* also felt pressure from the global capitalist crisis, changing party-state-capital relations, surging labour costs and labour shortage. As a response, it tried automation, but failed, before resorting to relocation. By 2018, it had opened three other manufacturing plants, in Yanbian (Jilin), Yongzhou (Hubei) and Thailand.

4.4 Access to the factory

Access to *Weida* factory was achieved through my personal connection, Leo. Before finding him, I had spent one month in Shenzhen, trying to negotiate access by getting in direct contact with factory managers and indirectly through local labour dispatching agents. Without exception, I failed because of their distrust – they could not imagine how staying in a factory for an extended period of time could be legitimate part of a PhD programme.

I also tried institutional connections. When I was back in Shenzhen in 2017, I consulted my NGO friends about access. They warmly offered connections in Shenzhen Federation of Trade Union (SFTU) but warned me that in one of the previous SFTU projects, they ended up assigned to a workshop set up specially for them, and hence were excluded from the normal scene. A more effective strategy, they recommended, was to enter factories through recruitment and operate covertly as *pugong*⁴⁰. As for my worries about being discovered, they shrugged: “well, just go to another one”.

This might be productive for them as NGO practitioners (Hammersley 1992), however, for researchers it raises both ethical and feasibility concerns. Ethically, covert ethnographers usually face huge challenges regarding consent from research subjects. Practically, operating covertly in factories renders building rapport and quality relationships difficult. During my visit to the NGO, workers there advised me not to leave much to chance, for they could easily see through it all, especially when

³⁹ Taiwanese managers.

⁴⁰ *Pugong* refers to those who assume non-managerial/skilled positions in the factory. They are often at the bottom of the factory's hierarchy and are most likely to be replaced.

I had no previous factory experience and that I would have to juggle a heavy workload with significant research commitments. Should this happen, they told me, my requests for interviews would be immediately turned down.

I obtained Leo's WeChat account in September 2017 through an introduction by Jian, my close friend and Leo's close family member, with whom I came from the same place of origin. Leo was a veteran customs official who had worked in the PRD for 30 years. During our first meeting, he showed a general interest in my research topic and offered his view on *nongmingong*: "their life is very difficult despite their hard work. But you reap what you sow". This sympathy partly motivated his decision to help me out. Another reason I believe came from his ambivalence towards his childhood hometown, and related to this, he felt an obligation to support young people from there. As he said, "I wish one day I could see Shuyang growing into a prosperous city like Guangzhou. You are now studying in a top university. We Shuyang-ers are proud of you. Do remember to give back after you make your mark" (fieldnote).

He then introduced me in person to Yuan, manager of a local factory. By the time we met, they had known each other for 20 years, initially as work friends, but this later developed into, as Yuan put it, a life-long brotherhood-like friendship. Upon Leo's request, Yuan readily agreed to meet me. After I talked him through the project and the consent form, he introduced me to *Weida* through his connection Mr Li, who was a *taigan* there.

I never met Mr Li, for he went back to Taipei after completing his term in Dongguan the day before my registration. When I finally registered as a *pugong* at *Weida* and settled down in an eight-bed male dormitory, it was already the end of September, a busy season for *Weida*. That afternoon I was welcomed by Mr Chen, manager of Manufacturing Department I, and we discussed my project and he signed the consent form. He told me they were shorthanded at the moment and my arrival was a timely help. He even kindly offered me a cadre dormitory, which I politely declined and explained to him why being a *pugong* would be best for my research. Of course, he did not accept my presence without reservation. When I explained the risks the project might entail, he revealed his bottom line: my work should not interrupt production or bring any economic or reputational loss to the factory.

4.5 Building rapport and self-positioning

As discussed so far, instead of covert participation, I opted for personal connection and achieved overt access. Because of the nature of the relationship between Leo, Yuan, Chen and me, I was allowed considerable freedom so long as no disorder and loss arose. While other ethnographers working in factory settings have reported being required to spy on workers by the management (Lee 1998; Wang 2015), I was never instructed to do so.

This decision to work as *pugong* was made with rapport-building in mind, for the relations between *pugong* and management was inevitably shaped by their power differences (Pun 1995; Chan 2010). Participating overtly, my first step to build rapport was to reveal my identity as researcher and obtain consent. To achieve this, my original plan was to talk participants through pre-prepared documents individually, for previous literature revealed that talking was not allowed during work time in factories. But this did not seem to apply to *Weida*. Despite the deafening and erratic noise, when engaged in work, I was quickly ‘interrogated’ by my curious colleagues.

Bearing in mind that it can be hard to expect frankness from informants while not being frank about oneself (O'Reilly 2012), considering Shenzhen workers’ advice, my strategy to respond to their ‘interrogations’ was to stay honest and humble: honest when answering questions about myself and my research, and humble when disagreements occurred. This meant that I frankly confessed to them that I was a PhD student who was there to work not for the wage but because I wanted to write a thesis on their engagement with ICTs, that I was in sore need of their consent and help, and that I would stay only for a limited period of time. By being humble I respected differences, listening to what they had to say, and replying honestly using their language while knowing that my view could only be my view and was no more legitimate than theirs.

However, this strategy did not immediately achieve the desired effect, for as I gradually realised, sociality on the factory floor was characterised by vigilance and mistrust. I do not mean that *nongmingong* never forged meaningful relationships based on mutual trust and support in factories, but that such relationships usually

started with reservations and built through daily interactions as they observed and tested each other against their own criteria. Two stories are illustrative in this regard.

One was a warning from Laoganma, the first to ‘interrogate’ me, playing a useful icebreaker role in breaking my initial embarrassment on the shop floor. One week later, we were again assigned to adjacent workstations and she whispered in my ear,

don't be silly, Daxuesheng. How can you be always so honest here in this factory? Student is student. A university degree makes no difference. These women, old or young, are not so innocent and honest as you thought. You ought to be careful. You never know how they will twist your words.
(fieldnotes)

Another story occurred in December, when I met HQX from production line B as her team was temporarily combined with mine. One time we were talking about her experience in other factories, and she asked how I found people at *Weida*. I told her sometimes I felt uncomfortable but believed everyone did what they did for a reason. In response, she said I ‘reminded her of her daughter’:

you are just like my daughter when she first left home and came to work in a factory... gullible, trusted everyone without reservation, still such a babe in arms too naïve and innocent to imagine people smiling at her could cheat her, making their small gains at her expense... after several months, you must have found how uneven work was distributed and how experienced workers bully newbies... (fieldnotes)

Upon reflection, it was precisely this nature of shop floor sociality – their tacit reservations about trust – that underlaid my confusion about why my invitations to dinner were often rejected – I used this as a strategy to build rapport, as many others have done (for example, Heimer and Thøgersen 2006; Lan 2006). Later, I became very careful and did not initiate such invitations until I decided that our relationships were robust enough for such close hangouts. This understanding was also very productive in guiding my later effort to forge meaningful rapport.

Another challenge was that before I was able to personally explain everything, my colleagues already heard about it from others and decided I was there to *tiyanshenghuo* (experience the hardship of life) and *shixi* (do internship). Despite my efforts to clarify my researcher identity, they simply stuck to their own terms. I was

frustrated at first, but soon turned to make sure that they understood the implications of my presence as a researcher, regardless of the terms they used. Because task allocation was relatively random, it took me almost a month to do this.

Nevertheless, once I passed their tests and became seen as trustworthy, they very quickly accepted me, and did whatever they could to help me out. In this regard, the long and repetitive process of explanation turned out to be a productive one. From my honest and humble attitude and patient explanation they felt a sense of frankness and transparency. Trust and rapport were hence achieved.

In many ethnographic method discussions, scholars touch upon the tension between tact and courtesy, self-conscious impression management, and deception, especially when the religious or political attitudes and commitments of the researcher and the researched differed markedly from each other (Hammersley and Atkinson 2007: 72). This is ultimately a discussion of the difficult self-positioning of the ethnographer in the field to generate rich data about the subjects and their native point of view while maintaining an ethical approach. Thus, by participating overtly and keeping honest and humble, I do not consider myself as facing such situations. At least during the fieldwork, I did not see myself as mechanically affiliated with certain rigid political or religious systems of belief. Rather, my interaction with participants was marked more by my position as semi-emic participant observer, which was a product of my personal experience.

Growing up in an extended family where many members were *nongmingong*, I left home for education at 14, but kept close contact with my family. When I spatially separated from their daily grind, this allowed me to experience their life indirectly. During the fieldwork, this indirect experience formed a productive basis for the various dialogues between the workers and me. My familiarity with *nongmingong* life convinced them that I was different from their educated relatives for I could understand their thoughts and grievances (*talk with Lao Pan*), while the indirectness and partiality of this familiarity sensitised me to the particularities of *their* experience.

Upon reflection, several strategies were useful in establishing this sympathetic image of mine and in bringing us closer. First, eating together with them at food stalls near the factory gate, and occasionally paying for them. Kaiping later told me she decided

to open up to me after I paid for one of her meals, not for the money, but because she felt valued, trusted and respected. Besides, eating together at the food stalls also created a relatively private space – compared to the assembly line – to talk and gossip freely without other people’s gaze.

A further fruitful strategy was showing genuine respect, sympathy and care where appropriate and offering help where needed. For example, I offered free *daigou*, surrogate shopping in my visit to Hong Kong during the fieldwork after I learned pharmacies there sold their much-needed Wintergreen Oil⁴¹ at a much lower price. This was well remembered even after I left. For another example, when Xiaoping poured out her concern with her son not performing well in school and blaming herself for having not taken good care of him, I told her not to listen to what people around her said, and, drawing on my life experience and sociological knowledge, explained to her why she should not be blamed.

Three further aspects of my identity loomed large throughout this process, significantly shaping my ‘field’, and my access to and understanding of their ICTs-mediated lived experience. First, being a university student meant that I was invested with more trust, in the sense that I was no gossipmonger, and that I was expected to offer some good advice about their life problems. It surprised me when they so suddenly became so open to me after my university student identity was vindicated by my identity card. It was not my plan to earn trust in this way. At first, their circulation of my ID card, without my knowledge, even discomforted me. Paradoxically, it turned out to be more effective than a thousand words. Besides, that I would certainly leave the factory soon relieved them of concerns about future negative consequences of their murmurings and complaints.

Second, being a young man in my 20s made it difficult for me to build close relations with young female workers, married or not, especially given my educational and family background. They worried that being too close with me would incur rumours, defamation or even mudslinging that would mark them out as snobbish or of easy virtue, not to mention that these rumours travelled afar to their rural homes. To avoid this, some even adopted a no-male strategy with WeChat.

⁴¹ Good for alleviating bone pains from repetitive use of certain parts of the body.

Third, I originally came from Jiangsu, East China, while most of the workers came from southwestern provinces like Yunnan, Guizhou, Sichuan and Hubei. This difference in place of origin ruled out any ascribed bonding with any particular regional subgroup and placed me in the same starting point in forging relationship with them. Further, east coastal and southwestern areas, though both belonging to China, underwent historically different trajectories of development within the grand ‘national’ project of reform and opening up. The difference in place of origin hence had the further implication of casting me as their social and historical ‘Other’.

4.6 The evolving field

So far, I have illustrated how my research interest and ambition, experience and resources enabled and shaped my choice and entry into the initial field. I have also discussed my strategies of rapport building and self-positioning in the field and reflected on their implications. This first stage of fieldwork took about 6 weeks. Surviving that, I arrived at a fuller understanding of *nongmingong*’s sociality, their concerns, their offline and online life and the local economic situation. More importantly, I was able to adjust myself well to the rhythm of factory work and to build rapport robust enough for the next stage.

Nonetheless, proceeding in this way, I found my observation was limited to my production line and dorm, not least because of the assembly setting in the workshop. In addition, while most workers in my team were second-generation, the gender ratio was sharp. Also becoming problematic was the long working time, which is on average 12 hour per day, 6.5 days per week. While this used to give me enough time to gain consent and build relations, now it left me little time and energy to focus on research.

Facing these constraints, to get a broader and more balanced picture, in the second stage, I decided to keep the job, but shorten my work time to 8 hours a day and move out to live in the nearby migrant village, Luyuan. During the nights, I would hang around and observe and get to know and talk to new people where possible.

One useful strategy in this regard was to snowball from *Weida* colleagues. Confident about me, they offered their help without much reservation. Usually they introduced me to their close friends or relatives through WeChat. I would then follow up by

sending friend requests, visiting their rented place or hanging out with them for dinner or barbecue and beer. The strength of this strategy lay in that getting to know me through their trusted friends, they tended to also trust me more.

Another strategy was to join *nongmingong*'s online groups either through invitation or by the 'nearby group' function afforded by *QQ* or *Blued*⁴². These were often open groups loose in identity checks, organised by location, places of origin or interests. Compared to the first strategy, it significantly enhanced my reach, allowing me to meet a wider range of workers from different factories, industries and sectors, but it was less effective in securing trust and rapport afterwards. For practical concerns, I limited my scope to Luyuan.

In this second stage, I began to talk to more people and got to know more about what was going on outside the factory. For example, my landlord kindly introduced me to his friends who had worked in Dongguan for many years, and they shared with me stories about how local life and economy had changed over the past decades, their observation of *nongmingong*'s living conditions in Dongguan and the emergence of ICTs. The Didi drivers I met when using their services were also generous in sharing their own life experience, from which I realised that many had previously worked in factories. On the way back from the factory to my place, I often stopped in front of recruitment stalls set up by local labour intermediaries who seemed to recruit all year round; perhaps because of the lack of job hunters they were more than happy to talk with me. From time to time we drank beers, ate barbecue and visited massages shops.

In this process, I gradually built up a larger picture of working-class life and began to focus on several issues. Specifically, I narrowed down the focus by juxtaposing three lists, one about *nongmingong*'s life concerns, another concerning my observation of the ways in which they engage with (use or discuss) ICTs most frequently, and the last concerning ways of engagement with ICTs they found most relevant. By comparing the lists, three issue areas emerged: work-related engagement; family-related use, including binding the family together when physically separate and the education of their children; and digital media

⁴² QQ is a popular instant messenger app among *nongmingong*. Blued is a popular gay social media platform in China. I used it mainly because I also met some gay workers in the field.

consumption. These three issue areas informed much of the later fieldwork and interviews.

4.7 Capturing *nongmingong*'s ICTs-mediated practices, meanings and arrangements

4.7.1 Rationale and strategy

In previous chapters I stated that an important way this project breaks away from sociology of labour literature is that it recognizes that *nongmingong* are now working and living in an increasingly ICTs-mediated environment. And the key point about this ICTs-mediated-ness is that, given its particular relevance in Chinese society, being positioned by particular forms of ICTs, with particular forms of appropriation and engagement, with particular practices, meanings and arrangements realized, crystallized and legitimated over others, becomes increasingly essential to the making of *nongmingong* as China's new working class. Capturing these 'particular practices, meanings and arrangements' is therefore central to the fieldwork. In the following, I focus mainly on the methods and strategies I used to achieve this end.

Ethnographers who research Internet-related phenomena have long engaged in the trade of gathering data from online spheres (including Turkle 2005,2011; Baym 2000, 2015; Miller and Slater 2000; Bakardjieva 2005; boyd 2014). Methods handbooks and textbooks have been available for some time. Guided by different understandings of technology-human relations, driven by different sensitivities and aims, scholars have explored various methods and strategies to collect online data. Hine (2015, 2017: 320) summarised these works and argued that they fell into the "community-focused online-only model". She identified Baym (1995) as a pioneer of the model, where the author in her fieldwork observed an online soap opera discussion group's daily activities and discussions as an active participant, conducting interviews and surveys. All the data was achieved online – only occasionally did Baym follow the group's offline gatherings (see also Willison and Peterson 2002; Boellstorff 2015).

This was productive if the goal was to understand one bounded online group contained in one single software platform, mirroring traditional anthropological fieldwork. However, technological development, particularly Web 2.0 or the participatory web (O'Reilly 2005; Blank and Reisdorf 2012), increasingly challenges the notion of self-contained online groups as containing their own culture. The growing individualised ways users engage with the Internet and ICTs and the extent to which they have become embedded in ordinary people's everyday life has pushed this further. As a result, the 'community-focused online-only model' has largely been superseded by more 'exploratory' approaches.

Exploratory approaches, according to Hine (2017), avoid setting prior boundaries for the field site, but allow it to emerge as ethnographers engage with their research subjects and identify phenomena of interest to them according to the questions asked. Beginning with a decision about what to study, ethnographers adopting this approach will then follow it across boundaries and sites, deciding what might be the significant connections to follow, exploring its manifestations in different spheres, before developing an understanding of both online and offline behaviours in their embeddedness in each other.

This strategy effectively resolves the debates concerning the community-focused online-only model about the extent to which online observation and interaction alone are sufficient for a fully rounded understanding of the life of research subjects from their own perspective (Paccagnella 1997; Bengtsson 2014; Hine 2015). Building on the user-centred perspective, and associated with it, recognising the embedded and embodied nature of the Internet and ICTs, this strategy stays open to all kinds and degrees of engagements, relationship and articulations between human agents and ICTs, and triangulations between online and offline worlds.

Hine also reminds us how further advancement of pervasive digital technologies were likely to outmode exploratory approaches by rendering communications more or less ephemeral, less observable and more unpredictable, noting that explanatory approaches

face challenges as the Internet continues to develop in forms that deviate even further from a model of discrete field sites open to the ethnographer's gaze. Increasingly, online activities are not directly observable, as enclosed

password-protected spaces, proprietary ownership and apps that promote private interactions proliferate. The model of an observable, immersive Internet seems increasingly outdated. It is questionable, therefore, how far even a networked and multi-sited version of online ethnography is sustainable, if much of what people do online is out of sight to any but those directly involved. (Hine 2017: 320)

By reflecting on the notion of co-presence, observation and participation in this emerging technological landscape, Hine suggests that to achieve co-presence in a full ethnographic sense is challenging, and there exists no single solution that can fulfil all the requirements. What ethnographers can do, then, while recognising that any final decisions taken would inevitably reveal only certain facets of the overall situation and downplay others, is to strike a balance between different approaches:

observing what there is that is available to be observed and learning from the subjective experience of silences and frustrations that this entails; participating in one's own right and learning what there is to be learnt from this form of subjective experience; and asking participants retrospective questions about their experiences while accepting the inherent artificiality of asking people to verbalise features of their unspoken practices and assumptions. (Hine 2017: 323)

I agree that a carefully managed balance between these three approaches promises a fruitful outcome. However, what is new about this 'emerging technological landscape' needs to be contextualised, as does the challenge it poses to ethnographers working with different groups of people who engage with various forms of ICTs in a variety of ways. Ethnographers never actually manage to collect data about and understand fully each and every part of a particular culture, either in non-digital or digital settings. This is of course not to say that new technologies bring nothing new and need no development in methods to tackle them. Neither do I mean that awareness about the partiality of data collected due to certain method choices is not relevant. What I do mean is that to render the unobservable observable as much as possible and to negotiate a higher level of immersion and engagement to gather data that can better inform the issue in question has always been a crucial part of ethnographers' work. What I argue relates to the question of how this balance can be best achieved. In this regard, I believe that the rapport-building and self-

positioning endeavours of previous ethnographers to secure effective data collection while maintaining ethical approaches has a lot to offer.

In my fieldwork, this balance is achieved by dividing the fieldwork into roughly three stages. The first stage took place mainly in the factory, where I worked as *pugong* with the main task of building rapport and trust and self-positioning. In the second stage I moved out of the factory and expanded my scope to a wider range of people; I also followed my fellow workers back to their rural homes. This was because of their deeply translocal lifestyle – though not the place they physically inhabited, rural homes were at least equally as important, if not more so, as their urban destination. I used the final stage mainly to conduct interviews. Participant observation was carried out throughout the fieldwork, with different focuses at different stages.

In previous sections I have discussed mainly the first stage, mainly because it significantly shaped the scope of subsequent fieldwork and achieved balance, though not exactly in the way I anticipated. Initially, *Weida* was meant to be the main field site, however, this turned out to extend well beyond the shop floor. But this did not undermine my efforts, for the trust and rapport built throughout this process provided me with an effective lens to consider *nongmingong*'s everyday lives and ICTs engagement. More importantly, as workers I met tended to reserve trust in strangers, this experience of working as a *pugong* in *Weida* seemed to me the best way to secure trust from them.⁴³ This further cleared the way for later observation, interviews and home visits, where the main body of data was collected.

4.7.2 Participant observation

Organising participant observation on the shop floor was at once easy and difficult. As stated earlier, I worked in the factory as a *pugong*, entitled to no special treatment. Though factory work was itself dull and tiring, thanks to my colleagues' curiosity and hospitality and my previous experience with *nongmingong*, I quickly adapted myself to the intensive work, and became confident enough to insert myself into their conversations.

⁴³ Previous researcher largely resolved this by resorting to relatives and friends, though this might significantly compromise the scope of investigation. However, having spent most of my life in east coastal China, this approach was not an option.

Assuming a *pugong* role and following its routine was crucially informative. Following a *pugong* routine meant that at the factory I got up at 06:30, had a quick breakfast with them at the factory gate, and rushed to the workshop. Before work started at 07:30 there was usually a quick session where the forewomen summarised the team's performance, levelled criticisms or verbal reprimands and assigned new tasks. The day that ended at 22:00 was divided into three 4-hour sessions by one lunch break and one dinner break, lasting 90 and 60 minutes respectively. During each 4-hour session there was a 10-minute break.

This total immersion in their work environment first impressed me with the kind of alienation participants experienced in work. Experience speaks louder than a thousand words. By working with them, I was initially overwhelmed by how the hands of human beings were reduced to mere equivalents of machine handles, as well as how unimportant human intelligence, feelings, and even dignity could be in the pursuit of efficiency and profits in industrial production. It also exposed me to the kinds of structural constraints and hierarchies *nongmingong* faced on the shop floor, engendered by the factory management system, age, gender, and places of origins, among other factors, and how each of them reacted to these differences.

While some scholars have observed ICTs-free workshops, using ICTs during work, though not permitted, was actually not uncommon in *Weida*. It only became a problem when higher level managers conducted spot checks or when a prescribed production quota was unlikely to be met. During each 10-minute break, the workers would do nothing other than go to toilet, drink water and play with their mobile phones. Most of the time, several groups of female workers would form a small circle, discussing what they had recently bought online or good bargains that had recently become available, while most male workers played video games or read fantasy novels. At other times, they simply watched TV series or short clips from livestreaming platforms like *Kuaishou* or *XiguaVideo*. Another time I observed their ICTs use was during lunch and dinner breaks. Most of my fellow workers who lived outside the factory would stay in the workshop as the break was too short to go anywhere else.

It may be surprising, but the workshop toilet was where I gathered some interesting data. Some male workers would play video games for up to half an hour on the pretext of using the toilet. Two other such spaces were food stalls and dorms. Also

worth mentioning was an occasion that was productive for my observation when they turned to me for problems they had in using mobile phones and the Internet, especially where there was English language involved.

On top of all these opportunities for observation, I added most colleagues on my WeChat the first week I arrived. Occasionally technicians and *pugong* from other production lines and dorms, usually male, would strike up conversations with me and add me as their WeChat friends, so returned the favour. Topics of our conversations ranged from factory history to their personal experience. Apart from being yet another site for observation, WeChat was also an important site where I interacted with them and liked their posts. From time to time, I also hung out with them, where I observed the migrant villages and its surroundings either under their guidance or on my own.

On the factory floor and in the dorm, talk was often fast, rowdy, sometimes with heavy accents, and hence was often difficult to grasp. The noise of the machines only aggravated this situation. Having to stick to work, taking notes in such an environment was difficult, if not impossible. Any appearance of a pen and notebook was too 'bookish' and awkward, and only interrupted the scene. Since mobile phone use was tolerated, it was possible to jot down keywords. Where work was too busy, voice notes recorded in the toilet or staircase were made during short breaks. Since they knew about my researcher role, I always opted for note-taking methods that were least disruptive. This sometimes also included shooting photos and videos. All jotted notes were later written up into full notes after work.

One of the main dilemmas I faced was how to reach as many *gongyou* as possible. Production in our workshop was organized in the form of an assembly line. Limited types of jobs led to relatively fixed job allocations, as efficiency rather than workers' wellbeing was upheld as the prime concern. For the first two weeks in the factory, I was able to become familiar with only 8 of my 30 teammates. I tried to solve this predicament by actively initiating conversations with them during short breaks. However, 10 minutes was obviously too short for natural future follow-ups. Sometimes it just got embarrassing and I later asked the forewoman for help. She was helpful and sent me to jobs off the assembly line where possible. I also took over the *feijishou* position – the person responsible for repairing defective products – for two months when the previous person was away for corn harvest. I was worried

that doing this job would increase others' workload but was told that the managers counted me as half a person when calculating daily production quota.

Overall, observation throughout the fieldwork proceeded to adhere to the iterative-inductive loop established by O'Reilly (2015), among others. It moved back and forth between my concern about *nongmingong*'s ICTs-mediated experience and their own voice, and sociological theories of ICTs, user agency, class and labour. This iterative process prompted me to keep thinking about what they were concerned about and tended to talk about most regarding ICTs (see also section 3.6). It also informed home visits and interview guides. Writing different forms of fieldnotes proved to be helpful. Apart from fieldnotes proper, every 2-4 weeks I wrote scratch notes to evaluate past work and decide on what to do next (Emerson et al. 2011; Guo 2015, 2016).

4.7.3 Home visits

Home visits were carried out under the multi-sited rationale, as *nongmingong* life is deeply translocal. While spending most of their time working in urban factories, they do so mostly for purposes related to their rural home, for example, to renovate run-down rural houses, to buy new flats in nearby down town areas, or to pay for their kids' education. Many told me that should they have any proper work opportunity and make a so-so living they would not want to leave home. Besides, during the fieldwork, the workers constantly mentioned various governmental projects, some of them ICTs-related, that were going on back in their home villages. I was curious about to what extent they could participate in and benefit from such initiatives, and what the constraints and opportunities might be.

I did not have much choice in terms of where to go. This was on the one hand because of the tight timeframe. I interrupted factory work from early January 2018 when the workers one after another embarked on their journey back home – they had to come back before the end of February when the new year's production began. On the other hand, upon hearing my request to visit their home villages, while male colleagues were often quick to agree, female workers were more reluctant as bringing a man back home, especially during the spring festival, was regarded as shameful and unacceptable, often incurring rumours of extra-marital affairs. Xiaomei

was among those female workers who said yes at first. However, the day before I arrived at her home city, she texted me that her father would not agree. She then introduced me to one of her male friends, who offered unfailing help during my visit.

Altogether I visited three villages, among which one was in a city bordering Myanmar in Yunnan Province. It was the only city in the province that had no high-speed road links. The village, located deep in the mountains, was only recently linked to the outside by a concrete road. The nearest public transportation stop took a 40-minute car ride. Ads for e-commerce services provided by massive-scale Beijing companies could be easily spotted. Another village I visited was one formed mainly by ethnic Gelao and Dong. During my visit, under the support of local government, the village was making its 2019 tourism development plan. As a *haigui*, a returned graduate from overseas universities, introduced by *gongyou*, I was invited to contribute to the brainstorming sessions. The third village was in Guangxi, located in a mountainous area within 30 minutes' drive from the China-Vietnam border, with a mixed population of both ethnic Zhuang and ethnic Han.

The home visits normally started with my colleague's guided tour around the village, where I asked questions about their life experience and changes to the village since they were young. These talks were recorded with the participant's consent.

Occasionally I wandered around the village and the small town by myself, taking notes and pictures of the signs, slogans, billboards, industries and institutions, among other possible key nodes of the central government's recent 'Internet+ village' initiative, and asked questions where possible.

In one of the villages, I was introduced to previous village cadres who led and witnessed the village's development in recent decades, and schoolteachers and other villagers who just came back from work in other PRD factories. Interviews with them were informative, revealing a lot about the village's past, recent policies of development and education, as well as the left-behind kids. During the Guizhou visit, I talked to a previous worker who now ran his own online shop on Taobao.com and we discussed the policies, opportunities and obstacles he faced. These interviews were not conducted in a one-to-one form. Usually taking place in the interviewee's home, it was actually open to any passers-by and unexpected participants who would chip in from time to time.

4.7.4 Interviews

I conducted mainly in-depth interview, rather than opportunistic chats or group interviews that are also commonly used by ethnographers (Skinner 2012).

Interviewing as a method has a long history in the field of media and communication studies, particularly in audience studies. It is widely recognised for its critical potential in “giving people a voice”, for its nature as a “discursive generator for obtaining an insight into the interpretative repertoires at the disposal of the informants as they make sense of a specific media product”, and ultimately as “a vehicle for bringing forward the media-induced meanings of the informants lifeworld” (Schröder et al. 2003: 143 , cited in Livingstone, 2010).

I conducted my first interview before I started factory work. It was with Leo, Yuan and Chen, the manager, and was mainly about getting a sense of the economic and migrant situation factories like *Weida* faced in Dongguan. Most of the interviews were conducted at the last stage to gather data about less observable engagement with ICTs, and the subjective meanings associated with this.

Altogether I conducted 45 interviews. All interviewees were born between 1980 and 2000, with only two after 1995. Most female interviewees were married while almost half of the men were single. I tried to keep a gender balance but was not able to achieve it. Among the 45 interviewees, only 18 were female. This was mainly because of my identity as a male researcher, which I will reflect on later. 20 of the 45 interviewees were recruited from *Weida*, with 15 from my team, 1 from the engineer team and 4 from other production teams. Rapport and trust built in the first stage played crucial roles in securing these interview opportunities as well as a reliable outcome, especially given participants’ limited amount of free time.

Other interviewees were enrolled mainly from two sources. First, snowballing through the introduction of *gongyou* at *Weida*. That they often introduced me to only their closest friends and relatives mitigated the lack of prior rapport-building. Second, through introductions by my NGO friends. Earlier I discussed my engagement with Shenzhen’s labour NGOs and why I did not choose NGO as my field. My worry was mainly with the implications their engagement with NGOs might have on them. However, I did visit the NGO a lot during the fieldwork. The

rapport and trust relations with the workers there developed during this process was mediated by the NGO and was very strong. Their closest friends and relatives hence made good interviewees. In the actual interview process, I usually started by greeting them, mentioning my relationship with our common connection, and talked a little about what I had learnt about them from *gongyou*, before presenting them with the consent form.

In the first few interviews, I talked my interviewees through the consent form immediately after the quick rapport-building hook, before asking them to sign it for me. The interviews were generally divided into two parts. In the first part, I mainly asked questions about their life history, work experience and concerns, as well as their personal experience with various forms of ICTs (landlines, pagers, non-smart phones, PCs, among others) from when they were young and how it related to their migratory experience. Usually this took 20-30 minutes. The second part was longer. Its actual length depended largely on how intensive the interviewees used ICTs, and normally lasted between 45-60 minutes.

The second part of the interviews largely borrowed the ‘thinking aloud’ procedure that is widely used in the computer industry to gather data in usability tests in product design and in academia in researching computer-mediated human communication. By definition, the thinking aloud method consists of asking people to think aloud while solving a problem and analysing the resulting verbal protocols (Someren et al. 1994). Its strength lies in that it requires the participants to express their thoughts verbally or in other meaningful ways (for example, body language). While for product design purpose researchers often ask subjects their experience with certain functions or content, I approached this in a slightly different way. Given my aim to gain a more comprehensive and deeper understanding of their ICTs use and subject meanings, I first asked them to talk me through their phone, and then narrowed down the focus on frequently used apps or functions. Where permitted, I took pictures of their app use histories, among other archival information. Where accessible, I dug deep into certain interesting connections in their social apps, pictures or videos they saved or starred, getting them to describe certain shows or short video clips they often watched. Where relevant, I interrogated how certain uses of app led to both constraints and livelihood opportunities to them.

A good venue is important for interviews, qualitative interviews in particular, for certain environments may have an impact on the interviewee's willingness to talk, and what they decide to reveal (Spradley 1984). I hence asked the interviewees to pick anywhere they felt comfortable and was quiet enough to talk. Due to the general lack of public spaces in migrant villages, most interviews ultimately took place in their rented rooms.

As the interviews went on, some changes were made to my approach. The request for written consent forms was not well received in most cases and even straightforwardly refused in several, as it added a hint of officialness, inviting worries about a hidden governmental agenda in China's unique political climate (see Heimer and Thøgersen 2006). It also consolidated existing power differentials arising from educational status, or more broadly, social status in general. The relaxing and relatively equal vibe so meticulously created and maintained suddenly became nervous and embarrassing. Therefore, I later opted for recorded oral consent.

The question guide itself also underwent considerable change. At the beginning, it was relatively simple and consisted of only few very direct and general questions about the participants' uses, feelings, impressions and meanings. I did this because I was aware that any clues about my motive I offered might distort their answer in a certain direction. However, most of the time, they found such questions difficult to answer, for they were not specific enough, and there was no obvious clue about what to follow and where to focus. This was especially problematic given most of my interviewees were not used to an interview situation. I hence opted for a more engaging approach: using my accumulated knowledge about them to provide clues where needed and asking for anecdotes and more descriptive details rather than abstract opinions. This proved to be productive in bringing out surprising stories, points and articulations.

4.8 Thematic analysis and presentation

After the fieldwork, I found myself faced with a massive amount of data, which included fieldnotes – most in written forms and others in audio recordings – 45 in-depth interviews, many other talks recorded with Didi drivers, labour intermediaries

and during home visits, as well as the artefacts, apps, digital media articles and videos that workers shared with me or talked me through during our interviews.

From July 2018 on, I spent nearly 5 months transcribing most of the recordings in full length in Chinese. In the meantime, I conducted some initial analysis of this data by jotting down some initial notes and thoughts about the themes, and this was informed by impressions I derived from the analytical notes I wrote during the fieldwork as well as the research questions, the literature review and the conceptual framework. In parallel, I also carried out some complementary data collection to generate insights into the practices and social arrangements that give rise to the technologies.⁴⁴

Based on the ‘themes’ that thus emerged, after this initial stage, I used NVivo 11 to assist coding. This round of in-depth thematic analysis dealt with mainly fieldnotes and interview data, and was carried out in principle in an ‘ethnographic’ manner, primarily from bottom-up, but blended deductive with inductive parts. I first grouped a number of larger sections of texts in the data under the initial themes identified in the transcription stage and identified some key protagonists in each category, to which I further linked texts about their life and work experiences to provide a background and a device of corroboration for interpretation. On top of these, I was aware of my limits as an ethnographer and that of the theory and initial conceptual framework, so I also kept a close eye on new themes emerging. After the first round was done, the data was broken down to become more manageable. I then further coded each section of data under the themes with several nodes. Finally, I drew links from the themes and nodes to theories and concepts from my theoretical framework.

The presentation of the empirical findings was done with the aim to convey an ‘ethnographic’ flavour and to enable the workers interviewed and studied to tell their own stories and speak for themselves. Because they were not ‘good’ interviewees in the sense that they were not very articulate and narratives were often fractured – with some questions initially answered, then broken off, before suddenly being returned to at a later point – in such cases I carried out a synthesis on the narrative to make it more readable, based on my knowledge of the particular interviewee and reflection on the context of the interview. Moreover, since each and every story was equally

⁴⁴ This included relevant government reports, company profiles, policies and annual reports, third-party industrial reports by consultancies and other investigation agencies, and media stories.

important and exciting to me – despite sharing similar social positions, it was difficult to choose between them in the presentation of results. Further, there was also limitations of length to consider. While trying to achieve a balance between thematic analysis and ethnographic storytelling, I tried to present as many of their voices as possible and using long quotes when needed.

Chapter 5 *Nongmingong*, ICTs and work (I): Between the factory and the platform

5.1 Introduction

I got to know Rizuo on my first day working at *Weida*. Because he seldom joined our idle chitchat on the assembly line and his eyes kept wandering into nowhere even when named and shamed during morning meetings, I had always thought he had a shy and introverted personality and that he got emotionally drained in social settings. It was not until four months later when he resigned that things began to reveal themselves to me.

One day in mid-December, he suddenly asked for one month's leave – at *Weida*, and perhaps for migrant factory workers in general, this was a strategy to resign without losing one-month's salary withheld by the factory. On that night I was writing fieldnotes alone in the dorm when he came back a little tipsy from dinner. By means of Dutch courage, he began to complain about *Weida* while packing for his train the next day. Previously, his plan was to resign at the end of December, but now he decided to leave earlier because he felt embarrassed and humiliated by Laocheng, our assistant line supervisor, who rebuked him sternly and openly that afternoon because he performed a new task slightly slower than others.

I quickly grabbed some beer, *latiao*, spicy gluten sticks and roasted peanuts from the convenience store downstairs. Accompanied by the groan and clank of factory machinery from afar, we talked for several hours. It did not take long for the talk to evolve into a quasi-interview situation, where I asked him about his work and life experience, and he asked about mine. He confessed that Laocheng's harsh words were just a trigger and his decision to quit owed more to his deep-seated aversion to factory work in general. He was reticent not because of self-absorption, but because, having worked in factories for 20 years, he had learned not to expect too much from his colleagues. Burying his head in work and getting his money without engaging much in his surroundings only made things easier for him. Nevertheless, he did reveal lingering nostalgia for the long-gone 'golden old times' he spent working in a football factory 10 years earlier where the foreman treated him like a brother. Overwhelmed by his emotion, I quickly switched to asking about his plans for the

future. He answered without much hesitation: “Well, I hope to start my own business. Nowadays, it is getting more and more difficult to do so. What do you think of online business? Which industry is the most profitable?”

During the 10-month of fieldwork, I had numerous such conversations with people I met. Though in different ways, most saw ICTs-enabled work and livelihood opportunities as an alternative to factory jobs. They invested much hope in ICTs to change their heavily exploited, precarious and floating conditions, particularly in a time of economic volatility, rampant precarity and ‘restructuring through networking’. In this chapter and the next I examine their choices, strategies and experiences in detail, based on which I discuss the opportunities and challenges ICTs afford *nongmingong* in terms of income, working conditions, upward mobility, and struggle and the formation of class-based solidarity in present-day China. The theoretical framework I draw on is that of labour regimes and politics of production, as I have laid out in previous chapters.

5.2 Why ICTs-enabled jobs? Financial gains and beyond

Xuanfa was in his mid-20s but looked older in his grey Odidos⁴⁵ T-shirt and paint-splattered cotton shorts. I would not have guessed he had been married without his telling me, as marriage had become increasingly difficult for male *nongmingong* (Murphy et al. 2011). He and his wife Shujuan first met online five years earlier, and he decided to marry her after she travelled all the way from Foshan to Dongguan on her own to meet him with unreserved trust. Until they married in mid-2016, both worked as *pugong*⁴⁶ in a toy factory, each earning 2,000-3,500 yuan per month. The job was okay, but the household income seemed modest when they considered having a child. Hence, Xuanfa decided to take up work with Didi while keeping his job:

We invest all our savings – the betrothal gift and red envelopes from friends and relatives during the wedding – to make the down-payment for an SUV. Nowadays, gongchang yuelaiyue buhao zuo, factory work is getting worse. We have to find a way out.

⁴⁵ A copycat brand of Adidas.

⁴⁶ Rank-and-file workers, the lowest rank within the factory hierarchy.

Shujuan, on the other hand, set up a *weishang* account, a micro business, selling a range of products from cosmetics to menstrual pads.

Of all my informants, around 80% reported experience with ICTs-enabled jobs. Most of them, not unlike Xuanfa and Shujuan, stuck with factory jobs while taking advantage of ICTs-enabled jobs as a side-line. Others quit the factory to begin afresh in digital sectors. Difference in strategies aside, when asked why they made this move at all, Xuanfa's complaint about factory work getting worse was almost always the most immediate and common response – so much so that it even made a good icebreaker later in the fieldwork.

When pushed further on what it was about factory jobs that was getting worse, two different yet related answers emerged. One was the unstable and falling overtime hours, which meant a significant decline in income at a time of surging prices. The other was that, because of the declining income, for many, the unfettered despotic managerial and disciplinary practices prevalent in these workshops (Lee 1995; Chan 2008) became less bearable. If previously they were more tolerant because of the modest wage, now such despotism only added insult to injury. As Guixiang's jail metaphor made clear:

working in factories is like serving sentence in jail. You cannot even see the sunlight much. If under such conditions they cannot even offer proper salaries, why should I still put up with it? I am no doormat anyway.

A crucial reason for irregular work arrangements and reduced income had to do with the larger political economic changes in the recent decade. In response to the aggravating economic, social and environmental crisis descended from its export-dependent economic miracle in the 1990s, from as early as the mid-2000s. A number of labour-favouring and environment-protecting legislations were introduced and implemented more fully than before (Gallagher et al. 2015; Lee 2016). More recently, especially after the 2008 global financial crisis which led to a slump in demand from the North and the looming Sino-US trade war, the state further pursued a range of policies to upgrade and transform its economy into one driven by domestic consumption and innovation to finally move the country upward in the global value chain and reclaim economic self-reliance (Hung 2013; Hong 2017). As a result, most of the manufacturing industries in the PRD saw a rising labour price,

dwindling orders, more stringent environment and labour law enforcement, and less favourable policies from the state, at both local and central levels.

To mitigate the negative influence, profit-seeking companies have adopted various strategies. Some relocated for lower labour and environmental costs. Popular destinations include China's inland provinces and Southeast Asian countries like Vietnam and Cambodia (Fan 2018). Roy was a veteran export merchandiser in Tangxia who I got to know at a barbeque get-together in a local *dapaidang*, cooked-food stalls. As one of the few English-speaking merchandisers in town, in recent years he had received many job invitations from relocated workshops in Cambodia, Philippines and Thailand. Other companies opened new branches in cheaper destinations while steadily cutting production in Dongguan. For example, *Weida* opened a new plant in 2015 in Yanbian, a border city in Northeast China, and another two in 2018 in Thailand and Hubei Province, China. *Weida's* manager Yazi told me that her Taiwanese boss planned to gradually close down the Dongguan compound in three years, and instead start a primary school until the end of the 50-year contract of land use.

Still other companies tried to restore the low-cost production regime by working with labour intermediaries of all sorts to diversify labour use strategies and enable flexible use of cheap labour, for example, dispatch agency workers, student interns, older workers, workers from ethnic minority groups, clandestine workers from villages on the Vietnam-China border, among others (Su 2010; Pun and Koo 2015). Another common strategy was to put contracts out to small, informal workshops. This is reminiscent of the same workshops Shieh (1992) documented in deindustrialising Taiwan. Usually run by former factory forepersons, these workshops were located in residential areas with cheaper electricity and water, and further reduced costs by bypassing strict labour rights and environmental regulations. Against this backdrop, financial gains became the primary motivation *nongmingong* sought for ICTs-enabled jobs. Yet, as stated earlier, their actual decisions about whether and what to engage in was both strategic and diverse, and a closer examination revealed a highly class-based and gendered pattern.

Most of my female respondents were married and held *pugong* positions. I was rather shocked to learn that 20-year-old Xiaomei, my colleague at *Weida*, was

already a mother of two 5-year-olds, and she told me that girls in her village had to marry to be allowed to *dagong*. Two types of ICTs-enabled jobs popular among them were *rijie* and *weishang*. *Rijie* literally means ‘jobs remunerated daily’, while *weishang* is a feature in WeChat that allows users to sell goods and services to their contacts.

For Shujuan, to conduct *weishang* was a practical choice. Before marrying Xuanfa, she was a skilled sewing machine operator in a garment factory in Foshan, an industrial city in the PRD. This meant she could have doubled her wage by moving to the apparel industry in Guangzhou. But she decided to give up and stayed with her husband because of the responsibility she felt as the wife of the family:

If I am single, I will definitely go... it is a good opportunity. But married now, I should do what a wife is supposed to... to bind the family together... Recently, my mother-in-law urged us to have a child...

Jihong’s husband was a vice departmental manager at Foxconn. This had allowed them to bring their kids to Shenzhen. She was just back home after picking up her daughter from kindergarten when we met at Dili, an NGO providing support for migrant mothers. In our interview, she described her life in the past five years as “centring around my two kids”. She had left Foxconn since becoming pregnant, and like Shujuan, she gave up a clerk position at Foxconn two years earlier and proceeded with *rijie*. This is because *rijie* gave her the flexibility a clerk job could not, that would allow her to practice her mothering role:

...myself left-behind, I knew exactly what it was like... grandparents have so many kids to look after and often pamper them... No matter how difficult life is for us adults, it is worth it. As a mother, I want them to grow up healthily, get proper education, have a decent job...

Jihong had also tried *weishang* before but found it unprofitable for novice, unskilled traders like herself and it did not fit into her routine as a working mother. By contrast, *rijie* seemed to her more stable and practical, allowing her to juggle work with parenting:

I gave up weishang because I wrote no attractive ads and had few WeChat contacts... most importantly, it required instant response and hence did not fit into my routine... by contrast, rijie offers a stable, fair income. More

importantly, you can ask for leave whenever you want. Nowadays, you never know when the kindergarten needs you there.

For Jihong, the decision that she, rather than her husband, made career changes to take care of the family was natural. In our conversation, she admitted never thinking that the gendered division of labour within the family could be the other way around, although she did regret giving up the clerk position. Perhaps because she felt the need to justify her sacrifice to a stranger, she quickly added: “reaching mid-30s and poorly educated, we are abandoned by the society. There is nothing much ahead of us. Our hope is with the kids anyway”.

If for Shujuan and Jihong, femininity meant family responsibility and motherhood, for Jincai and other younger women, this was defined more in terms of individual development and independence. Jincai never set foot in her husband’s village after their wedding ceremony, for she could barely get along with him. Rather than a product of true love and willing consent, their marriage was more a product of her parents’ wishful thinking that his family background could secure a decent and happy life for her. This was why she decided to discontinue her pregnancy in early 2018 without her husband’s knowledge. For Jincai, work was a weapon through which she could shake off the shackles of unwanted marriage and the patriarchal family. She considered ICTs-enabled jobs before but could not find anything suitable, for *Weishang* was unstable and unprofitable, while food delivery and Didi were unsafe and physically overdemanding. And besides:

...these jobs mean heavy workload and exposure to blazing sunlight. You age quicker and people turn their noses up at you. Although I do not like my marriage now, I do retain high romantic expectations about future marriage!

Among male workers, the decision varied across different marital statuses. Like married women, married men often undertook ICTs-enabled jobs as a side-line. Here, the gendered division of labour reasserted itself. Because of the perceived main breadwinner role within the three-generation family, they generally preferred ICTs-enabled jobs that generated steady and higher income, for instance, *rijie* or Didi. During interviews, it was not uncommon to hear complaints about the dreadful pressure to earn a living.

A *pugong* in his 30s, Liufeng's eyesight was very poor because of long-time working under fluorescent lamps on the assembly line. When I expressed my concern about his safety since he usually, after a normal 12-hour working day, continued to work by Didi late until after midnight, he turned to me, his voice wavering:

*Life is so difficult... My wife and I used to earn... 100,000 a year... I have a son in middle school and a daughter in vocational school. Tuition fees add up to 10,000, living expenses 30,000, and there are arbitrary fees. My daughter... begins to care about personal image, and I do not want her to feel inferior... My parents grow vegetables and raise livestock to feed themselves, but medical bills are growing... Besides, we have the irrationally high *renqing-wanglai*⁴⁷, up to 500 each time... Every year we have to be super thrifty to save some money, but the price is growing in our hometown, even more expensive than Guangdong...*

Such pressure allowed participants little space to experiment with ICTs-enabled jobs, trapping them in an infinite loop. As Chaoming confessed:

*I thought about becoming a full-time Didi driver or doing *huolala*⁴⁸. These were more profitable, but I never really get there... We post-80s are the backbone of the family and bedrock of the society... there is little space for trial and error. We cannot afford any failure. You may even lose your wife. After all, *pinjian fuqi baishi ai*, everything goes wrong for poor couples.*

In contrast, without a heavy family burden, unmarried young men were bolder and more active in exploring the opportunities afforded by ICTs. In justifying this preference, most invoked factory experience, with detailed reference to heavy workload and inhumane management. More importantly, factory work promised nothing but a gloomy and bleak future, which was particularly undesirable for those who began to think seriously about the future or aspired to become the pillar of the family. The desire and pressure to *erli*, become established, was repeatedly mentioned during interviews. For them, "people in factories are short-sighted and inflexible", "factories are attractive only because of *changmei*, female workers"

⁴⁷ Reciprocal gift-giving in order to maintain *guanxi* networks.

⁴⁸ An app operated by lalamove, a Hong Kong-based on-demand logistics company.

(Junfeng, in interview), and “you earn as little as you spend and can never save enough money to learn skills for a sustained livelihood” (Nian, in interview).

In contrast with the language of boredom, ridicule, unfairness and anger they used to describe factory experience, typical words associated with ICTs-enabled jobs were ‘freedom’, ‘interesting’, ‘feeling good’, and ‘tiring but better-paid than factory’.

Dazhong was 22 and had spent seven years at *Weida* after dropping out of a local vocational school in his home county in Guizhou Province. Because his mother was a forewoman here, his factory experience was less stressful and arduous. But even with this privilege, from 2014 he had quit three times to work for Meituan. Just before I left the field, he quit again and started a new job in Shenzhen, again in food delivery. For him, although the delivery job was no less onerous, the temptation of freedom and the feeling that “you are not treated unfairly and scolded at all times” was irresistible. For Haonian, working as a deliveryman allowed him to meet new people every day and stay open-minded; it gave him the hope to save some money for a course on auto mechanics offered by local repairmen in his home county, as he was “still young and could work for longer to earn more” (Haonian, in interview).

So far, I have explored the context, strategies and reasons for *nongmingong* engaging with ICTs-enabled jobs. In a time of transition, as the state continued to be derelict in the reproduction of labour power (Pun and Lu 2011), *nongmingong* who were increasingly proletarianized had no choice but to rely on alternative sources of income to sustain their lifestyles. In this link, ICTs-enabled jobs emerging from the state’s and capital’s deployment of ICTs to channel class conflicts and reduce costs presented themselves to *nongmingong* as a feasible option.

Specifically, concerns related to gender, marital status and family underlie *nongmingong*’s strategies for navigating the new working-class labourscape. Difference in class position defined in terms of skill levels or managerial rankings within the factory did not seem to have much effect at this level, but as I will demonstrate, it did so when it came to their subjective experiences of production. On the one hand, married men saw themselves as breadwinners, seeking extra income with minimum risks and uncertainties. They kept their factory jobs, picking up ICTs-enabled jobs as side-lines and working as many hours as they could for more money. On the other hand, younger men aspired to fend for themselves and ‘become established’. Supported by their families, their concern was to explore new ICTs-

enabled possibilities to finally secure a stable income for the future. Also engaged in ICTs-enabled jobs, they nevertheless entertained no long-term hopes for them. Instead of a permanent, secure way to make a living, they saw ICTs-enabled opportunities more as a makeshift arrangement through which they could work longer and harder to more quickly amass a fortune for later skill attainment. By contrast, female *nongmingong* tended to define femininity in relation to the three-generation family and motherhood over themselves as individuals. Because of their heavier role in reproduction and lighter role in production – if we are to retain this problematic division for now – for them, ICTs-enabled jobs were supplementary, though their contribution to the family’s income should not be underestimated. But this did not apply equally to all women, for some did define womanhood in terms of individual independence and autonomy, and this was found more often among younger women without children than otherwise.

But were the *nongmingong* happy with their new working lives? If so, why did Dazhong keep coming and going between factory and food delivery? How possible was it for Haonian to save enough money through ‘hard work’ as he wished? In other words, to what extent did these freedoms and needs, generated and partially satisfied amid the social transition of production, represent a genuine alternative? Was it a paradise of flexibility and individual freedom, or was it wholly contained within the reproduction of capitalist relations and representing yet another world of exploitation and conflict? It is from here I turn to an analysis of *nongmingong*’s subjective experience at the point of production.

5.3 Multi-jobbing

By ‘multi-jobbing’ I refer to the cases where *nongmingong* kept their factory jobs and took up ICTs-enabled jobs as a side-line. Among my respondents this was major strategy, with 50% doing so, and the options mainly included *weishang*, *rijie* and Didi. Around two thirds of the multi-jobbing women I talked to reported experience with *weishang*, but only two lasted in the role until the point we talked, with others soon opting out. They then turned to *rijie* for a more reliable option. *Rijie* was also popular among men, especially male *pugong*. More than half of the multi-jobbing male workers I met reported doing *rijie* regularly, while only three registered with

Didi. All other part-time Didi drivers I talked to assumed lower managerial positions in factories.⁴⁹

From the labour process point of view, multi-jobbing signals a shift in the institutional arrangements and ideological structures within which work is organised, managed and regulated among *nongmingong*, a shift that transports them from a singular factory regime to multiple combined production regimes. But this does not mean their subjective experience of work can be fully captured simply by the two together. Rather, they reinvent and combine these jobs strategically to their own ends and interests. This leads us to the question of what each job means for them.

As noted earlier, most *nongmingong* took primary factory jobs and supplementary ICTs-enabled jobs. They continued to spend most of their working time on the shop-floor and factory wages continued to constitute the bulk of their income. Most looked for alternative jobs only when factory jobs no longer paid their bills. Thus, my time at *Weida* allowed me to explore the world of factory work as the *nongmingong* experienced it.

5.3.1 Factory work in a time of transition

5.3.1.1 Managerial despotism and the politics of core/periphery and gender

Before going into more detail about *nongmingong*'s subjective experience of the changing labourscape, I first provide a brief account of how work is organised in factories in this transitional moment. Writing in the Chinese context, labour sociologists have characterized various factory regimes that co-existed and evolved under the permissive banner of market socialism throughout the period of reform. Since no fundamental shift has taken place in the mode of labour reproduction and enterprise relations to the state and the market, it is useful to base my account on this existing work.

Lee (1999) traced patterns of change in factory regimes engendered by SOEs reform as they were embodied in reform politics and practiced by managers and workers. She observed a shift from Walder's (1986) neo-traditionalism and organized dependence to what she called 'disorganized despotism'. Whereas in the socialist

⁴⁹ Two other options also widely adopted by men were takeaway drivers and Huolala moving specialists. Unfortunately I was not able to meet many involved in these roles during the fieldwork.

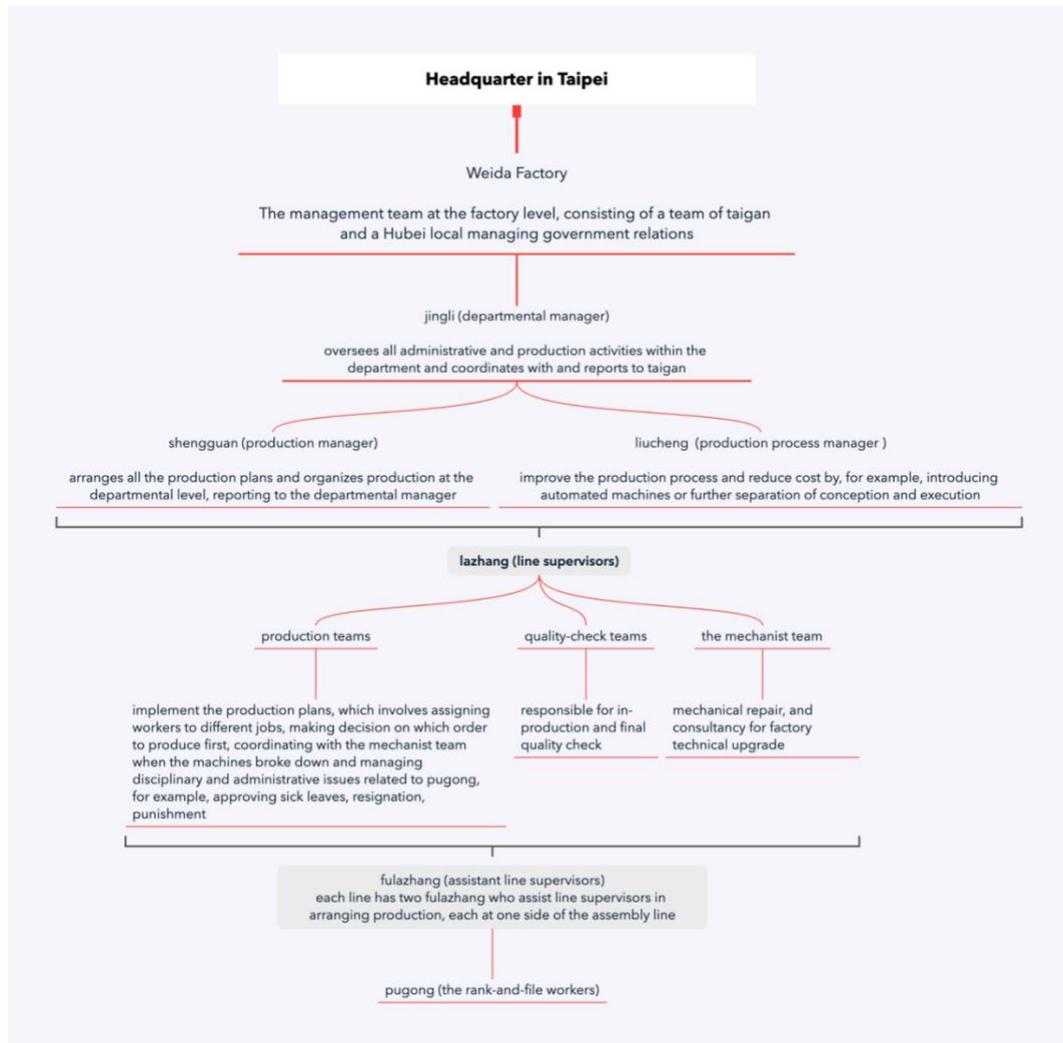
era, SOEs operated with the state as a monopolistic redistributor providing employment security, material support and superior political and social status in exchange for workers' political allegiances, the reform resulted in the withdrawal of the state's financial and institutional support and the increasing role of the market in organising and regulating production. The state became external to the point of production and assumed a legislative and regulatory role. A relatively independent labour market encompassing hitherto divided rural and urban populations was installed, which, together with increasing enterprise autonomy, led to unfettered managerial domination over state workers as much as *nongmingong*.

In a similar vein, Lee (1996), Pun (2007) and Zhou (2007) focused on private entities in a time of rapid economic growth. They found that despite the lack of state provision of social security and welfare, backbreaking work and low wages, labour processes in these workplaces was sustained in a despotic way. In Lee's Shenzhen factory, this related to 'localist despotism', an internal system of power based on regional politics and kin connections. On Zhou's construction site in Beijing, there was *guanxi* despotism, where the contractors strategically exploited *laoxiang*⁵⁰ relations, kinship and friendship to create identification, loyalty and consent. Pun and Smith (2007) explored the dormitory as a site of control and resistance where capital sought to secure and maximize surplus labour by flexibly manipulating and exploiting workers' leisure time. They hence drew attention to the dormitory labour regime as a mechanism that deepened workers' alienation. Chan (2010) wrote in a time of labour unrest. He coined the term 'contested despotism' to capture a situation where despotism prevailed while state intervention and collective action became increasingly commonplace.

At *Weida*, I observed a similar despotic regime. *Weida* is the manufacturing site of a Taipei-headquartered electronics company. It has four manufacturing departments and runs a time-rate payment system. The executive team comprises a group of *taigan*, Taiwanese managers, that oversees its overall production, administration and communications. The only exception in the team is a Hubei local who manages government relations and plays a minimal role in production. Below *taigan*, each

⁵⁰ The same place of origin.

department has a team that oversees day-to-day production. The diagram below shows *Weida*'s managerial structure.



In Manufacturing Department I, slightly different from the male dominance of managerial positions in Chan's (2010) factory, the majority of the managers were female, except for *jingli* and *liucheng*. Women also constituted the bulk of *pugong*: among the 28 *pugong* in the Panel line I worked, only five were male, including myself. As a result, there was a distinct gendered division of labour in production in which men were assigned to physically demanding tasks like packaging and moving boxes and women to those requiring extreme care like pin insertion and quality checks. In terms of place-of-origin, while most high-level managers came from Yongzhou, Hubei, around 30 lower-level managers and *pugong* came from eight

different provinces in Southwestern, Southern and Central China.⁵¹ All *lazhang* and *fulazhang* were promoted from *pugong* out of familiarity with production routines, management ability, *guanxi* or a combination of these factors. Previously, Dazhong was appointed *fulazhang* but was soon replaced by a former worker because of his inability to manage. Disciplinary rules were based on fines, but these were only loosely implemented amid a high turnover rate.

This managerial structure, demographic composition and division of labour, I argue, gave rise to a despotic factory regime with an internal power structure marked by the politics of core/periphery and gender.

In actual production, it was usually *fulazhang* who allocated tasks and implemented discipline. But as their formal role was limited to task allocation, if *pugong* disobeyed their instructions, they could do little more than report to *lazhang*. However, it was not in their interest to do so, for reporting too much suggested an inability to manage. Meanwhile, it was also not in *lazhang*'s interest to strictly carry out the rules, for that slowed down production, which would in turn affect their performance and bonus, and higher-level managers would *diao* – openly and mercilessly rebuke and scold – them. In fact, so long as the goals were fulfilled, it was in none of the local managers' interests to enforce the rules too closely. This explained why most of the time it was *lazhang* who warned *pugong* of *jingli* or *shengguan*'s inspections, and thus they seldom conducted inspections unless the production rate dropped or *taigan* visited.

Caught in-between, *lazhang* and *fulazhang* responded by forming their own core groups. Whether one was core or peripheral depended as much on contribution to production as on relationships with the management – kinship and friendship were more effective while place-of-origin was less so. Core workers often consisted not only of close friends and relatives of *lazhang* or *fulazhang*, but veteran workers familiar with production routines, skilled workers taking key positions requiring much experience with a specific task and those who were hardworking and obedient. Usually, they were treated with more tolerance and granted more freedom. Because of the disproportionately small numbers of male workers, they often belonged to the core only if they performed modestly.

⁵¹ These were Yunnan, Guizhou, Guangxi, Sichuan, Hu'nan, Hubei, He'nan and Guangdong.

While most of my respondents worked in foreign-invested factories like *Weida*, some came from family-run factories where the management was made up of the boss' close relatives.⁵² In these factories, similar managerial despotism and divisions of core/periphery and gender existed. A key difference was the nature of management-capitalist relations – in the latter, the interests of the two were closely merged. Therefore, managers would do whatever they could to maximize productivity and extract surplus labour.

5.3.1.2 Heightened control and calculated consent

Working under managerial despotism and workplace politics at a time of economic turbulence, when asked about their experiences, many first mentioned unstable work arrangements, lack of overtime hours and negatively affected income. This was a result of global and domestic market changes; it also set in motion a **mechanism of temporal governance** at the point of production, enabled by unfettered managerial power, which in turn gave rise to a heightened sense of antagonism between their interests and that of the managers as individuals.

At *Weida*, this had meant tasks were arranged in time slots when the hourly rate was lower.⁵³ Jincai's average monthly wage in 2017 was as little as 2,500 yuan and she attributed this to the 'always plotting' production manager:

she was very crafty, never considered for us, never gave us more overtime... we gave her the nickname Yazi, duck, for she would do everything... to please Manager Chen, her boss. We could work overtime... only when machines broke down or when there was a rush order.

I was confused by their use of the term 'duck' to ridicule the production manager since in Chinese, 'yazi' as slang often refers to male prostitutes. Jincai explained that this was because she had a raspy voice that sounded like a man, and that her family

⁵² I did not visit every one of the factories in which my interviewees worked. Instead, I asked them to describe key dimensions of the production regimes in their respective workplaces, including the rate system, capital-management structure, and demographic composition. Where they were less articulate, I drew on my own experience at *Weida* and asked them to compare their experience with mine.

⁵³ It is useful to provide some background about the complex composition of *nongmingong* wages. Usually, a *pugong*'s wage is made up of five parts: 1) the minimum wage set by the local government and meant to remunerate jobs performed during the legislated five eight-hour workdays; 2) workday overtime when the hourly-rate is 1.5 times the minimum wage; 3) weekends when the hourly-rate is twice the minimum wage; 4) holidays when the hourly-rate triples the minimum; and 5) social welfare and bonus – at least half of the monthly social welfare fee: the bonus is usually calculated by seniority and the nature of tasks performed, especially the level of skill involved.

name was Tang, the same as the popular Disney character ‘Tang Laoya’, Donald Duck.

At *Sanko*, a family-run factory specializing in producing watch bracelets, the production manager was the boss’ younger sister and the general manager was his wife. For Yongjuan and her colleagues, the situation had recently become their nightmare. Because of the heavy pollution it produced, *Sanko* became the target of the governmental-led campaign to clear away ‘backward industries’ to make space for more advanced ones, with its production constantly disrupted by planned electricity and water outage at only very short notice:

She is indeed buhui zuoren, untactful. Where they were given short notice of water outage by the government, she gave us short notice for rest. Where she suffered some loss, she got it back from us. Last month, for four days in one single week, she deliberately gave us excessive amount of work. When we failed to finish it all in due time, she made us work extra hours without due remuneration. If the outage was on workdays, she called the day off but hailed us back to work on weekends without paying the higher rate.

Overtime was also used by the managers as leverage to contain complaints of unfair, sometimes law-violating, treatment of workers. During our three-hour interview, Xiaoping spent 40 minutes complaining about how, after she refused to sign an illegal agreement, her managers made things difficult for her by not assigning her overtime hours:

...[it] goes that if we had any unreported diseases, the company can be exempted from paying our severance package. You know, we dagongde always have diseases of this or that kind. I had high-blood pressure so refused to sign. I managed to defend myself after arguing with jingli. But since then, I hardly had any overtime.

Under such heightened control, many of the workers still chose to stay with their factory jobs. For Mianbange, this was because he did not believe jumping to another factory helped improve their conditions: “factories are factories. It is the entire economy that goes wrong, not this particular factory. Besides, although many factories are recruiting, they are only interested in temporary workers. Why bother?” Kaiping shared Mianbange’s sentiment, adding: “it takes time to get used to a

factory, its work and its people... That is a troublesome process I do not want to go through again.”

A second keyword used to describe factory experience was ‘unfair’, especially among peripheral workers who failed to forge good *guanxi* with the management or demonstrate less ‘usefulness’ in production. Given their peripheral status, they were often given tasks that were physically demanding, difficult or even harmful, dangerous and health threatening. The Wet/Transfer Printing team was one everyone at *Weida* would avoid due to the pungent smell of the toxic gas disseminated by the high temperature working process. Xiaohe was immediately chosen to be ‘borrowed out’ to that team when Laoliu, our *lazhang*, received a request. This resulted in a dreadful row between them where Xiaohe cried for fairness and Laoliu responded with a firm no: “this is a factory, not the court, not the place for fairness!”

Another source of the sense of unfairness was the paternalism found in conflict settlement. Since the supervisor’s task was mainly to keep the assembly line going, it was not their priority to solve conflicts fairly, as that took time and upset production. Normally, they blamed both sides for disrupting the production process in a parental tone. Haonian was dismissed from his previous factory because of a fight with a colleague. Outside work, they were friends, but Haonian had long been unhappy with his colleague’s slacking off, which meant he had to work harder for the assembly line to proceed smoothly. Haonian had reported to *lazhang* several times but received no response. One day he decided not to bear it anymore and hit the colleague in the face, causing his nose to bleed:

I was wrong. I should not have resorted to violence, but the lazhang did not even try to figure out what really happened, just turned around and directed a torrent of abuse at me. When I answered back, I was told I was fired. The other guy reacted with silence and he managed to keep his job! You never know how unfair they could be.

Compared to Xiaohe and Haonian, as a core worker in the Panel Line, Mianbange had more space of resistance in such unfair situations. He became a member of core workers known for being hardworking: ‘Mianbange’ was not his real name but a nickname as he fixed screws onto the panel (*mianban*) very quickly. One day during the morning meeting, he was punished with doing a week’s cleaning for his failure to

meet the production quota the day before. He found this ridiculous and resisted with silence. Later that day when we discussed this on our way home, he was so angry that he almost screamed: “Fuck her mother. Is she blind? Everyone knows I work very hard, never taking even one second’s nap. I do so not because I am silly, but because I know life is not easy for her, just like for me. Where could she find anyone like me? Want to embarrass me? Fuck off! I will just quit if she keeps pushing me”. It turned out that no one even mentioned this incident the next morning.

On top of these examples, my interviewees also reported a sense of indignity and shame, which stemmed from the style of language used in managerial practices. This was felt more strongly among men, for they were often considered more thick-skinned and hence rebuked more abusively, and the supervisors were female. Many of my colleagues told me what they disliked most about *Weida* was the morning meeting because Laoliu would reproach them “as if she were our mother” (Rizuo, fieldnotes). Below is an excerpt from my fieldnotes where I reconstructed one of the morning meetings at *Weida* by memory:

Look at what you have done! Are you even capable of doing anything? If not, get out as quick as you can! Everything is so easy but even this you cannot do well. I am not asking you climb a mountain, nor putting you in an exam. Just moving boxes from one place to another and applying stickers to the right place, how come you did it so slowly? What on earth are you capable of doing? I really don't understand what is wrong with you all while other teams could meet their quotas. All of you eat three meals a day, have two hands and two eyes, don't you? We are all adults, and I don't want to be too tough. But I will take necessary measures if you continue to have similar issues next time.

5.3.2 Rije

5.3.2.1 Rije as an ICTs-enabled, hyper-flexible regime of labour use

As alluded to earlier, *rije* refers to jobs that are remunerated daily. In this sense they are a form of flexible and informal labour usage like that of temporary, dispatch or gig workers. *Rije* is distinguished from these roles as it is often organized by local labour agencies through WeChat or QQ Groups without pre-existing formal relations

of any kind. Whereas in cases of temporary, dispatch or gig workers, there are formal mechanisms (for example, contracts) and offline offices for workers and recruiters to meet and negotiate when disputes arise, the connections between recruiter intermediaries and the workers are rather loose and informal, usually limited to that of WeChat contacts or membership in the same WeChat group, which can easily dissolve once deleted, blacklisted or removed. Neither do the workers form any formal relationship with the factory. Even payment is handled by the intermediaries through WeChat.

According to Leilei, a worker-turned labour intermediary, and Huage, a veteran labour intermediary, *rijie* as a form of labour recruitment was a new phenomenon. It gained popularity in Dongguan partly because small labour agencies found it increasingly difficult to recruit and generate profits, and partly owed to the rise of small family-run workshops. I first met Leilei at a job fair in a migrant village, and he was rather open about this:

*Nowadays recruitment is difficult. You must not be fooled by the many people who come and go here. Most of them are just here for higher-paid jobs. Some come every day, and I can even recognize them. I even went to *dapaidang* with some of them. Young men nowadays do not like factories. The only reason they may take factory positions is the girls – reaching early 20s, they all need to *zhaoduixiang*, look for a girlfriend. But factories usually want one female worker to be coupled by one male worker. It is already difficult to recruit one, let alone two.*

In Leilei's QQ and WeChat, he had more than 20 *rijie* recruitment groups and all were migrant-village-based. This, according to both him and Huage, was because workers tended to look for *rijie* jobs near their factories and accommodation as this saved time and travelling expenses. Building up the 20 groups took Leilei almost 20 days and he reached most by adding them one-by-one at his recruitment stall and by snowballing from there. The 'nearby group' function in QQ also proved to be efficient for him.

Things were much easier for Huage. He managed to establish 100 groups in one single day with the help of a WeChat plug-in called BlueChat that allowed him to befriend 500 contacts within 5 kilometres without their approval. It also afforded

bulk multi-media text messaging and multiple account operation. BlueChat was not an official WeChat product but was developed originally for salesmen by software companies in Huaqiangbei⁵⁴ and distributed through sales networks comprising local phone repair shops and wholesalers there. Only recently did it begin to be adopted by labour intermediaries.

Having established these groups, Leilei's daily work involved distributing job information his boss had collected through personal connections from nearby factories. This occasionally included mega factories like Foxconn, but more often their clients were medium- or small-sized factories or family-run workshops in neighbouring areas. When someone showed interest in the group chat, Leilei would then talk to them in person, making sure that they were a real person, before taking down their names and arranging logistics, telling them when and where to meet.

The average hourly rate *rijie* offers was usually the equivalent of the workday overtime rate, which was 15-18 yuan per hour. The employers wished to pay a slightly higher rate mainly because the absence of a legal contract exempts them from paying for social welfare and bonuses. In cases of rush orders, higher prices of up to 20 yuan per hour were not impossible in exchange for flexibility. But normally the workers earned 1-2 yuan less, which the intermediaries extracted as commission.

5.3.2.2 Practicing *rijie*: Flexibility, marginality and precarity

As established above, for most people, *rijie* is complementary to their regular work. Even though with *rijie* they could theoretically work for 12 hours per day, seven days a week, most people did spare some time to rest. Usually, they followed the normal factory routine before the decline of overtime hours and took one night off every two weeks.

The decision to engage in *rijie* was also gendered and closely associated with the gendered division of labour within working-class families where men were the main breadwinner and women assumed more of a domestic role. As a result, male workers generally felt more responsibility and urgency to do *rijie*. Chensheng and his wife

⁵⁴ Huaqiangbei is home to Shenzhen's widely-known gigantic electronics parts market and was a centre for copycat smart phones before the rise of national brands like Huawei and Xiaomi in the early 2010s.

rented a room five minutes' walk from their factory. While he did *rijie* on both days of the weekend, his wife only did it on Saturdays:

I often tell my wife not to work on Sundays, but to do the cleaning, cook a proper meal while taking some rest. Although we are here to make money, we need some family life. Factory jobs are much more demanding than family chores, and as a man I think I should take this responsibility.

Down on the shop-floor, although managerial practices in different workshops did not radically differ, their experiences of *rijie* jobs were nevertheless different from that in their home factory, not least because their presence was temporary, and as a result of this, their status in the *rijie* factory was marginal. As peripheral workers in the new workplace, they often found themselves given tasks others would avoid. Most interviewees reported that *rijie* jobs were much more demanding. Xiaoping had experience doing *rijie* by herself and she also had *rijie* colleagues on her line when working for Foxconn:

lazhang are astute. They know well about how to take advantage of the newbies and temporaries to please and woo veteran colleagues and win them over. Otherwise they won't make it to their position.

But for Xiaoping, as for many others, this was not something to complain about, so long as the wages were paid sufficiently and on time:

*I do not really mind. I think one of the virtues of *rijie* is that you get paid immediately after the job was done. No deposits kept. This is more flexible. If you like it, you come back next time, and if not, then just leave.*

The marginal status has also incurred verbal abuse and unfair treatment by both contract workers and management. Often, this was either simply ignored or resolved with the managers taking a partisan position favouring contract workers. In this circumstances, most *rijie* workers would simply ignore it: “usually we do not talk back; we vote with feet. It is not worth risking losing the money, and there are many other factories out there”.

Further, the risk of not getting paid was real for some. Many had experience of acting as audiences for roadshow campaigns. Although paid slightly less, such jobs were attractive because they involved little more than physical presence in the audience, and they could do whatever they liked in the meantime so long as it did not

disturb the event. But such one-off jobs were often the riskiest. In our interview, Nian talked about his experience working for a *weishang* event as a member of the audience in a four-star hotel – he ended up not getting paid because they were blocked on WeChat by the intermediary and could no longer reach him after the event.

As I have demonstrated so far, *rijie* is an ICTs-based hyper-flexible regime of labour use, even more so than the gig work widely criticized in the West, not least because of the lack of any established formal institutions for coordination and the absence of formal contracts. Compared to gig intermediaries like *gigtogig.co.uk*, *rijie* intermediaries are more mobile and hence more difficult to locate and regulate. One may be a labour intermediary today and become a salesperson tomorrow. This further increases workers' vulnerability and risk, putting them in extremely precarious situations. However, they have found ways to circumvent the greedy hand of the intermediaries. One crucial strategy was to build long-term connections with the bosses themselves – this can be found most often in small workshops, and among skilled workers more than non-skilled workers.

5.3.3 Weishang

5.3.3.1 Weishang as networked reseller

For economists *weishang* is a form of ecommerce (or 'new retailing') based primarily on WeChat and the social network it affords. It became commonplace in China from 2015, at the height of B2C ecommerce. At the early stage of its development, it did not enjoy a good reputation and was often associated with '*xiaochang*', small, unapproved manufacturers, and '*zhiliang cha*', low product quality. It was only recently that big brands like Pechoin and Mengniu Dairy began to dip their toes in *weishang*.

Weishang distinguishes between corporate and individual operators. Corporations in China entered *weishang* at a much later stage and relied mainly on corporate apps and mini-programmes, apps within an app, to publicise product information, reach potential customers and conduct sales. Horizontal ecommerce entities (like Amazon) or producer companies are seen as entering the new marketing battlefield of social networking space engendered by WeChat to compete for market share and revenue.

Apart from corporate efforts in marketing, they also actively engage with a hierarchical network of individual operators to enhance sales capacity.

Individual *weishang* operators, on the other hand, sell goods and services to their contacts by advertising through Moments and group chat, but mostly as part of a larger, hierarchical network of non-salaried sellers managed by an upstream supplier company or platform. The promotional materials are usually provided by the company through *weishang* apps. The earnings of individual *weishang* operators derive mainly from two sources: by selling directly to retail consumers through relationship referrals and word-of-mouth marketing; and through the wholesale purchases made by downline distributors they are incentivised to recruit into the network. Business activities and processes are integrated into and coordinated through a digital enterprise architect (EA) system and its mobile applications, while the entire sales network is managed through a network of WeChat groups, formed along regional and hierarchical lines.

5.3.3.2 *Weishang* as a working-class female experience

If *rijie* was taken up by both genders, *weishang* was more of a female choice, with men considering it “not serious”, “*chuanxiao*, pyramid sales” or “a cheating plot” (fieldnotes). As stated earlier, many who did *weishang* soon gave it up, while only two were still involved in it at the time of my fieldwork. One was Hong, a line supervisor at *Sanko*; the other was Gaoqun, who was previously a *pugong* and later became a full-time *weishang*-er. The range of products they sold could be divided roughly into three categories: feminine supplies, e.g. daily intimate wash and menstrual pads; beauty products, e.g. shampoo, facial cleanser and masks; and health supplements. The actual process of promotion and sales involved editing the promotional materials in a way that was attractive to potential customers, posting it in Moments and WeChat Groups, and responding to customer enquiries in a timely manner.

For those who gave up, their decision to undertake *weishang*, was not, as one might expect, because they were fooled by rags-to-riches success stories created by *weishang* companies to attract distributors. Rather, it was actually from very practical evaluations of their own economic capacity, based on the experience of

recruiters who were real people they knew. The stories usually went that a close friend or acquaintance who did *weishang* told them it was a good secondary job, did not take much time and most importantly, required little investment. This convinced Yongjuan when Sister Li, the owner of the breakfast stall she went to every morning, tried to recruit her: “I started *weishang* because she told me it was profitable and easy. It sounds practical and worth trying and so I trust her”. Sister Li began to do *weishang* following the recommendation of Hong, Yongjuan’s colleague, in a similar way.

When asked why they gave up, it surprised me that they did not immediately mention its unprofitability, for the organisational structure of *weishang* resembles a pyramid scheme in which the upstream profits trickle down. Instead, they highlighted pressures from their immediate life circle, including families and colleagues. This was especially so among those who sold feminine supplies or condoms. Although these products were used daily and could be found in stores even in the remotest villages in China, in their social circles, they were still considered as something better kept under the table, rather than posted and promoted in such public spaces as WeChat Moments. As Yongjuan elaborated:

I personally do not find it problematic to sell menstruation pads and condoms... But my mother-in-law strongly opposed it. She considered it disgraceful and offensive to public decency and worried that this might incur scornful and carping comments from fellow villagers... I even managed to persuade my husband! But our life was turned upside down by her. Finally, I gave in.

Another reason Yongjuan decided to close her *weishang* account was the difficulty in finding clients and the lack of time available to maintain customer relations and manage the business. Working full-time on an assembly line, she barely had the freedom to instantly reply to emerging interests, explaining the pros and cons of the products or bargaining with them. Many times, she got *diao* by the management because of replying to clients whilst working. For her, this meant a significant drain on her already small customer pool.

She also barely had enough time to learn about the products from *weishang* apps, let alone edit them for her own use: “These might sound easy. But it involves much

work, taking very long time. When I just started, I spent an hour every day on it after the night shift”. She later realized that by design *weishang* was unprofitable for her. But rather than criticizing its hierarchical mechanism of profit distribution, she attributed her failure to her lack of contacts: “I know how the system works, but that is how society operates. It is natural that you earn less when you invest less. The model is good, but not designed for us.”

On top of this, for Liming, the problem with *weishang* also concerned the exaggerated and misleading promotional material the companies offered, which had brought her into disrepute:

I do not think these products have much virtue compared to those in the market. Basically, they buy from me for two reasons: mianzi and trust, and product quality. If the product does not fulfil its promise, people are not stupid. Even though they do not give it straight, they vote with their feet. For me, weishang is arduous yet fruitless.

Yongjuan’s failure partly explained Hong’s success. As a *lazhang* who had worked in *Sanko* for 11 years, she had built a massive *guanxi* network in the local community; all her siblings lived in nearby migrant villages, either assuming managerial factory roles or managing properties for local landlords who had moved to Hong Kong. Her managerial position had permitted her to manage *weishang* whilst working, while her extensive social network made it possible for her to build up a distribution network and recruit more downline sellers. She was aware of the politics of *mianzi* in this process:

I really appreciate that my friends, colleagues and relatives give me mianzi and buy from me. From time to time, I do what I can to give back. This is not being mercenary. Such is how we Chinese build our relations, isn't it?

Those advantages apart, Hong devoted strenuous effort to *weishang*. When she showed her phone to me, I was surprised to find she had four *weishang* apps, meaning that she delegated for four brands. She told me this was commonplace among her *weishang* colleagues: “Such is *weishang*. After all, the products cannot be consumed in a day and the profit margin is slim. We can only expand our product range”. On her phone I also found *Qianniu*, Taobao’s seller app, where she opened another storefront outside the WeChat ecosystem to expand her reach.

It is interesting that she used the word ‘we’ when talking about *weishang*, despite never having met her managers or colleagues from the *weishang* company in person. A closer scrutiny of her experience revealed where this sense of community came from. Compared to Liming’s characterisation of *weishang* as ‘arduous yet fruitless’, for her it was arduous but well-rewarded and was primarily an empowering undertaking, not only because of the economic benefits, but it was an opportunity to learn knowledge and skills useful for daily life and in preparing for future uncertainties.

As mentioned earlier, *weishang* was enabled by *weishang* apps in conjunction with a matrix of WeChat groups. While the former provided a platform where promotional materials are handed down to distributors and business exchanges (like stocks) are conducted, the latter was a space for communications and administrative issues. For Hong, the advertisement material the company pushed through the apps on a daily basis were a valuable source of knowledge about women’s health. Created to attract and convince potential customers, these materials were often written informatively about everyday life problems and filled with scientific jargon to convey a sense of scientific authenticity and authority. For example, the ad for a shampoo she promoted highlighted lab research findings on the benefit of ginger extract for hair quality; in another ad, a candied plum product was said to contain enzymes and probiotics that could perform a colon cleanse. Although she could not understand the terminologies fully, she was no easy victim of them: “I bet they exaggerate the effects. My way to guarantee product quality is to try everything by myself”.

Besides, to enhance the sales skills of the downline seller, sales tips were also delivered through the apps on a regular basis. This was further complemented by a series of sales lessons organised by the company in the WeChat groups. Oftentimes, upstream delegates with the highest sales records were invited to share their experiences in boosting sales, and this was exclusive to groups at and above the prefectural level. Hong was eager to learn these skills and confessed that this desire had kept her motivated:

These sessions were basically where those delegates with staggering sales records talked about their success... I have always wanted to reach their level. You have received good education, but we do not, and this is a good

opportunity for us to learn something useful. I really envy their opportunity to study tour to Tsinghua, which is beyond even my wildest dream!

If Hong's success owed much to her managerial position and extensive social network, for Gaoqun, getting herself established in *weishang* as a female *pugong* involved daunting risks. Originally from a mountain village in Lupanshui, Guizhou province, Gaoqun and I first met at Kaiping's over a weekend dinner. Aged 17, she was already a mother of two: three years earlier, after dropping out of middle-school and marrying her husband, she joined her husband, a *pugong* in Dongguan, and started to work in a printing facility. Two months after that she found herself pregnant. After her request to change for a different shift in the factory was turned down, she decided to resign to dip her toes into *weishang*.

She started with cosmetics but soon faced similar problems as Yongjuan. As she was about to give up, a *weishang*-er selling condoms managed to recruit her. She was convinced by this contact that condoms were more suitable for *weishang* because they were a one-off, and everybody needed them. Gaoqun was shy and hesitant at first, and her husband was no different. But soon they found it difficult to make ends meet by relying solely on his factory job, and so they compromised.

It turned out that condoms did help her to build up a client network – this also owed to her ICTs-enabled integrated marketing strategy. Growing up with digital technologies, she was more ICTs-savvy than her elder counterparts. In promoting her products, she combined multiple platforms with multiple media forms. The two platforms she used most were QQ and WeChat, and QQ was most effective for her, for its 'nearby group' function allowed her to reach out to larger groups at a time; others included live-streaming and short-video sharing platforms like *Kuaishou*, *Douyu* and *Panda*. While she conducted sales, maintained client relations and addressed complaints in QQ and WeChat, she used live-streaming platforms as more of a promotional tool. One strategy she found particularly useful in conducting promotion on these platforms was to take advantage of her female identity. Most of her pictures and videos featured herself made up in a seductive way, holding a condom, wearing sexy clothes, with her face photoshopped and unrecognizable.

While effective in gathering clients, this strategy also incurred verbal abuse, insult and sexual harassment. She was frightened by this at first, but it did not take her long to find her way around it:

at the beginning, to reduce cost, I delivered orders nearby by myself. There were several times when male buyers tried to hug me and kiss me. Then, I decided not to deliver in the evening and met clients only in public spaces.

Sales of condoms have accumulated a large customer pool for Gaoqun, with which she actively extended her business to include other products. Like Hong, she now delegated for four companies – for three of them, she was Star Delegate, and had 10 downline distributors across Dongguan. On average, she worked 13 hours per day taking videos and answering customer inquiries, longer than she did in factories. But still, she considered *weishang* to be a better option:

now I am a full-time weishang-er and work for myself. I am proud of it. Although I work for longer, it is way freer than the factory. The only con side of weishang I can imagine is the notoriety associated with it. But why should I care? Rumours dissipate quickly, especially when you become rich.

5.3.4 Didi

A third side-line option popular among my respondents was Didi, a leading taxi-hailing service in China. Since I will discuss Didi's labour process in detail in the next chapter, here I only briefly introduce it. Officially, Didi defines itself as an information provider that cooperates with drivers to provide transportation services to the public. To become a Didi driver, one needs a fully licensed car and a working smart phone. Because the relationship between Didi and drivers is defined as cooperation rather than employment, drivers are free to operate whenever they want and turn the app off whenever they like. Didi Chuxing, the company behind Didi, builds its revenue by charging a pre-fixed proportion of the fees generated by each service accomplished as commission.

This flexibility was exploited among factory workers – mostly by lower managerial staff. This is because most of the time they could leave the workshop with the tacit consent of higher-level managers during night shifts, so long as they had all their tasks arranged and were responsive when emergencies occurred. I also met three

pugong who pursued a Didi side-line, all born in the early 1980s. They chose Didi because they happened to own a car, which they were able to afford with the savings from past years when the economy was robust. All the drivers I met were male – women tended to think of Didi as a dangerous occupation.

Like the case of *weishang*, managerial workers generally experienced part-time Didi jobs differently from *pugong*. For the former, the level of reliance on Didi was much lower than the latter. This was manifested in the time of day they worked. While managerial workers usually ended their day before 10 pm, the time they had to go back to the factory to dismiss their fellow workers, for the three *pugong* I met, it was not uncommon for them to continue to work until midnight after a 12-hour working day, or even later in cases of bad weather or intercity orders. If for those in the managerial position working with Didi was ‘merely’ to earn ‘some extra money’, for *pugong* it was a necessary complement to the factory wage in order to make ends meet. Excessive working hours and darkness during the night were insidious threats to their health and even lives, especially when they suffered from serious eye problems after working in factories for decades. All three *pugong* drivers reported sleep problems and driving into sludge after rain, and two reported running into road accidents.

A further problem arising from this situation concerned their passengers. Didi operated a system that allowed passengers to rate the drivers’ service, which was in turn linked to its order dispatch system, which it claimed was ‘scientific’ and entirely algorithm-driven. Based on his own experience, Laohu believed that the lower the rating, the less likely they were to be dispatched to an order. He thought of this as unfair to night-shift drivers like him, for he had had many experiences of getting just one out of five starts after his car ran into sludge or spending two hours on a 40 km distance simply because he wanted to drive safely, despite exhausting his patience apologising and pandering to passengers and turning a smiling face to their sometimes caustic complaints. Not only was the emotional cost huge, but it also significantly influenced their income levels.

5.4 An interim conclusion

In this chapter, I have begun to draw on empirical data collected during fieldwork to examine *nongmingong*'s experience at the point of production under economic digitalisation. I come to this point not just because production is widely held as the most important site of working-class formation and class struggle in world history (Dahrendorf 1959; Katznelson and Zolberg 1986; Silver 2003; Pun 2016) – the decision is also driven by my observation that a vast majority of factory *nongmingong* now take up new work and livelihood opportunities afforded by ICTs. A crucial background of this development, as I have characterised it, was the post-2008 global financial crisis and the Chinese state's technology-centred response, and the shift in China's working-class labourscape engendered by these events: the beginning of the decline of the factory as a major form of labour organization and the growing relevance of the platform as an alternative.

In this transitional period in China, factories relocated, the manufacturing sector declined, factory jobs became increasingly unstable, insecure and precarious, and *nongmingong*'s income dropped, and their livelihood was threatened. But the scenarios of economic collapse, intensification of class contradictions and the upsurge of class conflicts and collective actions as predicted by many did not follow.⁵⁵ On *nongmingong*'s side, this partly owes to the fact that most of them turned to the newly-created digital sector to find a way out. In this process, individual strategies (such as whether to keep factory jobs and which ICTs-enabled job to choose) varied across different groups, divided along lines of gender and marital status and, related to this, one's perceived role within the extended, three-generation family. From the analysis above, it is clear that the gendered division of labour within the family and the workplace has been reproduced, although some young women workers have taken bold steps to pursue independence through work. The latter half of this chapter focused on the experiences of multi-jobbing practitioners. Within factories, the high turn-over rate did not lead to improvement in their work conditions. In contrast, control and exploitation were heightened and became more despotic and authoritarian, particularly for peripheral and female

⁵⁵ For example, Pun (2019) boldly announced that “a new working class comprising rural migrants and urban workers is being created, and they now form the new political subjects for potential resistance and shape the future of the labor movement in China, as well as placing a place to envision world labour internationalism”.

workers, not least because of the tightened environment and labour rights regulations and growing labour costs. In these circumstances, they chose to stay with their factory jobs on the one hand because they did not see any better alternatives, and on the other because factory jobs gave them a sense of stability and security.

Three of the most popular ICTs-enabled side-lines among my respondents were *rijie*, *weishang* and Didi. Both the adoption and experience of these options were highly class based and gendered. *Rijie* was popular among workers of both genders and was a product of ICTs-enabled labour informalization and precarisation where local labour agencies played a key role. It was widely accepted and adopted among the workers mainly because it offered stable and modest anticipated income. Like Zhang Lu's (2015) temporary workers in her automobile factories, *rijie* workers were usually the marginal group in *rijie* workshops and were hence more heavily exploited. The biggest risk associated with *rijie* was wage arrears, and because of the lack of formal contracts and effective offline mechanisms of conflict settlement, those engaged in *rijie* were very vulnerable under such conditions.

Among my respondents *weishang* was an option for women more than men. Because success in *weishang* demands instant replies to clients, careful customer relation management and an extensive personal network, for many female *pugong* it was not a viable option. Their female identity and the moral disciplines associated with it further set limits on them. The only female *pugong* who was successful did it full-time and unfortunately had to deal with gender-specific risks and threats. In contrast, constraints were fewer for those who took managerial positions in factories, not least given their position within the power relations in the workshop and beyond.

Compared to *weishang*, Didi was practiced more by men. In fact, the digital transformation of the working-class labourscape did not seem to offer many opportunities for women, except for *rijie*. Thus, they were pushed further from the social realm of production into the reproduction sphere of the family. Among part-time Didi drivers, like *weishang*, those who took managerial positions within the factory faced fewer constraints from factory work and had more time and freedom to practice Didi for extra income. But for *pugong*, the opportunities offered by Didi actually pushed them to work longer hours to earn more, adding pressure to their already overloaded factory work. The passenger supremacy characteristic of Didi's

labour regime further exacerbated their condition. In extreme conditions, excessive working hours and overloaded work even posed lethal physical threats to them.

In summary, for multi-jobbing *nongmingong*, the digital transformation of the working-class labourscape has given them a viable option to respond to the adverse impact of the global economic downturn, for it has provided alternative job opportunities and sources of income. But this has been at the cost of heightened exploitation and control, increasing informalization and precarisation, and gendered and even life-threatening risks, which have in turn fostered a heightened sense of exploitation, unfairness and desperation, as well as growing antagonism between *nongmingong* and management.

Chapter 6 *Nongmingong*, ICTs and work (II): Platform-based labour, technological despotism and heightened control

In this chapter, I continue the discussion from the last chapter on the mediated politics of production by focusing on a different form of mediation: platform-based labour. By platform-based labour I am referring to cases where *nongmingong* quit factory jobs and switch to full-time jobs in ICTs-enabled, low-end service sectors, for example, car-hailing, home and cargo moving, and takeaway delivery.

While the same set of phenomena are elsewhere conceptualized as gig workers/economy or precarious labour (Graham 2017; Graham et al. 2017), I use the term platform-based labour here on the one hand to distinguish it from factory-based labour, highlighting the platform as a new mode of labour organization, and on the other hand to capture the continuity between the two: despite the changes in organizational infrastructure and arrangements, questions of labour conditions, resistance and struggle continue to be relevant.

6.1 Didi as a moving target

Headquartered in Beijing, Didi is a transportation company that provides e-hailing services in China. Compared to factories, the production regime of Didi is difficult to characterize, not only because of the capillary entanglement of technological and non-technological factors in its labour process, but also because it is itself a moving target.

Since its founding in late 2012, Didi has undergone what its CEO William Chan called “an expansion frenzy” (Liao 2019), using aggressive price war strategies, supported by ambitious, profit-seeking investors from both within China and abroad. As is shown on its official website⁵⁶, these investors include not only industrial titans specialising in Internet and information technologies like Alibaba, Apple, Baidu, Tencent and Uber, but also financial capital from banks and venture capital investors like Softbank, Tiger Fund and Temasek Holdings. Until 2018, the cash-burning model of expansion persisted, and Didi was reported to lose a staggering US\$585 million in the first half of 2018 and \$1.6 billion across the entire year (Chen 2018;

⁵⁶ <https://www.didiglobal.com/>

Liao 2019). Over the years, it completed successive rounds of fundraising, merged with Kuaidi, outspent rivals like Yidao Yongche and Uber China, rebranded itself as Didi Chuxing, acquired Uber China, captured a lion's share of the market (90% in 2017) and finally secured its monopolistic position in China's taxi-hailing and private car-hailing markets (Tsang et al. 2018).

Throughout this process, the range of services provided by Didi also multiplied. Starting with taxi-hailing (09/2012) by cooperating with and transforming the taxi industry, Didi gradually expanded and diversified its product range to include Premiere service (middle-end vehicles, 09/2014), Express service (lower-end vehicles, 05/2015), Hitch (social ride-sharing, 06/2015), Bus-booking (07/2015), Designated driving (07/2015), Carpooling (2017) and Luxe (higher-end vehicles, 05/2017), each targeting a different niche market. After the central government stepped in to regulate and raised the threshold for licenses and certificates for driver entry in late 2016, Didi joined the then-burgeoning local car-rental industry to rent out cars to drivers negatively influenced by the regulation and attract potential drivers, through its offline premises of Didi Driver's Club.

6.2 Driving Didi as a technologically-mediated capitalist labour process

Although given its ownership structure and relationship with the state, there is little doubt that Didi is a capitalist enterprise, and its platform-based model nevertheless stands out from the factory model in many ways. Since Burawoy's framework is based on the latter, it is useful to establish the characteristics driving Didi as a technologically-mediated capitalist labour process, before analysing its politics of production.

Drawing on Marx, Burawoy (1979: 20-35) distinguished between feudal and capitalist labour processes. For him, in a capitalist labour process, there is no separation either in time or space between necessary labour (the wage equivalent) and surplus labour (its realization in the form of profit). While under Feudalism serfs mostly performed on the lord's demesne to render the rent and cultivate 'their own' land in the remaining time for means of survival, under capitalism, surplus labour is obscured and workers cannot live off what they produce on the shop floor, for the means of existence is only accessible through the market. Under capitalism, workers

neither possess means of production, nor can they set the machineries in motion by themselves. Control and coordination by managers are two aspects of the same process. Struggles over production activities take place on the shop floor, rather than in manorial courts. The relationship between workers and capitalists is marked by their *economic* interdependence, and the production of commodities is simultaneously the production of the labourer through necessary labour and the capitalist through surplus labour.

In its agreement with drivers, in contrast to employment relations that define the traditional taxi industry, Didi recognises itself as an operator of the “mobile driver app and platform” and a provider of “related support services” for drivers to receive and fulfil requests for transportation services. Drivers are positioned as independent service providers, or ‘driver-partners’. Once a request is accepted, they enter into a separate agreement with the rider and have the sole responsibility to deliver the service and deal with whatever incident arises. In other words, although Didi is often praised in official documents and popular discourse for being a big employer, the drivers are by no means employees protected by the Labour Law, but partners regulated by the Contract Law.

Here, one might already begin to contest the applicability of Burawoy’s theory to the case of Didi, for the drivers retain a certain degree of independence from Didi. After all, it is they themselves who own the car, the means of production, which they are free to set in motion or not. However, a closer analysis of the entire process leads to a different conclusion. A car becomes a means of production only when it is used to deliver a transportation service, that is, to produce the ride-hailing services.

However, ride-hailing in present-day China has become so tied to these apps and the order-dispatching services they offer that it is very difficult for a car to effectively operate as a means of production without the mediation of the apps, especially in big cities. If Didi has truly changed mobility in China in any way, they have re-commodified the transportation service by integrating into it externally provided information as a new raw material of production.

The actual process in which transportation service as a service commodity is produced relies heavily on digital technologies. This might on the surface look easy and simple, but behind the seemingly user-friendly interfaces of the app, there is an entire algorithm-based infrastructure, designed, written, revised, updated and

maintained by hundreds of programmers and product managers on behalf of Didi, consisting of terabytes of data that support each and every trip on the platform.

Central to this capitalistic technological infrastructure is a map system and a dispatch system comprising demand and supply services and a system for matching. In its simplest form⁵⁷, both supply and demand services use actively updated geolocation data to locate passengers and drivers on the map. Whereas the supply service further models detailed attributes of drivers and their vehicles (e.g. number of seats available), the demand service tracks order requirements (for example, vehicle types). These details then go through a matching system for dispatch optimization, according to a ‘distance first, global optimum and safety first’ principle.⁵⁸

Meanwhile, the map will plan a route – again based on algorithm. Once a match is made, orders will be sent to both sides. The service then starts by drivers picking up riders and ends with the rider’s arrival at their destination.

Ironically, as partners drivers have no role in pricing, which is totally controlled by Didi. After a service is completed, riders pay through a digital system integrated into the app directly to the company, which is then divided between Didi and their drivers. In the contract, Didi reserves the right to decide on the revenue split. At the time of my fieldwork, Didi took 20% of the revenue as commission, as an ‘information service fee’. If under the factory system the extraction of surplus value is obscured through the wage equivalent, in Didi it is taken relatively transparently with the drivers’ knowledge.

Defined in terms of cooperation and without co-presence in the same confined physical space, managerial power under the platform system may seem weaker and less coercive. Rosenblat and Stark (2016) and Chen (2018) coined the term ‘soft techniques of labour control’ to describe managerial practices in Uber and Didi such as surging pricing.⁵⁹ But this seems misleading to me, as it indicates that these strategies are less consequential to drivers and that there is more space for

⁵⁷ What I describe here is the simplest form of how the technological system works and the aim is to illustrate the place of ICTs in the core production process. But in its actual operation, the technological system Didi relies on is far more complex. According to Ye Jieping, vice president of the Didi Research Institute, the company recently invested heavily in developing the ‘Didi Brain’, an artificial intelligence system comprising cloud computing, big data and machine learning technologies, to enhance its capacity in all respects. Whereas cloud computing promises flexible and fast calculating capacity, big data and machine learning help Didi model unstandardized transportation services that happen in all environments and contexts more accurately.

⁵⁸ Recently, Lai Chunbo, Director of Platform Governance at Didi, revealed in *Economic Daily* that the company’s order dispatching system models are based on more than 200 factors, including passengers’ sex, travel needs, order distance, order time, and the drivers’ sex, driving habits, order history, and complaint records.

⁵⁹ Surging pricing occurs when a company raises the price of its offering as demand increases.

negotiation. As far as my fieldwork is concerned, for those drivers who used Didi as a full-time job and relied on it for their livelihood, the control might be softer in the sense that they do not involve direct paternalistic confrontations (as epitomised by the *diao* culture), but this does not necessarily lead to a rebalancing in manager-labour power relations, and we cannot begin to understand the differences without closely examining how management is institutionalised in the labour process and experienced by the drivers.

In Didi's case, as the three authors rightly point out, digital technologies are integral to its management. In the place of human resources departments, Didi operates a verification system for drivers and their cars. One will need to upload their ID, car specs, and relevant licenses and certificates and pass the company's checks to successfully register and be 'listed' on the app. If a driver is regarded by the company as no longer eligible, it can 'delist' them without their knowledge. As an equivalent to quality control mechanisms in factories, Didi features a rating system that allows riders to rate the service, putting drivers under riders' gaze. During my fieldwork, it was suggested that 'attitude', 'vehicle condition', 'driver professionalism'⁶⁰ and 'city knowledge'⁶¹ were key indicators of service quality. Where passengers feel offended or unsatisfied, the Didi app features a function for them to lodge complaints, which is further supplemented by a hotline service.

To attract more customers while maintaining driver loyalty and encouraging them to work to the full, incentive schemes and campaigns are devised and held by the management and realised through manager-led development of new app features. To customers, Didi distributes coupons and red envelopes and links their face value with numbers of social media sharing and likes. With drivers, devices and techniques like surging pricing, order-based monetary incentives, priority order dispatching, scalable management⁶² (van Doorn 2017) and push notifications via app and text messaging are actively exploited. At the corporate level, drivers of different subgroups⁶³ are invited in and given special considerations at different stages. As in factories, these disciplinary rules and incentive strategies are in principle standing practices but are

⁶⁰ Whether riding with this driver has been a relaxing and comfortable experience.

⁶¹ Whether the driver knows the best route.

⁶² In scalable management, labourers are categorized into different, often hierarchal levels, based on their performance in work. The system is then linked to order dispatching, pricing or bonus schemes.

⁶³ For example, taxi drivers, private car owners, drivers renting cars from Didi, drivers renting cars from other companies.

actually implemented on a flexible and improvisational basis, depending on what the management sees as their best interest.

Whereas corporate-designed, algorithm-driven digital infrastructures form the backbone of Didi's management system, other, offline apparatuses are also central to it. For instance, during my fieldwork, two such apparatuses observed were Driver's Club and *shenfang*, anonymous riders. Driver's Club in Dongguan was built on a town-by-town basis. It provided car maintenance and repair services and was simultaneously a centre for complaint settlement and management, with its daily activities carried out through a set of WeChat groups. *Shenfang*, on the other hand, is a means through which Didi watches designated drivers. Designated drivers are in theory partners of the company, but Didi sets overengineered standard operating procedures for them.⁶⁴ To ensure their execution, Didi designates anonymous riders to test them. Where the drivers fail the test, punishment is applied, and they either receive a compulsory intensive training session or get 'delisted' for good.

It is also worth noting the difference in the nature of the products, and the interests and intentions of capital between Burawoy's factory and Didi as a platform-based enterprise. Factories, as described by Burawoy (1985), are invested in by industrial capital and transform the nature into products. Hence, to obscure and secure surplus labour requires the management, based on a combination of coercion and consent, to translate as much of the workers' labour power into labour actualised in the immediate productive process on the shop floor as possible. But for Didi, precisely because it deals with information, its products go beyond transportation services. For example, the user data generated provides raw materials that open further options for monetization. This, plus the dominance of financial capital, complicates what it means to obscure and secure surplus labour, which is not only to generate as much immediate profit as possible, but also to seize a larger market share and maintain monopoly status to pave the way for further monetisation.⁶⁵

⁶⁴ This code of conduct comprises multiple parts, including clothing, reception manner, service package (including white gloves, car seat protectors and boot mats to keep the car clean), pre-ride checks (to avoid possible conflict over car conditions) and safety belts. It also requires the driver to keep silent throughout the entire service period.

⁶⁵ I did not have the opportunity to interview high-level managers from Didi. What is said here is based on three sources: first, general theories of the distinction between industrial and financial capitals; second, interviews and talks Didi management have given in the media; and third, my personal exchanges with connections holding senior managerial roles at one of China's leading 'AI+ Medical service' start-ups with a similar ownership structure to Didi.

6.3 The lure of freedom and its limits

I think factory jobs and Didi both have their virtues. Factory jobs give you steady income and there is little risk. But it is not comfortable, and you feel constrained, for the boss always wants to maximise profits and managers blindly follow. When I feel down, I prefer Didi, because it makes me feel freer and cheers me up. It is worth it even at the cost of the day's income (interview with Xiaoli).

Perhaps because all the drivers I talked to were worker-turned-Didi-drivers, when asked about their experience with Didi, they often started by comparing it with factory jobs and highlighted the *ziyou*, freedom, it allowed them. For them, this freedom was genuine, and this partly explained why many stuck around in the job for a long time. This sense of freedom was experienced in various ways.

One point the interviewees repeatedly made in explaining what it was about Didi that was freeing concerned the arrangement of work. But this should not be confused with the utopian scenario of overall autonomy and control over work put across by the company, an instance where labour is no longer estranged and the drivers make decisions about whether to operate or not solely at their own will, without having to consider all kinds of economic constraints and livelihood concerns. In contrast, as seen in Xiaoli's quote above, for him, the freedom associated with Didi was of a different and, sadly, much less empowering nature. It gave him the freedom to *not work* when he was not in a good mood to do so – but this came at a price, for although it cheered him up, this was at the cost of a day's income, a significant loss for him. The use of the word 'even' by Xiaoli conveyed exactly this ambivalence: although the button to switch the app on and off is in their hands, being a Didi driver does not give them sufficient financial gains and sense of security to stay off work – even just taking one day off when in dire need – without worries. Rather than the rediscovery of labourers' agency and control over work, this freedom is better understood as an uneasy moment of respite.

A second meaning of this *ziyou* was the freedom from factory rules and the day-to-day managerial paternalism and despotism on the shop floor discussed in the previous chapter. In this sense, they considered Didi to be a decent job that they

could work with dignity. Tang had worked in factories for more than a decade before becoming a Didi driver in 2014:

Being a Didi driver is freer. In a factory you have no choice but to pander for money... but when driving, you can make phone calls and talk whenever and wherever you want. You do not have a supervisor who would always boss you around, and publicly scolds you as if you were a primary school student and they were your teacher. That is such a shame for adults.

The freedom of Didi as experienced by my respondents also stemmed from changes in work environment, both physical and social. Physically, the factory shops they used to work in were typically dark, hot, full of machines – unpleasant locations. There was little fresh air and sunlight, not to mention the noises generated by the productive activities throughout the day and the sharp and pungent industrial odour hanging inside the workshop and around the factory premises that never dissipated. What they found even more unbearable was the sociality on the shop floor and the parochial mentality and outlook it cultivated. For them, those who stuck to factory jobs were ‘short-sighted’, ‘easily satisfied’, ‘lacking in ambition and passion’, ‘shamelessly bending for minuscule profits’, and ‘preoccupied by shop floor micropolitics’.

For Tang, and for many others like him, not only was the physical environment of the factory unfavourable, but the social environment was uncongenial, sterile and spiritless and thus difficult to put up with. By contrast, Didi was freer in the sense that it did not confine them to an environment as such, allowing them to travel across the city, meet new people, broaden their horizons and keep an open mind.

While freedom appeared to be a main motivation, Didi became popular among factory workers more than anything else because it was reasonably remunerative, offering an income comparable to – and in some cases better than – factory jobs. This was the baseline for many. Rizuo had been single throughout his life. Having lost both of his parents and living alone, he had little savings in his bank account. In 2015 he borrowed some money from his friends and bought a second-hand car to enter Didi. For him, that was a rare time when his daily income reached as much as 300 yuan. This almost rekindled his hope for life, and he even renovated the leaking roof of his rural house, painted the wall and went on some blind dates. Sadly, this

proved to be a flash in the pan. From March to June 2016, he earned an average of just 2,500 yuan per month by working 12 hours a day, hence his decision to return to *Weida* in July.

This longing for freedom and autonomy from the constraints and alienations of factory life as felt by *nongmingong*, albeit limited, I argue, underpins and sustains their transfer to Didi in a time when old, secure factory jobs are in crisis and becoming less endurable. But even this patchy freedom was not equally attainable to every *nongmingong*.

On the one hand, an important prerequisite to become a Didi driver in the early stage of my fieldwork was to own a car. Although in the recent decade, state intervention had been effective in creating a fast-growing automobile manufacturing and consumption market and had significantly lowered car prices in China (Zhang 2014)⁶⁶, for many *nongmingong* (like Xuanfa and Shujuan in Chapter 4), the price was still prohibitive and buying a car drained their savings. For this reason, most of my driver respondents previously held lower-level managerial factory positions (such as *lazhang*, *fulazhang*), while a smaller group got cars from their parents as bride prices or bought them with financial support from their family. Meanwhile, it is worth noting that the decision to make this big purchase was often not solely driven by the plan to take up Didi. When choosing a particular model, family use was also of crucial concern, as was the price. This explained why many of their vehicles were SUVs with low engine displacement rather than saloons.

On the other hand, as Didi gradually snatched more market share, its threshold for drivers' backgrounds and car specs crept higher, for example, at the turn of 2018, the requirement for engine displacement was elevated to above 1.6. State regulation also tightened. A new legal framework was put in place from mid-2017 which meant that driving with ride-hailing apps required double licenses – a driver's license and ride-hailing driver's permit, a local *hukou* and a commercial operating car license. For drivers, this meant they had to cover the extra costs of licensing, training, insurance, maintenance and scrap their vehicle after eight years. All these criteria had either

⁶⁶ Among the set of policies, two are particularly relevant for *nongmingong*. One is the 2006 policy that encouraged the development of energy-saving and environmentally-friendly cars with low engine displacement (below 1.6); the other is the decision to halve the purchase tax of a car with an engine displacement of 1.6 or less from October 2015 until the end of 2016. Whereas the former policy encouraged automobile manufacturers to invest more in small-displacement cars, the latter was fruitful in stimulating consumption of them, as it meant a big saving for many.

effectively driven out many *nongmingong* drivers, especially *pugong*, or put those who tried to avoid such big costs in a grey zone, playing a never-ending cat-and-mouse game with the local traffic police.

6.4 Didi as an embodied experience: Changing despotism, reconfigured control and multifaceted exploitation

So far, drawing on their own experience, I have argued that a major motivation by which factory *nongmingong* switch to Didi is the relative freedom it offers, which is experienced in various ways and in comparison with factory work. I have also pointed out that this freedom is patchy and limited. In this regard, their experience confirms my evaluation. During our interviews, discussion about freedom was usually very soon followed by a denial of freedom, with the conversation switching quickly to how Didi was not as free as it appeared to be, and how it was sometimes even more constraining than factory jobs, albeit in different ways. This usually started with a general complaint, either ‘Didi is no longer profitable’, or ‘it is increasingly difficult to work on Didi’.

6.4.1 Didi in transition and the sense of betrayal and antagonism

It is intriguing that all respondents talked of Didi as ‘*no longer profitable*’ and ‘*increasingly difficult to operate*’, and when pushed to clarify this, they tended to start by telling a story of the development of China’s ride-hailing industry in general. Regardless of when they started the job, their narrative was similar: Didi became less profitable from early 2016, and two landmark events underlying this change were the Didi-Kuaidi merger and Didi’s acquisition of Uber China.

As they recalled, before 2016, Didi could indeed bring them higher income. According to Tang and his peer A’wen, who was also a seasoned driver, back then Didi had just launched in Dongguan and was at a stage of massive driver recruitment and market expansion. To recruit and retain more drivers it sent many offline teams to the streets, handed out smartphones to taxi drivers, installed the app for them and deleted rival apps, provided hands-on instructions and offered them a range of subsidies. On the other hand, it showered riders with red envelopes and dispensed incentives to encourage social media sharing. Basically, the more orders a driver

took, the more subsidies they could earn; and the greater number of social media shares a rider achieved, the higher the face value of the red envelope. At the height of this aggressive price war strategy, it was commonplace that passengers got free rides and drivers earned up to 500 yuan a day. However, this did not last long. Tang could still recall how it had all gone overnight:

in Dongguan, [the subsidies and benefits] were all gone in one month... they substituted it with a 'bonus', which is bullshit... you have to complete 20 orders a day to get a bonus of 100 yuan; otherwise you get nothing. This is almost impossible, especially as the number of drivers grows and riders drop after the price war.

Xiaoli was 25 and started Didi in late 2015. To my surprise, his knowledge of Didi's history was no less than Tang's, and his evaluation was that Didi actually took advantage of its drivers to achieve market leadership and simply threw them to the wind thereafter. This sense of betrayal and antagonism was not uncommon among the drivers. As Xiaoli elaborated:

The profit margin is getting all the more meagre and this owes much to Didi's policy. The subsidies are like carrots, some sweetness they use to lure you. After you become increasingly dependent on it, they hit back to profit from your dependence. They are expert in this... they keep splitting us into small groups, giving carrots to one group at a time for its own interest. To put it bluntly, these are bawang taikuan, high-handed and arrogant clauses. But there is little we can do but to accept it.

I was curious about how he already knew so much as he had only joined Didi recently. He then showed me several WeChat groups comprising Didi drivers, and told me that in these groups, Didi's constantly changing policy was always one of the most discussed topics. Interestingly, this discussion was based not only on their personal experience, but also on news articles from media outlets like Tencent and Jinri Toutiao. He also mentioned another site where such discussion often took place: public spaces in the bustling and vibrant points of the city where drivers gathered for orders.

This open and continuous discussion within the driver's community both online and offline, however trivial and informal it might seem, fostered among them a collective

understanding of their relationship with Didi. Perhaps because of its decidedly historical nature, this understanding is distinctive from their perceived relationship with the factory. With factory jobs, while being aware that the management tried to squeeze the most out of them, they generally considered themselves as deserving of the low wage because of their lack of education or skills. By contrast, they saw Didi as taking advantage of and betraying them and their interests as antagonistic.

6.4.2 The real face of cooperation

At the day-to-day level, this sense of betrayal and being taken advantage of is enhanced by a sense of hyper-exploitation and unfairness, which has its roots in the gap between the way Didi defines its relationship with the drivers and how this relationship actually plays out, particularly in Didi's commission-based approach to extracting surplus value.

So far, drivers have been understood by legal agreement to be Didi's partners, not employees. As such, Didi holds its drivers in a position to cover all operational costs. This includes both short-term and long-term expenses, for example, oil fees, wear and tear, repairs, smart devices, fines for running red lights, speeding tickets, car depreciation, accidents and even drinking water. Designated drivers are required to buy uniforms from the company at a fairly high price and prepare service packages solely at their own expense.

When these costs are taken into account, it turns out that Didi's reported commission rate of 20% is a hypocritical claim, a flawed mask it uses to hide its greedy hand from the public. By taking 20% from the revenue, it actually extracts 50% or more of the drivers' profit. Based on one of the trips he completed earlier that day, in our interview Nian worked this out for me, where he concluded that Didi was comparable to a heartless and blood-thirsty vampire:

this morning on my way back from Nancheng⁶⁷, I received four hitch requests respectively to Changping, Qingxi and Zhangmutou⁶⁸, which added up to 120 yuan. Although Didi planned a best route that connected these destinations, my cost was very high as we got caught in traffic jams several times off the

⁶⁷ Dongguan's downtown area.

⁶⁸ Three neighbouring towns in Dongguan.

highway. I drove for 100 km and four hours. The oil cost about 50 and Didi took away 24. That means I earned 46 in four hours, abrasions not considered. Actually, Didi took away way more than it claimed, and it is like a vampire feeding on we drivers' blood.

The following quote Tang showed me that was widely circulated in local drivers' WeChat groups echoed Nian's concern, but calculated the earnings on a longer time scale:

about Didi, only do it part-time when you already have a car... nowadays, on average, one can complete 16 trips on weekdays in over 10 working hours. This leads to a revenue of 200. After oil fees (60) and Didi's commission (40) are deducted, we earn 100, which is complemented by a bonus of 58 from Didi... during weekends, demand surges and normally one works for over 12 hours, completes 24-30 orders, builds up a revenue of 350, and earns 180 plus a bonus of 100. If things go smoothly, and you take two days off each month, the total monthly earnings amounts to 6,500... the living expense is around 3,000, since it is not possible to eat at home... After insurance and car maintenance fees are deducted, you should be able to save 50,000 in two years, which may be just sufficient to cover car depreciation after such intensive use for two years... at the end of the day, Didi is the final winner.

Hyper extraction of surplus labour and meagre profits apart, among the drivers, the sense of exploitation and unfairness also stems from Didi's absence in contributing to their social security. Although through its legal framework Didi does not have the responsibility to do so, the drivers did not find this arrangement fair and convincing. Although most could not articulate it explicitly, they nevertheless pointed out that by positioning them as partners, Didi *intended* to avoid this payment and evade its due obligations to them.

It may be surprising that *nongmingong* drivers took issue with Didi over the problem of social security. Popular belief suggests that they are considered to be less interested in social security than compensation in the form of spendable money. However, echoing critical scholars' arguments, my observation was that this was not because they rejected the idea of social security *per se*: what they truly rejected was the poorly designed social security system. Predominantly employment-contract-

based and *hukou*-based, the social security system in China is linked to jobs through contract and builds on contributions from both employers and employees. It distinguishes between rural and urban *hukou* status and across different regions, while the management of the social insurance fund is conducted on a territorial basis (Frazier 2010; Chen and Gallagher 2013; Young 2013). Not only do people of different *hukou* statuses and from different regions enjoy different provisions, but the benefits are mostly accessible only where the account is registered, and to transfer it to another city involves convoluted procedures. The system also presumes stable employment. In 2017 in Dongguan, one would no longer be eligible for benefits if one discontinued them for two months. Considering their low income and high turnover rate, this system became more of a nuisance than a blessing in times when they were robust, and the economy was stable.

But this does not mean that the drivers do not consider social security as constitutive of their interest. In fact, in my daily exchanges with workers at *Weida*, they demonstrated strong awareness of the importance and usefulness of social security. I was surprised that many of my colleagues, mostly elders, asked me about how to check their social security account on WeChat and Alipay, and how younger workers saw social security as a natural part of their work-related rights and entitlements. This echoed Gallagher et al.'s (2015) evaluation of the implications of the 2008 Labour Contract Law, where they observed a growing awareness of the Law's key principles and showed higher propensity for a labour contract.

These workers-turned-drivers – with much experience of working for a boss in factories and better-informed about work-related entitlements – understood their relationship with Didi through the lens of their factory experience and hence rejected Didi's strategic invoking of a 'partnership' relationship to exploit the loopholes in legislation and shirk employer responsibilities through legal means. As far as their lived relations in production were concerned, the formal distinction between the legal languages of 'partner' and 'employee' did not make much sense, and Didi failed to convince them of their 'driver-partner' status. Instead, they considered it to be an arrogant violation of their interests. This distanced them from Didi, reminding them that they were not part of it. As Xiaoliu commented, in an angry tone:

they may think we drivers are fools, but... giving it a misleading name will not gloss over its nature. Bullying us laobaixing⁶⁹ for being not well-educated and poor? I bet it will go bankrupt very soon... from my perspective, Didi is really stupid and does not know how to shoumai renxin, win popular support. 200 yuan is not a big deal for them, but in saving it, the company is losing our heart. Whereas I consider myself as an employee and part of the factory – at least during my stay, with Didi I think I am little more than its tool, no feeling of belonging. It could be Baba, or anything.

6.4.3 Technological despotism, extreme control and hyper-exploitation

The second way in which Didi is restrictive rather than emancipatory for its drivers has to do with what I call ‘technological despotism’, which owes on the one hand to its market and management strategies at the time of my fieldwork, and on the other to its algorithm-based, scientific and intelligent technological apparatus of labour process management. Working under such conditions, the drivers felt an intense sense of alienation, of being controlled and pushed to the limit, and because of the impersonal nature of the technological system, a profound sense of desperation arose.

Earlier, I stated that Didi secured market leadership in the domestic e-hailing sector in 2017 and one method the company used to achieve this was to outspend and acquire its rivals, distributing subsidies to drivers and coupons to riders. At a later stage, in response to the rising regulatory hurdles of double certificates rolled out by the government that put a squeeze on driver numbers, Didi lowered the barriers of entry by allowing drivers to rent licensed cars it sourced from local car rental and automaker partners. Both strategies had the effect of expanding and diversifying its driver pool and changing the power contrast between the two. If previously it was Didi that tried to recruit and retain as many drivers as possible, now it was the drivers who relied on Didi for work and competed with a growing number of others for riders.

After the price war ended, the market and the daily operation of Didi returned to normal. For drivers, this resulted in an awkward situation where orders dropped, and

⁶⁹ Common people.

profit margins shrank. Against this backdrop, to boost driver retention and morale, the managers introduced a bonus scheme, which was closely linked to the number of trips each driver accomplished and rejected. In so doing, the drivers were set by the company to complete more orders to earn a modest amount of money.

In terms of the daily labour process, all the orders are assigned to the drivers through Didi's technological system that operates according to the principles of the so-called 'global optimum', which is defined by managers and programmers of the company as inter-driver time and cost effectiveness and efficiency and realized through algorithms and machine learning models (Li et al. 2019). Despite their nominal driver-partner status, there is no way the drivers can contribute to or influence the design and development of this system. For drivers, this has meant their preferences of orders and specific conditions of working are not considered. Within the system, all they can do with the orders assigned to them is to accept or reject them, and it is not possible to, for example, transfer it to someone else or reject it with a reason. This decision is then returned to the system as some general 'value', with the specific and diverse reasons underlying the decisions reduced to a number whose meaning is pre-determined by the programme. This input will then put a further set of programmes into effect, generating another set of results that provides the basis for managerial decisions. It is in this automated and impersonal way that Didi's labour process is organised and managed through the platform system.

The drivers' space of action is further undermined when Didi offers virtually no meaningful channels for them to air their grievances. Although it has a WeChat-based driver service system and a similar feature on its apps, for many drivers it could take up to three hours to finally be able to speak to a Didi representative, and a week for an issue to be resolved. Precisely because management is now carried out by automated machines, the space of negotiation between managers and workers that serves to organise consent on the factory shop floor is gone, making the system all the more despotic.

For many drivers, this technological despotism, at a time of growing power imbalance between them and Didi and shrinking profit margins, gives them an intense sense of control and pushes them to the limit. In interviews, participants described the company as 'scheming and calculating', and their experience of relations in production of Didi as more coercive than in the factory. For example,

like Tang, Xiaoliu found the bonus scheme to be ‘bullshit’. But if Tang was forced to work for more than 12 hours a day because of the contrast between growing numbers of drivers and dwindling orders, for Xiaoliu the problem was more to do with the order dispatching system, and how the bonus system was effectively transformed into one of coercive control by it:

[Didi] orders are dispatched automatically. Although it has a ‘reject’ button, I do not think I really have a choice... I do not know why, but the system keeps assigning to me awkward orders, for example, that from Dongguan to Shenzhen, which I do not like because my car is registered in Dongguan and cannot take orders in Shenzhen, meaning that I have to drive back without a rider. If I reject it, the system keeps pushing it to me. In the end, I have no choice but to accept it for the bonus. Nowadays, profits from Didi basically come from bonuses.

Xiaoliu’s ambivalence was also felt by Laoyang, but as he did not operate in border areas, he was only occasionally assigned such inter-city orders. For Laoyang, the sense of control and desperation stemmed more from the tension between Didi’s underdeveloped map system and its regulation concerning driver route-taking:

Didi’s map system is really shit. it works better in Shenzhen, but in cities like Dongguan where the road systems are extremely complex, the geo-location data is imprecise, and many of the routes it plans lead you to dead ends. But according to Didi’s rules, we have to drive strictly according to those routes. If you make a detour, some people will complain to Didi, and we will be punished regardless of why we take the detour...

In face of this technological despotism, unless pushed to the limit, it is not in the drivers’ interest to contest it. It is true that some drivers, as Sun (2019) found in her research on Beijing’s food deliverymen, did try to learn about the algorithm and work the system, and on a daily basis they shared their experience and guesses about the system with peer drivers in WeChat groups. However, none of my respondents considered this meaningful in guiding them to better navigate the system. By contrast, most felt they had no choice but to yield to it and did not consider it worth the risk of violating the rules to test the algorithm. This is because the unpredictability of the system has an immediate price for them to pay, for example,

decreasing orders, loss of bonus and the fear of things getting worse. Having substantially invested, they felt an urgency to make more money by working longer and harder. Some worried they might be removed entirely from the system, since it cost Didi little to do so. After all, under the legal framework of the Contract Law, Didi need not pay a severance package, for example, to dismiss drivers.

6.4.4 The rider's gaze

The bonus scheme, route regulation and the order dispatch system aside, Didi's rating system is also central to drivers' experiences. Itself constantly changing, at the time of my fieldwork, the rating system had three components: order completion rate; five-star rate; and complaint rate. Order completion rate is the percentage of orders fulfilled against orders assigned – it encourages drivers to accept every order the system dispatches. The five-star rate and complaint rates are set to encourage workers to deliver the service in a way that satisfies passengers.

For the drivers, it was natural that Didi wanted to encourage them to work more and provide excellent service to the passengers. But they found the system wretched in its actual implementation, as it allowed riders to mark the service without having to worry about consequences. Although Didi did suggest several indicators, ultimately the rating relied entirely on the rider's discretion. In this way, Didi effectively put the drivers under the riders' gaze. This riders' gaze became more powerful when the rating system was linked to the order dispatching system, which had a direct impact on drivers' income but was effectively a black box to them.

In their daily encounters with the riders, many drivers reported that they were often yelled at and looked down upon and were often forced to accept excessive requirements. Tang became furious when talking about this:

In Dongguan you meet all sorts of riders, many of whom are fucking stupid. They act as if you owe them a big chunk of money. Who do they think they are? Come on, spending 5 yuan to get a Didi ride does not make you God! You are still dagong de, OK?

This emotional cost also involved a gender dimension. Xiaoli was in his 30s and had been a driver for two years. He particularly disliked the feeling of having to bow

down to the riders' mistreatment and unreasonable requirements almost on a daily basis, which had trapped him in a crisis of masculinity:

You cannot imagine how arrogant they are... here in Tangxia, you can always meet people who... do not really treat you properly, as an equal person... This makes me really unhappy and feel ashamed. After all, I am a man! What is a man? A man is supposed to be dingtian lidi [of indomitable spirit], to be the master of the family and you benshi, you chuxi [skilled, capable of doing meaningful deeds and full of promise]. But I am so wonang [useless]!

Frustration related to passenger supremacy was also deeply felt – albeit in a different way – by those drivers who had received higher-level education. Among the drivers I talked to, three held vocational school degrees, two dazhuan, and one sanben.⁷⁰ This echoes the well-established fact that second-generation *nongmingong* are generally better educated than their parent generation (Wang 2010). Because of the sharp contrast between the bright future promised by education, the high hopes of their parents, and the cruel reality, they typically felt a sense of desperation, dislocation and meaninglessness, and this was similar among educated drivers. Huzi was a designated driver who worked for three days a week to earn enough money to rest for four days. According to him, this was not because he was too lazy to work, but he saw no point in the job:

being a designated driver means you work mostly for rich drunkards. Very often you find yourself 50 kilometres away from home late at 3 am, and your body covered all over by disgusting vomit. But you have no choice but to take care of them, although it is not part of your job. Otherwise, they will complain and Didi will definitely fine you. What is the point in suffering from all this after struggling in school for years?

Although feeling very angry, drivers seldom answered back when treated as such because they did not want to encourage a low rating, for as far as their experience was concerned, the more low ratings they received, the less likely they were to receive 'good' orders. For Xiaoliu, this meant long-distance orders, and for Laoyang, this meant orders from and to bustling areas.

⁷⁰ Dazhuan and sanben are higher education institutes in China.

Drivers also tended to react passively in the face of passenger offences because they did not consider Didi to be as fair to them as much as they were to riders, and neither did they have the time to deal with the burdensome processes of settling conflicts. As Laoyang put it:

Spending time educating the riders or arguing with Didi is not worth it. You can even understand by thinking with your toes that Didi always sides with the riders. My experience teaches me the same. Didi is never fair. It never listens to us and puts itself in our shoes. Even though it was finally found out to be the passengers' fault, so what? We never get any compensation for our losses, I mean, the time we spent in handling it. Rather than wasting time on that, spending it on two more orders seems to me more practical.

Although drivers tended to avoid conflicts, they did consider it to be part of their cost, and although they attributed problems partly to riders' personal attainment, they did recognise Didi's role in this process. For Xiaoli, Didi's lack of effective measures to regulate rider behaviour was intentional, and in doing so, it sought to reduce costs by shifting the responsibilities to the drivers:

Didi... knows well how to leave all the problems to us and at our cost, fleecing us as much as they can... they are absolutely bandits. But to the passengers, it acts like a bitch, pleasing them without principles.

6.5 Struggle and resistance

So far, I have painted a rather pessimistic picture regarding what it is like to be a Didi driver. I have argued that while most drivers were attracted to Didi in the first place because it was a profitable and freer option, at the end of the day, it often did not take them long to figure out that it was not much freer than the factories. As the analysis above shows, relations in production of Didi as experienced by my participants are better characterised as the exploitation and extraction of surplus value becoming more transparent and multifaceted, strategies of control reconfigured to become ever more despotic and coercive, and spaces of negotiation that previously served to organize consent and soften the antagonistic relationship between managers and workers on the shop floor have vanished. As used by Didi, digital technologies are, to use Tang's metaphor, like the gold crown on Sun

Wukong's head, which might on the surface look fancy but Sun Wukong needs to be put under the close control of his master Tang Sanzang who knows how to tighten the crown by chanting magic words.

However, where there is dominance, there is also struggle and resistance. Among my respondents and their colleagues in Dongguan, struggles happened on both mundane and eventful bases, at both individual and collective levels. The only individual-based mode of resistance I observed happened in attempts to circumvent Didi's technological despotism through use of plug-in apps. I am aware of the current debate within the field on workers' space of agency under the platform economy, where a central argument is that workers are technologically literate and are actively making sense of the algorithm, and that they remake a set of 'labour algorithms' by 'inputting' diverse work practices in the labour process. Typical evidence they offer is, for example, veteran deliverymen choosing a different route from that suggested by the algorithm based on rich local knowledge, or female domestic workers leaving the platform to return to traditional domestic worker dispatch agencies (Liang 2017; Sun P 2019). But in what way do these strategies represent struggles and resistance from below? From my point of view, if in doing so they have truly made decisions diverging from what the apps suggest (for example, the different routes taken by food delivery drivers) during work, this does not necessarily challenge the labour regime to which the technology is integral. These seem to me more like factory workers hopping to another factory or trying to figure out how to perform tasks in a less physically-demanding way, which can be best seen as tactics to make the job more bearable.

The plug-in apps, on the other hand, have disrupted Didi's technological despotism at its core. Whereas the drivers tended to use different plug-ins, there were generally two ways in which these apps circumvented Didi's system: one focused on pricing – these plug-ins allowed drivers to set the price by themselves; and the other targeted the order dispatching system, allowing drivers to assert themselves in positions of higher priority within Didi's algorithm, to set their own preferences concerning riders and orders, change their GPS location, reject orders without punishment, and even pre-arrange orders for the next day. Like the WeChat plug-ins popular among

rijie intermediaries, all these bot apps were created by small, local companies in Dongguan, Shenzhen and Guangzhou.⁷¹

Not surprisingly, this activity has invited attention and reaction from Didi. In collaboration with the government, it has launched several rounds of crackdown campaigns. It may be surprising that developing and reselling such apps was illegal in China, and some of the developers and resellers have been arrested for “providing programs and tools to hack and illegally control computer-based information systems”⁷² and sentenced to up to three years in prison (Li T 2018). For my respondents, it was not uncommon to find the plug-ins no longer working two weeks after installation. But so long as there was an entire industry behind it, new plug-ins continued to emerge and replace older ones, usually offered for free or at a very low price to existing users.

At the collective level, Didi drivers were the most militant group I encountered. During the fieldwork, I witnessed two Didi strikes, while most of my informants either reported having experience of strikes or had heard about them in various WeChat groups. For example, Nian surprised me when he told me there were five Didi strikes in Dongguan in the month before we met. While three of them lasted for only a few days, two lasted for over a week.

Thus, WeChat groups provided a crucial infrastructure in connecting drivers and in mobilisation. Unlike in many factory strikes, these chat groups were not formed solely for organisational purposes (Wang 2015; Zhang L 2015) but were standing groups the drivers actively used in day-to-day work and life, with some of them established by local businesses and others by individuals along lines of friendship and locality. In normal times, these groups were where they shared complaints and experiences in driving, where they notified each other of traffic police, and where they gathered with friends and acquaintances and met new friends for late-night barbeques and beer after a day’s work. In short, these were a space where they connected with each other and formed what A’wen called the ‘*jiurou xiongdi*’, brotherly acquaintance, and ‘*zhanyou*’, comrade, a connection that was not as close

⁷¹ I was unable to find any website for the plug-ins my respondents used, but see <https://www.ddvip6688.com/dljm> for one developed by a Beijing-based company. There were also local companies trying to gather orders from Didi to create an order pool and generate profits by redistributing them to the drivers, but this was unfavourable for my respondents so long as it took away a proportion of their already slim profits.

⁷² This was written into the Criminal Law of the People’s Republic of China in 2009.

as brothers or friends but provided sufficient grounds for strategic solidarity to emerge at the point of resistance.

The main appeal of the two strikes I observed related to pay cuts and restrictive work practices. In the mobilisation process, a clear sense of the antagonism between the interests of Didi and ‘we the drivers’ could be observed. Discursively, masculinity defined as *xue xing* (literally meaning ‘the spirit of blood’, which could be understood as courage and uprightness) and *guqi* (integrity) was used to mobilise the drivers, who were predominantly male. To avoid strike-breakers, they even called on the participant drivers to place fake orders to non-participants to disrupt their operation to finally force participation. The following quote is an open letter Nian showed me that was widely circulated in the WeChat groups of Dongguan drivers before one strike:

Dear all, this letter is written on behalf of the interest of us Didi drivers as a collective. We should understand Didi treats us worse and worse. For example, whether it is us or the passengers who cancel the order, at the end of the day, it is us who are punished and fined. The fault is always ours. The passengers are too picky and too quick to give us low ratings. And the price in Dongguan is so much lower than Shenzhen and never rises.

*All in all, Didi’s policy is so exploitative and repressive that no one should bear it anymore. We need to stage a strike, with full participation. Whilst we are on strike, try to make as many orders as possible and cancel it once it is accepted. Why do this? To increase the cancellation rate of the strike-breakers. If they call you, tell them today is the strike day. If they are still not convinced, complain to Didi about them as a rider. Please all Didi drivers stand in solidarity. Please spread this letter to your WeChat groups. We need to make sure Didi has no car to use on that day. If you are a man with *xuexing* [guts] and *guqi* [standing tall], please repost.*

6.6 Conclusion

This chapter continued discussion of nongmingong’s work experience under economic digitalisation, and the focus herein is on Didi as an emerging form of mediation, that is, platform-based labour. I started by establishing the characteristics

of driving Didi as an ICTs-mediated capitalist labour process. By comparison with the factory as an ideal type, I pointed out that, in terms of ownership structure and relationship with the state, Didi is a capitalist enterprise. Although on the surface it is the drivers who own the means of production – the car – as information provided by companies like Didi increasingly becomes an indispensable raw material in the production of transportation services as service commodity, a car is hardly an effective means of production without their mediation. Hence, rather than enhancing their bargaining power, to require drivers to own or rent a car to register as a driver only adds to their cost. The ways in which revenue is distributed and surplus labour secured in the labour process means no longer just translating as much of workers' labour power into labour actualised in the immediate productive process, but surplus value is extracted in a relatively transparent manner in Didi. Further, because of the differences in the nature of the products and differences in the intentions of different types of capital, to obscure and secure surplus also means seizing a larger market share and maintaining monopoly status.

I then turned to the drivers' subjective experiences of Didi under such a labour regime. I argued that they tend to make sense of this experience by comparison with their past factory experience. One main motivation that made them turn to and stay with Didi was that they found it freer than factories, for it allowed them to not work when in dire situations, and they no longer had to bear managerial despotism and the depressing physical and social environments characteristic of the factory. But this option was not equally accessible to everyone.

Thanks to the online and offline discussion groups they engaged with in everyday life, their perceived relationship with Didi was based not only on individual experiences, but also on collective, mediated and historical experiences. The contrast of Didi's policies before and after it achieved market leadership inspired in them a sense of betrayal and antagonism. Comparing driving experience with factory experience, they believed the so-called 'driver-partner' relationship to be deceptive, having the effect of shifting a significant part of the operational costs on to them. Related to this, they found that while Didi claims to take 20% from their income as commission, it actually extracts much more than that.

At the day-to-day level, their sense of being controlled, taken advantaged of and exploited was intense. After Didi's aggressive price war and frenzied expansion, the

number of drivers grew, riders dropped, and the profit margin diminished for both drivers and the company. In response to this condition, Didi's strategy was not to continue its price war strategy but to introduce a bonus scheme that encouraged drivers to accept all the orders assigned by it and to complete as many as possible, regardless of whether these orders led to profits for them. This created mounting discontent among the drivers. Adding to this, Didi also linked the customer rating system with these two systems, which further strengthened their control and exploitation over the drivers by putting them under the riders' gaze.

A key point in these processes is that there are no effective channels and mechanisms through which drivers' voices can be heard and grievances aired. On the one hand, Didi's technological system is essentially a capitalist one whose design, maintenance and update are carried out by Didi according to a 'global optimum' principle defined as inter-driver time and cost effectiveness and efficiency. Ironically, as partners, the drivers have no say in this process. On the other hand, in this essentially automated and impersonal system, the intentions and reasons behind the drivers' day-to-day decisions in production (for example, why they want to reject an order) are reduced to the value of some parameter within the system whose meaning is programmed and pre-determined. Plus, its offline grievance apparatus almost always fails. Thus, the 'human factors' – for example, Lee's 'internal power system of regional and kinship relations' and Zhou's *laoxiang* relationship – that serve to organise consent and facilitate negotiation on the shop floor are almost entirely eliminated from the labour process.

Under such technological despotism, most of the time the drivers choose to bear with it silently, for they cannot afford to raise their concerns. But this deepens their sense of exploitation, of being controlled and powerless. Many men feel their sense of masculinity deeply threatened or consider their jobs to be meaningless.

But the drivers were not always docile: facing this increasingly despotic and authoritarian production regime, their struggle and resistance took place on both an everyday and collective basis. Didi drivers were perhaps the most militant group I encountered, and this echoed the observation of China Labour Bulletin, which documented more than 300 strikes among drivers nationwide from September 2017 (see also CLB 2018; Crothall 2018; Dai 2018). Among my respondents, none considered it an effective means of struggle to learn about the system and bend it to

their own ends. They preferred to use bot apps that allowed them to circumvent Didi's technological system. It is interesting that these apps are often developed by local, small companies in a time when China's Internet industry is dominated by big tech companies, and that these are actually criminalised in China.

In terms of collective actions, the underlying concerns include pay cuts and restrictive work practices, and WeChat provides a platform in connecting the drivers and in mobilisation. Based on the cases I observed, due to the absence of a confined, physical workplace and the lack of a human factor in the labour process, solidarity emerged less along lines of pre-existing relationship like *tongxiang*, same place-of-origin, or shared physical spaces like dormitories that were previously effective in collective action organization (Perry 1993; Chan and Pun 2009; Chan 2013; Wang 2015). Instead, solidarity emerged more through the relations forged among the drivers in online WeChat groups through day-to-day discussions and offline get-togethers, a relationship they called *jiurou pengyou* or *zhanyou*. As for strategies of mobilisation, the distinction and antagonism between Didi's interest and that of 'us drivers' as a group is made explicit. Since the vast majority of the drivers are male and their experience with Didi is gendered, discourses of masculinity are frequently invoked. They also take advantage of their double identities in relation to Didi – as producers and consumers – to play with its system and achieve 'force mobilisation'.

So far, I have focused primarily on *nongmingong*'s experience at the point of production. As I stated at the end of chapter 5, this is important not just because production is a key site of class formation and struggle, but this seems to be what they talked to me most and concerned most about. After all, for many, it is financial gains that in the first place motivate their decision to migrate. Having said this, they do not work 24 hours a day and they do have a life outside the world of work. Production aside, these reproductive activities also are contested and constitute their experience of the digital transformation of the economy, and the two mutually penetrate and construct. In the next chapter, I turn to their experience in the realm of reproduction, with a particular focus on media consumption.

Chapter 7 *Nongmingong*, Popular Media Culture, and the Bitter and Precarious Structure of Feeling

7.1 Introduction

A common scene on the shop floor during work intervals: right after the forewoman turns off the green-coloured assembly conveyor system, the lights go off and the machines continue to produce sharp noises. In the relative dimness of the workshop, everyone readily puts their work aside, yawning and stretching, pulling their cell phones out of their grey uniform pockets. Xiaolu yells cheerfully at several other women: “Laotaipo, Lijie, come here. What do you think of *The Times We Had*, that TV drama? Is it good?” Sitting next to her, Kaiping slightly leans over and joins their conversation. They quickly form a circle, leaning against the workstation, and begin to discuss recent events on iQiyi or Tencent Video⁷³, sharing what they find interesting, commenting on what they dislike. From time to time, loud laughter and vulgar four-letter words burst out, amusing yet inconsequential for many.

From the other end of the assembly line comes 22-year-old Dazhong, one of only four male workers in our line, who has worked at *Weida* for seven years, since dropping out of middle school. As usual, he shuffles lazily across the workshop, with a cigarette pinched between the tips of his thumb and middle finger. He always forgets his lighter but never needs to worry: as the factory offers no smoking facilities, the toilet has become a space for smokers, and it is not difficult to find a lighter there. Amid the dense cloud of smoke, he lights the cigarette with ease, taking a long, long drag, blowing out smoke rings. However ephemeral, the subtropical heat of Dongguan, the sweltering motionless air, the severe strain of work, the dust hanging over the aisle, even the pungent smell from the pad printers, all these suddenly become not so intolerable. Squatting against the wall, Dazhong begins to circulate a WeChat piece about rural official corruption. Dazhong and his cigarette mates do not like soap operas and variety shows, for these are “entirely made up, with no reference to reality, in which only young girls will be interested”. They instead prefer competitive video games, and short online video clips and news posts.

⁷³ iQiyi and Tencent Video are major online video streaming apps in China.

While *nongmingong* watching television is not a new phenomenon, watching the content of their own choice on their own screens is a recent development. This owes much to the growth of the domestic smartphone market and the reform of the telecommunications sector. Laoganma recalled that before 2014, she and her colleagues used to exchange family gossip with each other during work breaks, and they had to go to the factory's common room or corner shops nearby to watch TV. Her memory of this was not a good one, for the common room was always crowded and she could never choose what she liked, not to mention the endless whining buzz of mosquitos. Later, some had the option to buy downloaded TV plays or pirate DVDs from local shops, but for many, that was an expensive option. It was not until recently, after *Kingcard* and its competing services⁷⁴ were released, that watching favoured content at their chosen time and place became commonplace.

However, this newfound freedom may be not as natural and innocent as it seems. As has been well established by cultural theorists, any communicative process can be understood as a power-laden circuit in which culture is (re-)produced and subjects sutured through the means of language and practices of signification (Hall 1973, 1997, 2009; Fiske 1987; du Gay 1997). On the one hand, media messages do not grow on trees, but are produced out of the apparatuses, frameworks of knowledge, social relations and practices of production of an entire industrial system of media, which in turn operates within distinctive conditions of power and regulation. In this process, the dominant seeks to encode and signify social reality in certain ways, naturalize certain ways of seeing and prioritise certain preferred meanings, while repressing or rendering others invisible.

On the other hand, the circuit is not complete unless the messages are appropriated as meaningful discourses and meaningfully decoded by the audience. In this moment of reception, the audience, occupying specific social positions (including class, gender, race and place of origin), draw on resources available to them and actively interpret dominant messages in the specific context of reception (Ang 1989, 1991, 1996; Morley 1992; Livingstone 1992; Silverstone, 1994). Out of this process they

⁷⁴ *Kingcard* is a type of pre-paid SIM card service that is co-promoted by China Unicom and Tencent. It offers monthly mobile phone plans that allow unlimited access to apps developed by the two companies and their partners. In recent years, services like *Kingcard* have seen substantial growth in numbers, with Internet companies reaching all kinds of agreements with mobile service operators to secure market share.

form their own views and meanings about social reality and position themselves in relation to others and to society, suturing themselves as subjects.

Based as it is on the national context of Western industrialised societies in the mass communication era, this understanding of media reception as a process of identification and subject formation has in recent years been enriched by various contributions. For example, Martín-Barbero (1993) contested the cultural imperialism thesis then dominant in the study of culture in Latin America by advancing a radically historical perspective. For him, the nation goes beyond a rational body of decision-making but is simultaneously a field full of contradictions, where cultural identity is under constant negotiation. Antique (2016) observed the banalization of transnational media. He reaffirmed the usefulness of a reception approach to understand the impact of ‘global imagination’ but stressed the necessity to consider the multiple configurations of transnational audiences in specific material, geographical, social and temporal relations. Others have debated the blurred boundaries between audience and producer, and interpretation and participation (Livingstone 2003, 2013; Bird, 2011; Rosen 2012; Carpentier 2011; Livingstone and Das 2013). Despite their different perspectives, all agree – technological and social changes in the mediascape notwithstanding – that: 1) questions of culture, power and determination remain crucial; 2) the interpretative relations between audiences and texts remain crucial sites of empirical investigation; 3) the empirical active audience remains a crucial and fruitful point of departure, though the notion of ‘active audience’ is becoming increasingly problematic; and 4) a radically historical and contextual approach is needed.

Drawing on this framework, I argue that the scenarios described at the beginning of this chapter represent a key moment of *nongmingong*’s ICTs-mediated class formation, this time not at the point of production, but at the point of culture. The communicative process, as much as the labour process, is a site where class relations are lived and experienced through the seemingly mundane practices of audiencing (Fiske 1992), and understandings of one’s class position, class interest and possibilities of class actions forged, contested and constantly updated.

Much like it was in Hall’s time, *nongmingong*’s media consumption is still largely dominated by the industrial system of media production and distribution, albeit one that is reinvented by incorporating ICTs into the organization of these processes.

While producers and consumers may have multiplied and diversified, the underlying power structure has not. In the introduction chapter, drawing on critical communication scholar Hong Yu (2017), I pointed out that China's digital content industry has recently been allowed to flourish by the state as one way to offset the adverse effect of economic downturn and to pursue economic restructuring. In this process, private – both domestic and transnational – and state capital flooded in, and multi-channel networks (MCN)⁷⁵ rose to dominate (Topklout 2019), while the state continued to normalise, synergise and rationalize market power in a decentralised manner to maintain control (Zhao 2008). In a time of mounting social economic crisis censorship abounds, with the new hierarchical state organ of Cyberspace Administration created and algorithm adopted. The digital content industry continues to be urban-centric and middle class oriented, caught between the party line and the bottom line (Zhao 1998), although new dynamics have developed – from my observations, there was a growing subsector specifically targeting lower classes like *nongmingong*.

In this chapter, I discuss the relationship between the booming digital content industry and *nongmingong*'s class formation. Following their daily routine at *Weida* gave me first-hand, detailed knowledge about *nongmingong*'s choices and engagement with digital media content during and after work. Participation in the above-described shop floor/toilet discussions gave me a sense of how this reception was context-dependent and what the participants made of it. These observations prepared me for later in-depth interviews, where, acknowledging that some content mattered more for them than others, I asked them to name 5- 10 pieces they themselves found most interesting, relevant or inspiring, and directly elicited answers about their preferences and interpretations of them. Where possible, I watched or read some excerpts with them, asking them to talk me through the examples.

⁷⁵ Normally, MCNs do not produce content by themselves. Instead, they gather content produced by small and scattered producers and promote and monetize them by working with distributive channels like video platforms. They generate profits by taking a certain proportion of dividends.

7.2 Alienating *dagong* life and entertainment-seeking mode of viewing

When I asked, ‘why do you watch digital media?’, almost all participants gave me the same answer without a second thought: “It is funny and relaxing. *Dagong* life is frustrating and boring and you need some entertainment”.

Dagong life is indeed tiring and frustrating for many workers. Harsh working conditions, heavy family burdens and lack of institutional support aside, labour processes at *Weida* were organised by Taylorism. For me and my colleagues, this meant sitting or standing for 12 hours a day, repetitively performing the same deskilled, timed and dull job with only short toilet and meal breaks. Workplace management prioritises productivity over workers’ well-being. Intensive work left us little time and energy to deal with problems outside work.

Ruizhuo was 35 and joined *Weida* as *pugong*⁷⁶ in 2014. The long-hours of dull work had pushed him to look for less-demanding jobs: “Every day back home, I am always too tired to do anything. Sometimes I just got grumpy for no reason. Even a call from home can piss me off. All I want is to lie in bed and chill”. Qunxian, mother of two, had worked in *Weida* for eight years. Accustomed to the physical pain of factory work, what she disliked was her feeling of indignity as an adult in her 30s:

You might find this derisible, but every day when I wake up, I have two mouths to feed. My daughter keeps asking for money. Too much pressure. I just have to rely on this job. When I don't have to deal with these, I just want to stay with myself, doing whatever I like that can make me laugh.

The statement “*dagong* life is frustrating and boring” refers to the repetitive work, inhumane management and heavy family burden; it also implies the absence of much-needed quality social and emotional support. When I asked Xiaolu, who I had befriended when we talked, what about factory life made her frustrated, her face turned red and she answered in a low voice, “let me tell you what I really think. I often feel very lonely, but still I don't open up to people here because I don't trust them. All they want is to gossip”. Qunxian did have close relatives around, yet she also found the biweekly one-day break too long:

⁷⁶ *Pugong* are rank-and-file workers.

We dagong people have nothing much to talk or celebrate. All is not well. Nobody will put themselves in your shoes. Relatives are no different. Unlike you, talking with them only makes me more anxious. I personally often sleep the whole day. When I am awake, I watch TV drama to kill time.

Digital media also became popular entertainment because of the lack of affordable offline options. In industrial towns like Tangxia, infrastructures were historically designed for industrial purposes. Recently gentrified, it was not surprising that the cinemas, malls and fine restaurants were meant for the middle classes, being far from the factories, and expensive. Public stadia and libraries supposedly open to all were subject to abuse of power and served only local officials and their associates. Around the migrant villages there were only Internet cafes, snooker bars, and massage parlours that more or less involved prostitution.

Songli was a badminton player and swimmer before joining *Weida*. When he first arrived, he found it difficult to get away with boredom during breaks:

Occasionally I do go to dinner with colleagues and fellow countrymen, but most of them have a family so there is not always one to go. I thought about swimming before, but the only pool in town is not open to the public. There is a badminton club half an hour by bike from our factory. Guess the price? RMB 100/hour! That is only for the bosses, not us!

He soon turned to ICTs-enabled media services. In his cramped rented room, he showed me his ‘television kit’: an armchair from the landlord, a *Kingcard* with a 50-yuan monthly plan offering unlimited access to all apps developed by Tencent and its partners, a 6.5-inch Huawei pad, as well as a Bluetooth speaker and a DJ dance light, both from *Taobao*.

For many, this scenario of the working class using mass media in their leisure time for escapist entertainment is reminiscent of a key debate in the field. Smythe and his followers (Smythe 1977, 2012; Meehan 1984) emphasized the material aspect of this scenario. For them, under mass communication and monopoly capitalism, working class people worked 24 hours a day. The job front aside, they performed marketing functions and reproduced labour power in deceptive ‘leisure’ time, and in this process their audience power was exploited and sold as a commodity to advertisers. Focusing primarily on communicative institutions, this audience commodity thesis

reveals how mass communication economically contributes to the domination of the working class and sustains capitalism. However, audience activity is here reduced to an economic act that is meaningful only to communication institutions as demographics and ratings. It fails to explain why audiences, if they are doomed to be dominated, constantly enter into this loop without coercion (Ang 1991). This raises the question of how such content becomes meaningful to them.

From the discussion above, it is clear that *nongmingong*'s entertainment-seeking mode of viewing should not be understood solely as audience work. Insofar as none of the workers indicated coercion, it is fair to say that everyday audiencing is also meaningful to them. Subjecting their statements to closer scrutiny, I argue that this meaningfulness cannot be fully captured by the notion of 'mere entertainment' as extant literature tends to frame it. He (2015: 86) is a case in point:

[nongmingong's Internet use] limits to mere entertainment, simple interpersonal communication... they seldom realized more powerful functions of the Internet like learning, enlarging occupational network, even claiming rights. For them, the Internet is like a friend ... This is not surprising, for their life in big cities is lonely and dull as dishwater.

What this view indicates is that digital media for *nongmingong* is at best a trivial form of 'mere entertainment' that meets individual psychological needs, helping soothe and kill loneliness and boredom characteristic of modern urban life. This is banal and irrational when compared to the 'advanced functions' (He 2015: 86) of the Internet, like self-development and democratic participation, which they fail to engage in mainly because of their lack of motivation, time and *zhili* (intelligence) to fully embrace its potential (He 2015).

Diverging from this individualistic and elitist view, I insist that rather than disdained as inferior or trivial, *nongmingong*'s pleasure that is derived from purportedly vulgar, trashy and unimportant digital entertainment needs to be valorised in its own right. This is not to categorically defend the digital content industry, rather I contend that this pleasure, however escapist and transient, is real and important for them, not because it fills their spiritual void of a generally urban kind, but it allows them to deal with the *particular* pressures, sufferings and tensions of *dagong* experience in contemporary China.

Dagong experience is arguably urban as geographically it occurs within urban territories. However, it goes far beyond what can be captured by the opaque notion of 'lonely and boring life in big cities'. Growing out of the overlapping forces of state socialism, market capitalism, Chinese patriarchy, legal authoritarianism and rural-urban duality, the *dagong* experience, as characterised by many authors, echoing my interviewees' accounts, is one of neoliberal individualisation, extreme alienation, increasing precarity, enduring liminality and uncertainty, mounting socioeconomic pressure and exclusion, with exceptional emotional costs (Lee 2007; Lu and Pun 2010; Sun 2017, 2019).

Under such harsh conditions, digital entertainment provides a space for *nongmingong* to at least temporarily escape from these daily miseries. This echoes Sun (2014) finding that *nongmingong* preferred mainstream cinematic narratives about them rather than supposedly more critical elitist productions that highlight their miseries, where the prime rationale is *gaoxiao* – making them laugh. Although this does not solve their life problems, the pleasure and relief, as mentioned earlier, is nevertheless real. It allows them to throw up a screen between themselves and their dual responsibilities towards the family and the factory. This is a space where they can, in their own words, stay with themselves and be who they are, not compromising or suspending their own desires and wishes for closest families and friends, but freely choosing whatever they like to watch or read and please themselves. This sense of pleasure, freedom and self-control, I argue, is central to their experience with digital media. In the increasingly individualized and gentrified industrial towns of the PRC, digital media is the most affordable and convenient option of this kind.

Escapist relief aside, some do see an instructive value in these relaxing moments, especially in terms of self-transformation into independent, mature, responsible and adaptable individuals who keep abreast of the times. Homing was 26 and unmarried when one of his fingers was cut in a work accident. At that time, limited material conditions, physical disability and his unsatisfactory marital status almost destroyed his confidence. In his rented room, we had a conversation about his digital media use, and I was surprised that he subscribed to five WeChat public accounts offering advice on how to be a good man and was a dedicated reader of them all. Burying head in arm, he smiled shyly and confessed:

I was really frustrated when first injured. A man reaching his 30s, I was a real nobody, no jobs, no money, no wife! It was Tonggen⁷⁷ that rekindled hope in me: I want to be stronger and have a normal family life. Now I am more positive. Living alone, not wanting my parents to worry, these public accounts are useful as they teach me a lot about the unwritten rules and principles of society.

However, to valorise this pleasure and its instructive value should not obstruct us from the power struggles behind this pleasurable and edifying process. This shifts our attention to the micro workings of media power in the interpretive process of everyday audience sense-making. In what follows, I synthesise my participants' observation with their self-reported preference for digital media content. I focus on what this content is, how they find it relevant, interesting or thought-provoking, how they interpret it and in what context, and what kinds of understanding of lived experience and boundaries between the probable and the improbable – that is, class disposition – thus emerge. I conclude the chapter by discussing the challenges and opportunities for emancipatory class subjects to emerge from this cultural politics, understood in a classic Marxist sense.

Despite the shared entertainment-seeking motivations, participants' preferences are closely related to their classed and gendered identities and concerns. In what follows, I discuss four themes or genres thus emerging. These represent key aspects, as far as my fieldwork is concerned, of *nongmingong*'s ICTs-mediated class formation through digital media in present-day China. In this process, they negotiate and constantly update their understanding, drawing on media texts as well as their own structures of feeling and discursive resources, of what it means to be semi-proletariat *nongmingong*, positioning and imagining themselves in relation to their middle class counterparts, the state, the opposite gender and the rural-urban duality.

⁷⁷ Tonggen is an NGO specializing in legal aid for work injuries and occupational disease. A pseudonym is used here to protect the organization. Many *nongmingong*, because of their lack of education, find it difficult to navigate the complex work-injury compensation application system. Tonggen basically prepared the documents needed and made the application on Homing's behalf.

7.3 Watching urban middle class life in *shenghuoju*

For most female *nongmingong* in the *Weida* factory, what they call *shenghuoju* are invariably an important influence on their perceptions and images of middle class life. This is especially true when their daily round of activities centres around the routine of production. A term of their own invention, *shenghuoju* literally means TV dramas about life. In daily interaction, my interviewees used the term to refer to a set of melodramas with metropolitan settings that blend different aspects of urban middle class life: office politics, romantic relationships, and individual development; exploring themes like self-realisation (especially female), individual development, love and morality. Interestingly, none focused exclusively on *jiating lunli*, family ethics. Textually, *shenghuoju* share a similar storyline: they usually start with the protagonists born into or encountering major life problems or challenges of a particular kind, which develop as they try hard to resolve contradiction after contradiction through their own efforts and with the help of others, and ends with all challenges solved.

Upon my arrival at the factory, the then-phenomenal *First Half of My Life* quickly gripped large urban audiences and dominated their TV talk. As a *shenghuoju*, *First Half* is typical in many ways: it sets the scene in metropolitan Shanghai and centres around the intertwined lives, loves and struggles, ups and downs in marriage, romantic relationships and careers of four main characters, all taking senior managerial positions in the high-income consulting industry – except Luo Zijun, a full-time housewife – in melodramatic fashion. Adapted from Hong Kong-based writer Yishu's social realist novel of the same name (which in turn drew its inspiration from Lu Xun's 1925 novel *Shang Shi, Regret for The Past*), *First Half* explores what it means to be an independent woman – a theme the two authors explored in 1950s HK and 1920s China – in contemporary urban China.⁷⁸

I felt rather perplexed about the immense popularity of dramas like *First Half*. Given the sharp contrast between the *dagong* experience and urban middle class life, I had expected my participants to find these dramas irrelevant, unrealistic, too posh and experience-distant, and hence show no interest at all. I also expected that, because of cultural proximity (Georgiou 2010), they would be interested in rural dramas like

⁷⁸ See screenwriter Qin Wen's interview: http://m.xinhuanet.com/book/2017-07/13/c_129654193.htm

Rural Love Story. However, it turned out to be the opposite: while the few viewers of *Rural Love Story* complained about its implausibility, with the term *shenghuoju*, my interviewees implied that it was these dramas about urban middle class life they found to be more relevant, realistic and ‘about life’. The following quotes are illustrative in this regard:

*My criteria for choosing TV drama is ‘life’. I click open a lot, but not many I continue to watch full episodes. Usually I watch the first episode to see if it is about life. Everything I watch is about life... (Laopen, discussing *The Times We Had*).*

*I like *First Half of My Life* very much and have watched it twice. Now I am working from home, so I can watch it there. It attracts me because it is very realistic (Hejie, discussing *First Half of My Life*).*

*What I like most recently is *Pretty Man*... Though it is entirely made up – TV dramas are made up, but you can always find people like them around you. (Qunxian, discussing *Pretty Man*).*

Recalling the synopsis of *First Half*, it is obvious that in terms of life conditions and everyday concerns, lives portrayed in *shenghuoju* and *dagong* experiences are far from similar. One also has a difficult time imagining that female *nongmingong* may prioritise self-realisation and independence over family concerns. This surface paradox prompts me to ask: in what ways are these dramas realistic and ‘about life’ for them? How is it that they can “always find people like them” around them?

Realism is a recurring theme in audience reception studies, and the precise meanings of this judgement are found to be class/gender-specific and genre-related. Radway (1984), Long (1986) and Ang (1985) identified among Western middle class female audiences and readers of fictional romances and melodramas a deep allegiance to realism. A crucial mechanism through which this is established is ‘para-social interaction’ (Horton and Wohl 1956), that is, the audience emotionally identifying with and talking about the characters, evaluating their personal traits and experiences as if they were real people rather than constructed realities. On the other hand, Press (1991) observed among her US comedy audiences a similar pattern of working class female viewers recognizing middle class life scenarios on TV as realistic. She argued that they derived the sense of realism in a decidedly different way than the middle

class: not from emotional identification with characters, but distanced acceptance of the overall world or the ambience portrayed on TV, pertaining to details like specific plots, physical settings, moral issues and lessons learned – the accoutrements of middle class suburban houses.

Interestingly, my female *nongmingong* did not recall much of the details of the dramas. Their recollections of *shenghuoju* when explaining what they found to be realistic had more in common with Ang's middle class *Dallas* viewers, as they usually began by confessing emotional identification with the pitiful fate of the characters, before relating it to their own experience. Hejie admitted that she was a big fan of *First Half*. Since her husband pulled a few strings that allowed her to work from home, *shenghuoju* had been her loyal companion whilst working alone. On the hot Friday afternoon when we met, she was busy fusing charging cables with solder, with her 6-inch OPPO phone set up on a plastic dock in front of the soldering gun. It was the third time she had watched *First Half*. When pressed about what kept bringing her back to *First Half*, she further elaborated her notion of realism as she understood it:

Similar things also happen in real life. That woman [Luo, the female protagonist], she stays at home as a housewife, looking after her husband and educating their kids. Later her husband has extramarital affairs and divorces her. She becomes single again and can only rely on herself. Such is life. You can rely on no one. This might sound cruel but simply the truth. I feel pity for her, but there is nothing we can do.

In the quote above, Hejie mentioned little of concrete daily situations. Her narrative abstracted Luo's personal divorce and struggles in her career from the immediate socio-economic setting of the drama in which it took place and framed it as general human experience. She talked about Luo as if she was a real person, rather than a character created by the screenwriters and presented through the audio-visual languages and techniques of the director, identifying with her emotionally and feeling pity and heartache for her. What motivated her emotional identification with Luo was her "bitter structure of feeling", as manifested in her own words: "such is life", "you can rely on no one", "cruel but simply the truth", "there is nothing we can do". For Hejie, misfortune, cruelty, bad luck, precarity, helplessness and uncertainty were a normal and necessary part of life, and in her reception, *First Half* is

abstracted as a vehicle through which this notion of life is elaborated and conveyed. It is in this sense that she thought of it as realistic.

Her bitter structure of feeling, of course, did not come from nowhere. As we first met on a personal occasion to which only close and trusted friends were invited⁷⁹, in our interview Hejie was fairly open with me. Like most *nongmingong*, she was born into a family in reduced circumstances in a mountain village in Jiangxi, a less-developed inland province in China. She dropped out of middle school after her father fell seriously ill, as a result of which her family became debt-ridden. The decision to follow her uncle into work in a Dongguan factory was made when she saw how her mother was rejected right and left when borrowing money to cover her father's medical bills. Things became better for her after getting married. Her husband, according to her, was responsible, reliable and worldly-wise, making him foreman material. After he became foreman, he often used his influence to alleviate her workload. Recently, she was happy to be able to work from home, no longer having to bear unfair and disrespectful treatment.

This emotional identification with characters based on the bitter structure of feeling is also manifest in Qunxian's reception of *Pretty Man*, a trendy romantic drama concerning the love story of two protagonists from an upper middle class background. It is a *shenghuoju* in the sense that it started with the two protagonists breaking away from their families and working in a café to support their lives. The narrative proceeded with a typical romance storyline and contained standard elements of the genre, including male and female villains and foils. One month after watching it, in our discussion Qunxian recalled little of the romance part of it, but focused more on the bitter element:

When he [the male lead] was young, he used to dagong to support himself. The girl [the female lead] was no better. Her father was ill. So, while she studied, she had to dagong to support herself and cover her father's medical bills. Both are piteous. They suffered too much at such a young age. The actors act really well, and I feel real pity for them. Though this is not real – TV dramas must be made up, but you can always find people like them in real-world life, around you. I prefer this kind rather than those popular

⁷⁹ We first met over a dinner organized by Qunxian, Hejie's elder sister on her mother's side. At that party all invited guests except me were Qunxian's relatives.

romance dramas... all about 'you love me and I love you' ... that is not what life is like. To use a metaphor, they are floating in the air.

Though Qunxian was aware that TV dramas are fabricated, she nevertheless thought of *Pretty Man* as realistic, in so far as the two leads 'dagong', 'suffered too much' and she felt 'pity' for them, despite the fact that the two leads were actually running away from their multinational corporation-owning parents to whom they could easily return. Qunxian herself began to *dagong* in a shoe factory in Fujian province when she was 14 years old, not because her family was in a state of virtual penury, but because she did not do well at school and so was expected by her parents to work and support the family, particularly to pay her elder brother's school fees. It is interesting that she used the term 'dagong' to describe the two leads' temporary jobs at a café, for *dagong* in the daily use of the term, from my observation, denoted working class jobs distinguished from *gongzuo*, which is often associated with middle class jobs with higher income. Her distinction between *Pretty Man* and those romantic dramas that are "all about you love me and I love you" is telling, which might on the surface seem implausible since textually speaking *Pretty Man* was in large part a typical romantic drama. However, a text can never be read in its entirety and *nongmingong* are capable of 'haggling' about mainstream narratives as much as any other groups (Ang 1987; Sun 2014). For Qunxian, *Pretty Man* is meaningful and realistic not because of its romance but because of the bitter element at the beginning, which bore a closer relationship to her own experience.

So far, I have argued that female *nongmingong* favoured middle class *shenghuoju* because of its realistic nature, which, according to them, stems from their emotional identification with certain characters based on a bitter structure of feeling they derived from their own *dagong* experience. For them, the middle class life portrayed therein is real insofar as it presents life as one full of bitterness, precariousness and suffering, and as far as this bitter structure of feeling is concerned, there is no difference between them and their middle class counterparts.

While this represents a key moment of female *nongmingong*'s understanding of their relationship with the urban middle class, it does not follow that these dramas lured them into the illusion that the world is flat. But this awareness of the disparity does not undermine the level of realism they invest in these dramas. Rather, they tend to explain it in terms of individual *suzhi* (quality), *wenhua* and *guanxi* capital. Jinyu

also watched *First Half*. In our interview she provided a comment about Luo Zijun's career trajectory – in *First Half*, Luo gets a position in a leading consultant company in Shanghai with high income and security:

well, she is an able person, and finally gets a well-paid and stable job. But I think that is because she is educated and skilled and has a strong guanxi network. This is beyond my wildest dream for us who are meiyong, meibenshi and meiwenhua, incapable, unskilful and uneducated. Maybe my son can do this. But I have learned to be content with my lot, to like my life as it is [guo ziji de xiao rizi]... for us who are meiwenhua, you can't expect too much.

For Hejie, Luo's career success is also 'very realistic',

...her bestie's boyfriend used his influence to help her. One of the mall's managers fell in love with her and helped her out a lot. So, her success actually owes a lot to others' help. We definitely need to be independent, you need be independent, but it would be useful to have some guanxi.

This critique of their own identity as *meiyong*, *meibenshi* and *meiwenhua*, and the conviction that they deserve their less satisfactory status because of their lack of competence compared to their more successful middle class counterparts, can also be found in their reception to the representation of urban consumerist culture in *shenghuoju*. In her brief comment on *The Times We Had*, Laopen responded to a plot where the two protagonists travelled together in first-class cabins to Thailand to attend meditation classes: “only people who are *youbenshi*, capable, can travel abroad. For us useless people, we can only stand by and envy”.

To summarise, spending most of their time in the workshop, *shenghuoju* with a metropolitan-setting that female *nongmingong* find relaxing is crucial in mediating their imagination of middle class life and relationship with the urban middle class. *Shenghuoju* cuts across genres and is marked by narratives reminiscent of ‘speaking bitterness’, by which Farquhar and Berry (2006) denote a dominant narrative in Chinese historical fiction that transforms local stories of personal suffering into collective narratives of blood and tears, and in so doing simultaneously constructs the nation and the subject. *Shenghuoju* also draws on personal suffrage but transforms it into tales of neoliberal individual development.

In their actual reception, what keeps drawing them back to *shenghuoju* is their realistic nature, defined in terms of their emotional identification with individual characters based on a bitter and precarious structure of feeling. This in turn contributes to the view that middle class life bears no fundamental difference from theirs in term of *chiku* (eating bitterness) and precariousness. Furthermore, they are cognizant of the sharp contrast between urban middle class life and their own, usually signified by better jobs, modern offices, abundant and fancy consumer goods. But this is also realistic for them insofar as it can be explained by the language of *suzhi* they take for granted, a pivotal technique of neoliberal governmentality in post-reform China in turning peasants into modern citizens (Anagnost 2004; Kipnis 2006; Yan 2008).

7.4 Luogui going viral

First released in 2014, *Luogui* is a phenomenal *wangda*⁸⁰ that in less than one month generated more than 130 million views on one single platform on Tencent Video. This success notwithstanding, it has received little attention from mainstream media and academia. But this does not stop content producers mimicking its content, form and style, giving rise to what I call the *Luogui* genre among the recent MCNs-dominated short videos upsurge in China. Although aesthetically unsophisticated, *Luogui* videos were intensively viewed, reposted and debated among my *nongmingong* interviewees of both genders.

7.4.1 Luogui as a genre

Luogui literally means ‘back home in dire straits’. It follows the homecoming journey of Qin, a peasant-turned-millionaire entrepreneur who has spent most of his life in business, disappointed by moral degeneracy engendered by the market, and feels nostalgic about the old norms of the *xiangtu*, earthbound, acquaintance society. The story revolves around the reactions of different people – his brother, sister, childhood friends, middle-school classmates, neighbours, former business partners who he once generously helped – to his disguise as a beggar and explores the tension

⁸⁰ *Wangda* is an Internet-based film and refers to a new mode of production, distribution and consumption. Normally, its crew members operate independently from traditional corporate modes of film production, and its distribution relies mainly on Internet-based content platforms.

between two contrasting sets of norms: that of the traditional, rural acquaintance society and that of the modern, urban market-oriented society.

To speak of *Luogui* as a genre I mean the videos under discussion in this section are built roughly on a narrative structure and theme indistinguishable from *Luogui*.

Theme-wise, central to this genre is the rural/traditional-urban/modern tension, though each are preoccupied with individual and isolated incidents – serious disease, abject poverty, bankruptcy crises and high-end consumption – and explores different aspects of it – kinship, trust, brotherhood or *renqing*. In terms of narrative structure, broken down in terms of Wright's three essential stages in his study of the western⁸¹ (Wright 1975), *Luogui* usually starts with an initial situation where a certain traditional value is challenged by a modern one, and proceeds with a complex set of intermediary interventions, before the threat finally gets removed and traditional values are restored. The most basic structure of embedded actions that cause and explain this process coherently are best captured by the nine logically related functions (Propp 1968) as follows:

- 1) A⁸² hides his social identity (economic success) out of humbleness
- 2) B acts antagonistically towards A because of his surface mediocrity or even failure, usually on occasions associated with high-end consumption, in a capricious, arbitrary and exaggerated manner
- 3) A reacts with considerable patience, restraint and tolerance
- 4) B's antagonism continues in a more aggravated manner
- 5) C joins B in disparaging and insulting A while flattering B

[after several rounds...]

- 6) A passively reveals his real social identity through a third party
- 7) B and C are surprised by A's real identity and quickly admit their mistake, showing admiration of A, or fleeing with tails between legs
- 8) A forgives or condemns B and C for their shallowness and wrongdoings in traditional moral terms

⁸¹ The western is a genre of fiction often centred on the experience of nomadic cowboys or gunfighters armed with guns and riding horses, set primarily in the late 19th century in the American Old West.

⁸² A = Hero, personification of traditional values, usually successful in business terms, predominantly male; B = Villain 1, less successful than A in business, predominantly male; C = villain 2, least successful in business, usually female; A, B and C were previously in a close relationship with each other within an acquaintance society norm.

9) A's identity is restored; the moral value associated with it is reinstated

[incidental music, usually viral hits among *nongmingong* on a relevant theme, for example, *We Are Different, Brother of Life...*]

A slightly different variant of *Luogui* locates the tension between male characters of kinship or brotherhood relations. If there is a villain, it is usually the wife of one of the brothers. Typically, the threat is associated with real-world financial difficulties in subaltern lived experience, for example, a small business on the brink of bankruptcy or serious disease. It usually ends with one party, rich or otherwise, resolving things in an economically irrational way, either in return for a previous debt of gratitude or in defence of brotherhood and family values. Whatever the value and norm addressed, the title usually takes the form of suspense or exaggeration.

For many (e.g. Liu N 2018), the *Luogui*, or the emerging *Tuwei*⁸³ subculture on the Chinese Internet it belongs to, represents an autonomous form of rural youth self-representation, and it gains popularity because it fulfils rural youth's long-unmet desire of self-expression. On the other hand, moral panic abounds, with most censuring it as vulgar, nasty, inferior, pornographic, drug-related and crime-prone. Others are concerned about the message it spreads, particularly the reification of women and male supremacy, arguing that it will contaminate the subaltern mind, sparking further social unrest. Echoing the state's campaign to clean up the Internet, these scholars call for joint efforts from the state and Internet companies to curb its rampant growth to represent an authentic, harmonious and positive rural culture.

While I do agree with some of the feminist appraisals, much of this critique is merely an elitist debasement of popular culture in aesthetic terms, nothing more than the old distinction between high and popular culture taking on a new guise (Williams 1974). Besides, it also mistakenly treats these videos as autonomous forms of self-representation from below. Tracing the origins of *Luogui* videos reveals that most are professionally produced by contracted producers to be distributed through MCNs for profit, which can be better explained as the outcome of the rise of the digital content industry and the state-led campaign of mass entrepreneurship, rather than some newfound interest of the subaltern. It is this mediating force of economic interest that sustains the continuing production, mutation and diversification of the

⁸³ Countrified and folksy.

genre. More importantly, this critique fails to do justice to *nongmingong* as its fervent audience, for it rushes to the conclusion that detrimental content as such undermines the subaltern morality without attending to what they actually make of it. In interviews, my workmates told me quite another story.

7.4.2 *The dialectics of moral critique and pragmatic identification*

While realism is explicitly paramount to female *nongmingong*'s likes and dislikes of *shenghuoju*, in the case of *Luogui* videos the issue is more complicated. Jinyu's response to a video entitled *CEO Held in Contempt by Ex-wife When Buying A Ring for His Wife, but When Making the Payment...* – a typical *Luogui* video featuring an ordinary-looking *nongmingong*-turned CEO, Ming, and his well-dressed ex-wife, Qi, in a jewellery store – is telling:

This is too exaggerated, I think. Very few people will, like Qi's boyfriend, insult others with such dreadful words in public. In my hometown, he will be taught a lesson he won't forget, with fists. But it is true that nowadays people like Qi and her boyfriend can be found everywhere, I mean, those who are snobbish and get dizzy with a small fortune, fawning upon the rich and the powerful, while looking down arrogantly upon the poor and the powerless, as if they were superior. This is a time when such villains hold sway. But... they are not as rich as big bosses, nor do they have much wenhua... what is there for them to brag about?

In a similar vein, whilst showing me a *Luogui* video in her dormitory – about two brothers and a sister-in-law in which the elder brother becomes seriously ill after his deaf younger brother, with his altruistic full support, became a successful businessman – Lijie offered her comments:

I think elder brothers taking care of a disabled younger brother is common. Brothers are brothers, and it is just a matter of adding a pair of chopsticks on the dinner table. The sister-in-law's ambivalence toward the younger brother is reasonable. After all, they are also poor. But in my experience, this is less likely to be the case. Normally, people are more tolerant to the disabled than to those with full labour capacity.

[The younger brother, after becoming a boss with his brother's unfailing support, without hesitation covers his elder brother's large medical bill following a heart attack]

This is very touching [Lijie is on verge of tears]. If I were him, I would do the same. Family members are always the closest and should always support each other without reservation. But this is unrealistic for us. We cannot afford surgery for a heart attack. Nobody, even siblings, will lend you the money because they have their lots to deal with, not to mention that we will not be able to return it, for we do not have the skills and wenhua to do so and it is beyond our grasp. My father and your elder brother⁸⁴ are both ill in bed – one cerebral haemorrhage, the other severe fatty liver. Sometimes I wish I can have a brother as such. But this is above all unrealistic. We have to rely on ourselves.

Similar to Press' working class women who were critical of shows with working class settings for not perfectly reflecting their life, as the two quotes above show, for my participants, *Luogui* videos are simultaneously realistic and unrealistic.

The videos are realistic in the sense that they represent directly and in detail some of the concrete real-life situations and predicaments they confront in their *dagong* life. For Rizuo, this is a crucial reason to explain why he found *Luogui* videos interesting and relevant: "these videos are about us". So long as they can 'recognise' the difficulties and the settings shown therein, it is not surprising that they frequently invoke similar experiences of their own to make sense of the videos, as if they were real incidents or misfortunes happening to themselves or to real people in their lives. In the interpretive process, they either position themselves as part of the context, making evaluations or judgements according to their moral standards and knowledge of the subaltern experience, as Jinyu did; or they identify themselves with the character in trouble, asking themselves "what if this happened to me" and rehearsing their own solution in their mind when they had or are facing similar problems. That everyday *dagong* situations and experiences are often exaggerated in *Luogui* videos to create dramatic conflicts and heightened effects does not undermine the videos' realistic nature. For example, although Jinyu thought of the reaction of Qi's

⁸⁴ Lijie referred to her husband as my 'brother', as I called her 'elder sister Li' during the fieldwork.

boyfriend in the video as being ‘too exaggerated’, she did appreciate that the character was a personification of snobbishness, and the exaggeration was one way to bring it out clearly and highlight it.

However, they do not seem to be convinced by how conflicts are resolved in these videos. In *Luogui* videos, under the surface diversity almost all the conflicts are solved by subsuming the logic and power of the market under the traditional moral framework dominant in the earthbound acquaintance society. In this utopian world, the market is a powerful process that one can master through individual effort, while traditional morality is the prime rationale guiding the use of it. For example, in the second video, the elder brother’s huge medical bills are covered not by state-proffered social welfare, but by his younger brother who owns a multinational company providing live-streaming services. And what motivates his younger brother is the traditional moral value of *bao'en*, repaying a debt of gratitude, and that of brotherhood.

For my interviewees, this solution is clearly rejected as unrealistic, for this is not consistent with their real-life experiences. As far as their *dagong* experience is concerned, the present-day society is one in which snobbish villains hold sway and where market logic prevails and undermines traditional morality. It is also inconsistent with reality because the solutions are not feasible. The cruel reality for them is that failure to outcompete in the marketplace hinders the practice of traditional rural moralities they identify with in the face of these situations, as bitterly elaborated by Lijie. By watching *Luogui* videos and rejecting solutions as such, they actually level an implicit critique at the ubiquitous penetration of market logic in all realms of social life in moral terms.

But this rejection, if read more closely, stops short at the level of feasibility and the critique of the market system does not go beyond moral terms. If the solutions are unrealistic for them, it is because they themselves do not have the skills and education needed to outcompete in the market. This method of reasoning implies that, paradoxically, they actually agree with the solution itself, that is, it is money and individual success in the marketplace – rather than, say, solidarity among themselves to struggle or the state – that provides *the* viable and effective solution to these life problems. In rehearsing their solutions to these problems, most resort to wishful thinking. Lijie wishes that she could have a brother like the younger brother

in this *Luogui*. Responding to different videos, Mindan sighed, “where can I find such a man?”, while Rizuo hoped that he could have a sworn brother who could offer altruistic help. Though most would add that these thoughts were unrealistic, for them it is not the solution per se that is unrealistic, but their inability to take advantage of it.

Historically, rural-urban duality is central to the unfinished proletarianization of *nongmingong*, and how they evaluate this duality and position themselves in relation to it is pivotal to this process. For one thing, rural China is tantamount to the stabilizer and reservoir of urban reform. Exploitation of rural resources and rural labour power based on discriminative institutional arrangements and market mechanisms provides the much-needed primitive accumulation for urban capitalist development (He 2003; Wen 2013). For another, a parallel process of spiritual enclosure takes place quietly in the mind of the *nongmingong* (Pun and Ren 2008). Confronting real-world material changes, they increasingly see no hope in rural areas and turn to urban areas for existential needs and self-development. In mainstream discourse, being rural becomes associated with backwardness and low *sushi*. It is this dual process that leads to their liminal, semi-proletarian class identity.

Understood in this context, the popularity of *Luogui* videos among participants amounts to a moment when they negotiate this liminal class identity and position themselves between the rural and the urban. While watching these videos allows them to come to terms with and morally criticize the life difficulties and inequalities engendered by the market system *as it is* and the norms associated with it, this criticism is nevertheless limited to the moral level, and what is reaffirmed in this process is rural morality, for example, the code of brotherhood, mutual support between family members, and male dominance. What is also constantly reaffirmed, as they watch these videos daily in dorms and workshops, is the spiritual enclosure, the belief that the future lies with the city – the only effective way out of their current predicament lies with market power.

7.5 Political infotainment and relationship with the state

In the previous two sections I discussed two main strands of digital media content that emerged from the data. In the following section, I turn to a third category: political infotainment.

7.5.1 Political infotainment as a new mouthpiece

The term infotainment was originally created to capture the downgrading of journalistic standards in the production of political information because of the commercialization and competition in broadcasting journalism as it increasingly relied on entertainment formats (Brants 1998; Langer 1998). I use infotainment here because the news pieces under discussion emerge in a similar context of rampant commercialisation and competition and rely on entertainment formats, albeit in different political and historical contexts.

Though often mistaken for being user-generated because such content appears to be produced and distributed via individual channels, venture capital-backed MCNs that provide content production, distribution and promotion services are often behind them. Rather than news agencies, individual journalists or *nongmingong* themselves, most political infotainments are created by professional editors in MCNs, and the aim is primarily to attract lower-class audiences and generate profits. Textually, these pieces fuse a range of informative and entertaining elements – including news reports of similar themes, governmental policies, pictures, emojis, stickers, gifs, and/or videos – in tabloid style, which according to Sparks (2000: 13) is marked by “sensationalism, prurience, triviality, malice, plain, simple credulity”. Below are some of the titles characteristic of infotainment videos:

- “Revolutionary change for hospitals! Good for all! Future is at your doorstep!”
- “The central government started five-clearance! Three groups paled with shock! All *nongmin* [*peasants*] applaud in high glee!”
- “They always wear a ten-dollar hat on a five-cent head”: foreign profiteers particularly targeting Chinese tourists
- “Greatest enemy in recovering Taiwan revealed, not US!? Unbelievable!”

These headlines give a sense of the general areas the infotainments mentioned my workers touch upon, from which two categories can be discerned. First, government policies closely related to *nongmingong*'s livelihood were commonly mentioned. While the majority concern rural reform, for example, *hukou* (land) reform, and reform of the social welfare system, a relatively small proportion cover the 'Internet + hospital' initiative and anti-corruption campaigns particularly targeting local officials. The main thrust of these pieces is to present policies in a way that engages *nongmingong*. A principle method of editing is to rewrite or copy reports by official media and add some paragraphs, reviewing the ways in which the policy might be relevant for them.

Normally, the main voices in these pieces come from two sources – one is central-level officials who mainly elaborate the underlying intentions and rationale for the policy under discussion, constructing the central government as a wise, deliberate and rational instance of decision-making that is well-informed about the law of historical development, fully aware of peasants' sufferings and dedicating itself to unshackling *nongmin* from corruption and mafia and bringing them to *xiaokang*, a historical stage of material and cultural abundance. The other source is *sannong* experts, experts on rural issues, who speak from a more practical point of view, reminding *nongmin* readers of the concrete steps and timings around which these policies might be implemented, and how they can capitalise on them. As a result, party lines are seldom contested. Even reports on anti-corruption campaigns do not lead to discussion of government accountability but are framed as a reflection of the party's ability and resolution to purify, improve, reform, and excel.

A second category has to do with China's relationship with the world. Central to the pieces in this category is the historical and contemporary antagonism between China and foreign countries, especially the West, and it bolsters a vehemently asserted chauvinism. In this narrative, Chinese people today remain spiritually colonised (*chongyang meiwai*) by the West, as evidenced by the super-national treatment for overseas students and some Chinese women's preference for white men; meanwhile, the West wilfully denigrates and stigmatises China and Chinese people simply because of their nationality. The idea is thus advanced that such inequality and bias needs to be addressed and revised by providing evidence of Westerners as *disuzhi yanglaji* (low-quality foreign trash) and conspirators or enemies threatening China's

rise, of the core values of individuality, freedom and struggle as mere fig leaves for disgraceful behaviours and invasion of China. ‘We Chinese’ are called upon to stand up against the Westerners, urging them to adhere to Chinese law when on Chinese soil, and fight for national pride.

7.5.2 Ideological critique of the state

Most of the interviewees who reported interest in political infotainments of the first strand were male workers. Among 25 female respondents, only one reported reading and watching infotainments, while others contended that news was “those things that men should take care of” (Qihong in interview). Male workers tended to resonate with this domestic division of labour, considering following policy changes as their due responsibility as the man of the family. For them, political infotainment was relevant because it keeps them instantly updated on information about policy changes hitherto blocked by local officials, thus allowing them to better understand their rights, benefits and possible life-changing market opportunities as rural reform unfolds.

In elaborating the significance of political infotainment for him, in a bakery near Tangxia’s coach station, Junhua told me that having been away from home for more than 15 years, he had little idea of changes in the benefits attached to his rural *hukou* status, such as subsistence allowance and house repair subsidy:

previously we had a village WeChat group, but our village head never used it to disseminate policy information. He still did it face-to-face. The problem is that we have only our 75-year-old father at home, for whom it was simply incomprehensible. For more than 10 years, we missed all the benefits. It was not until last year when the policies became accessible on mobile phones that I finally had a clue to claim them, though it often took me a long time to check with friends and fellow villagers, before talking to the village head directly.

Junhua and his family received more than 7,000-yuan last year, a great relief from the family burden for him. Similarly, Dayi found political infotainment useful because it provided information about ecommerce opportunities in his hometown, as

he had always been keen to set up his own small business, selling home-grown tea and oil.

Reception of digital infotainment also extends to the discursive level, contesting the kind of state-peasant relationship constructed therein. In a toilet break, Mianbange shared an article on land reform. An adaptation of an official press release, the article, although featuring an inviting headline, drew extensively on official voices from the Ministry of Land and Resources and Central Leading Group Office for Rural Work.

At first, the discussion revolved largely around details of the policy itself. The general gist was to find out what it was about and how to leverage its potential. Most participants, after reading Mianbange's piece, found it little more than empty preaching. Soon Dazhong and another man forwarded two other pieces to their WeChat group, one like Mianbange's and the other that highlighted an expert voice. It did not take long for the discussion to evolve into some general complaining about the government. Below is an excerpt from my fieldnotes where I reconstructed the session based on on-site voice memos and memory:

***Mianbange:** These officials always say nothing more than that the government is doing us laobaixing, common people, good. To be honest I do not quite understand their lengthy talk, but I know I do not believe them. The land problem for us is simple, but they make it so complicated.*

***Youheng:** Don't be too [cynical]. I think this is a good policy. Growing agricultural products is just unprofitable. Most of my family's land is left uncultivated, why not contract it out?*

***Dazhong:** Don't be stupid! The land is not profitable in your hand, but profitable for the government. You know. They will sell the land to developers. All the money will go to their pocket.*

***Rizuo:** I do not think it is a good idea to lease the land out for that long. What if one day we are too old and weak to work? We have to rely on the land. I used to come across news about the land used to grow things that significantly undermine its fertility. The boss just does not care, as long as it generates profits.*

Mianbange: *Let me tell you why I do not trust the CCP. In the past they wanted your tax, so they gave you land, telling you agriculture was promising. Now they need your land, and they shamelessly contradict themselves. They are experts on extracting the most out of us while pretending to do us good. But we never had any choice. If the CCP wants your land, they will find a way to achieve it. They do not bother negotiating with you. There is nothing you can do unless you have guanxi. Law is for those who are rich or have guanxi. You guys are much younger so have no idea of what they did before. In our village, a woman got her house bulldozed when she was seven months pregnant because of the one-child policy. This story is widely circulated, and it must be true, though I never met her in person. Such is the CCP, gangster.*

Duan: *I agree. I previously ran a food stall in my hometown. But one day I was suddenly told my food stall was not 'civilised' and my food was not clean. This is ridiculous. Later I discovered that our county was preparing for the Inspection Team for Civil Cities from Nannings during that period. I wish they fail.*

Gu: *I do not understand why you guys bother talking about all this. You can only follow the CCP, get whatever they shanggei ni, kindly offer to you. In China, there is no such thing as equality, only obedience.*

Mianbange: *The CCP is losing minxin, popular support. Back in the war time, people followed Mao wholeheartedly, even sacrificing their lives. Are they stupid? No. That is because Mao genuinely cared about them. Mao gave them land to grow corn and wheat and fed themselves. He actually saved them. What about now? Laobaixing were never put first. They take your land, give you several thousand yuan and leave you on your own. When you can no longer make ends meet, they give you a name 'dibaohu' as if they were charity. This is humiliating. What can we do? Nothing.*

As the conversation above shows, while it started from one single infotainment article, it became meaningful to Weida workers only when it was interpreted by them in relation to other reports on the same topic within the context in which they were

⁸⁵ Nanning is the capital city of Guangxi, where Duan was from.

read and discussed. For them, Mianbange's piece is no smooth reading; it is full of intricate and obscure propaganda that they find "so complicated" and that they "cannot relate to". The other two texts are no different.

But this does not mean that the texts are entirely lost in this process. In their discussion, it is clear that the framing of the issue of rural land reform as one concerning the *laobaixing*-state relationship by the text is accepted, for their talk largely centred abstractly around the relationship between the two, with little reference to the reform agenda itself. So, rather than the text getting lost, *nongmingong*'s reception of political infotainment is a process where, precisely because of the convoluted, formalistic, dogmatic and empty nature of the infotainment texts, its particularities become 'defused' by the context and subsumed under the abstract problematic itself and the underlying ideology that organises these particularities around this problematic (Neale 1977; Morley 1998). It is this later level that *nongmingong* readers can better relate to and tend to respond to.

At the ideological level, most participants strongly criticised the image of an omnipotent and peasant-serving government as represented in these infotainments. They resolutely rejected this image and subverted it with a deep-seated political scepticism stemming deeply from their direct or mediated experience with the government through, for example, locally circulated stories, news previously read or direct confrontation. Common to the experience invoked is damage to their interest, property or livelihood by unexpectedly imposed and forcefully implemented policies, whether confiscating food stalls or coercive land-grabbing with disproportionately low compensation.

Mianbange even made a historical comparison between the CCP in the pre-PRC war era and the CCP now, where he drew intensively, as he said, on cultural memories transmitted from his grandparents by word-of-mouth. From this reflection he concluded that while previously peasants were willing to follow the CCP to fight because Mao, through land redistribution, allowed them to live on their own – rather than with others – with dignity, now the CCP wants their land back, trading their independence for the interest of the unholy alliance of the state and the market while leaving them in precarity. It is this politics of livelihood, economic autonomy and dignity that underlies their political scepticism.

However, because of its unfathomable nature, the workers fail to relate to the particularities of the text and mobilise more detailed, issue-specific experiences in reception, for example, in terms of state-market relations. The scepticism they developed thus tends to rest at a general, abstract level, with the specific mechanisms of power and dominance unattended to.

This notwithstanding, its radical nature should not be underestimated. Although it does not lead to individual or collective class actions, for most people this is not because they are unaware of or disagree with the social origin of their suffrage, but because there is no viable way to do so. After all, in their experience, struggles have led to severe consequences. Later in the fieldwork, when I told participants about a recent case of struggle where workers at a factory in Shenzhen had crowdfunded to hire a lawyer and won a suit of pension arrears against the factory owner, they were very excited and told me that had they had such opportunities, they would do the same.

If *nongmingong* engage with political infotainment of the first strand primarily out of practical concern, what underlies their interest in the second strand is their strong identification with China, in both cultural and political-institutional terms. This derives mainly from the nationalistic rhetoric of China as victim of Western imperialism in mainstream discourse since the early 1990s, with which Chinese popular culture resonated, particularly in anti-Japan TV plays. It is these resources and discourses that they avail themselves of in making sense of sensational infotainments of the second strand. For example, in explaining what a piece he reported relevant – *Greatest enemy in recovering Taiwan revealed, not US!? Unbelievable!* – was about, Duan suddenly raised his voice, and his face flushed angrily:

I am very angry. Xiaoriben [shitty Japs]! We should have followed up the victory with hot pursuit, then they would not dare to be this aggressive, becoming our threat... Why they keep doing this for so many years?
[Interviewer: For so many years?] *You must have seen kangri ju. I like it, especially those about old Mao [laomao] leading us to fight the Japs and establish our own country. I don't want to make a fuss over the history. We were poor, and lagging behind left us vulnerable to attacks. But now we*

become richer, how dare they keep bullying us? We should give them a dose of their own medicine, rather than silently swallow everything.

To summarise, like in many other capitalist countries, the Chinese state has played a crucial role in *nongmingong*'s unfinished proletarianization and in providing a stable external condition for the country's capitalist development. It is a significant enabling and disabling condition for their everyday life and struggle. Therefore, any discussion of their class disposition should address how they perceive the Chinese state. In this section, I argue that reading and discussing political infotainment is the moment in which this perception is forged, negotiated and updated.

Elitist laments about the degradation of political information notwithstanding, the infotainment pieces my respondents found interesting and relevant were based largely on official journalism, and they found both practical and critical use for them. For them, political infotainment is a newfound source of policy information with which they can better navigate the state's constantly changing policy landscape. It also provides conversation pieces for them to discuss issues in daily interactions and reflect on the role the state plays in the making of their subaltern status. An analysis of their interpretation of these contents revealed that their perceived relationship with the state exhibits a combination of radical political scepticism when it concerns national issues, and a strong pro-government nationalistic sentiment and big-power chauvinism when it concerns China's relationship with the world, especially the West.

7.6 Negotiating patriarchal families and 'masculine compromise'

The last theme emerging from the data is gender. Gender, perhaps more so than any other issue, is highly contested in my respondents' daily audiencing practices and media talk, and this owes much to the fact that representations of gender can be found across various genres and forms.

Diverse genres and forms aside, almost all the items my female respondents brought up in our interviews centred around female characters or were written from a female point of view. Across individual settings and conflicts, the plots or narratives tend to revolve around the female protagonists' interactions and tensions with the family, an essentially private realm that can be separated neatly from the public realm marked

by waged labour and market production. Besides, the family referred to here is usually not her *niangjia*, natal family, but *pojia*, the three-generation family on the husband's side.

For example, in historical family ethics dramas based on lower-class experiences, female characters are often care-giving, working mother-wives who willingly and selflessly put the family ahead of themselves – even at the cost of their lives – in assisting their husbands to carry the *pojia* family through the uncertainties of the radical yet progressive social changes engendered by market reform. The dramas usually end by glorifying such characters with little more than poetic justice.

Besides, short videos or articles on conjugal and *po-xi* (mother-in-law vs wife) relationships are widely circulated by female workers in their WeChat conversations. Two phenomena frequently criticised therein are the husband's lack of attention and care for the family, as captured by the catchphrase 'widowed childcare', and the powerful legacy of son-preference culture, usually personified by feudal-minded, high-handed mothers-in-law. In most of these videos and articles, the solution to women's predicaments lies with the husbands coming to their senses and transforming themselves into compassionate and supportive men, although suggestions of women's self-transformation into independent, self-interested and sexually powerful individuals can also be found.

In female workers' reception of these dramas, videos and articles, their focal point is without exception the female figures constructed therein. Certain aspects of these figures are accepted while others are rejected, and this varies across different age groups.

Niangqin Jiuda, a family ethics drama popular in *Weida* at the time of my fieldwork, is a useful example. *Niang* sets the scene in a residential community of a state-owned factory in a small town before the 1980s. The story revolves around the Tong brothers and their niece, Chengcheng, who all lose their mothers before adulthood. Most of the episodes are devoted to showing how the eldest brother, Tong Jiageng, the father-like figure within the family, with the help of his wife Jia Lihong, leads the family to thrive throughout 20 years of radical social change. Focusing primarily on rural family ethics, *Niang* soon began to dominate the TV talk of Jihong⁸⁶ and her

⁸⁶ Jihong and Jinyu were both born in 1982, and both had a husband and several children who were reaching adolescence. Manrong and Xiaolu, on the other hand, were born respectively in 1989 and 1994, both were married but did not have much

friends in the workshop. Below is an excerpt from my fieldnotes of their discussion where I joined them and asked what they liked most about *Niang*:

Jihong: ...the talk between Tong and his wife after being laid-off. All of a sudden, the family lost its income. They... tried to sort things out together. They really care about each other. He told his wife to stay at home and rest, and she refused because overwork might be detrimental to his health. Later when he came back from his brick factory job, she brought him a cup of tea. When she started a mahua⁸⁷ stall... his heart broke... But there are few such sensible and supportive husbands like Tong in real life. My husband is rather selfish when we are in difficulty. I am like over the moon if my husband is half considerate as Tong.

...

Jinyu: What I can recall most clearly was that Chengcheng skipped school for Liu Dehua's concert... I particularly like the way her uncle solved the problem. I do not think I can deal with similar problems in a way as good as his. I am not a good mother anyway. I should have spent more time with my son.

...

Xiaolu: To be honest I do not like rural big families. Small is better because you are freer. You do not have to deal with self-righteous people who are always ready to tell you what is the right thing to do, especially when you are a woman. This is also why I prefer dagong than doing small business at home.

...

Manrong: I think the character of Jia Lihong is unrealistic, sacrificing her entire life for her husband and the Tong family, even giving up treatment when diagnosed with cancer. It is something that can happen in Qing

experience of conjugal family life. As roommates who often worked in neighbouring workstations, they formed a relatively close-knit group. This gave them the liberty to refer to personal experiences when discussing television without having to worry about rumours.

⁸⁷ Mahua, or fried dough twist, is a traditional snack popular in northern China.

Dynasty. She is really stupid... is this even reasonable?... If I were her, I would divorce him without a second thought.

Jihong: *You young girls are immature. You will understand all this when you reach my age. A family needs Jia Lihong, otherwise, it is doomed to be broken.*

Manrong: *What about her? Why does she even need Tong's family? Women are human beings, aren't they?... and we have our own natal family, don't we?*

As shown in the extract above, like their colleagues' reception to *shenghuoju*, realism is a criterion with which Jihong and her TV mates evaluate *Niang*. And similar to their abstraction of *shenghuoju* into a general individual lived experience of precarity and bitterness, they abstract *Niang* into family experience of a general kind, in the sense that the historical and contextual particularities within which the story of Tong's family unfolds are treated as some constant external conditions of family life in general, which bear no fundamental difference from theirs and does not change over time. It is on this premise that they identify with Jia and draw on their actual, perceived or ideal family relations to compare with hers and evaluate her choices and decisions.

For Jihong and Jinyu, family life as represented in *Niang* is realistic. For one thing, they confront similar problems in their own family life, for example, problems of livelihood for Jihong and the rebellious behaviours of her left-behind son for Jinyu. For another, the judgement of the nature of family problems and the solutions offered in *Niang* are also accepted by them. In *Niang* and for themselves, family problems arise from the family's inability to cope with external social change, rather than being engendered in the first place by these social changes. They are hence to be solved by the collective efforts of family members, for which mutual understanding and support is essential. It is in this sense that Jihong's unusually detailed recounting of the conjugal dynamics between Tong and Jia can be best understood. For her, a sensible, considerate, and helpful husband is the only effective solution she can imagine for solving her family problems.

Considering family problems as such, in my participants' interpretation they further accepted the gendered division of labour within the patriarchal family. Jinyu's

response above might sound like some general regret from a mother who failed to provide her children due support. But if we put her words in context – her husband actually worked in their home city, lived together with their children but did not show much care – her self-blame takes on a new meaning. It is plausible to say that by blaming not her husband but herself, she takes for granted the norm wherein women are considered to bear more responsibilities in raising children. In a similar vein, when Manrong and Xiaolu rejected Jia's character, who sacrificed her entire life for Tong's family and argued that women are themselves people and have their own desires and needs except for those associated with *pojia*, Jihong disagreed, considering them immature. In this process, the gender norms that a woman's place is in the home and that women are subordinate to men are reaffirmed, and alternatives are rejected.

In contrast, Manrong and Xiaolu, who were younger, demonstrated a more radical attitude towards patriarchy and the norms associated with it. For Manrong, that Jia prioritised Tong's family while downplaying herself was "stupid". And when she said that this "can happen in the Qing Dynasty", she did not mean to discuss gender norms or family patterns in the Qing Dynasty, but to dismiss it as an absurdly traditional and outdated mode of thinking and behaving. Rejecting the construction of a model woman in *Niang* as such, she confirms the idea that women are no mere appendage to their husband and family, but first and foremost individuals whose desires and wills should be treated seriously in their own right. The husband's family should not be an all-time priority for women. When serious clashes between the two take place, women should "divorce *without a second thought*" because there is no point in staying for the benefit of "others".

The divided attitudes around patriarchy and women's gender roles between these two age groups can also be found in their responses to the image of women as 'independent, self-interested and sexually powerful' individuals shored up in WeChat essays. Elaborating the poetic and figurative expressions in these pieces either with personal family experiences or judging it against their ideal family relations, while the older group considered women's self-independence to be unrealistic and self-interested and being sexually powerful as immoral, the younger group embraced this image more fully, thinking of the family as necessary only when it enhances their own wellbeing.

If gender was a concern for all my female respondents, irrespective of age and marital status, among male respondents only those who were unmarried reported gender-related digital media consumption as relevant. For them, WeChat public accounts and articles providing advice on how to be a better man were a helpful diet of masculinity advice at a time when precarity and social marginality increasingly challenged them in this respect⁸⁸ (Lin 2013; Choi and Peng 2016).

In contrast to trendy images of *xiaoxianrou*, little fresh meat, and *badao zongcai*, bossy boss, in mainstream media and consumer culture, the ideal man in these texts is more akin to a modern version of the Confucian *Junzi*. Somewhere between *shengren*⁸⁹ and *xiaoren*⁹⁰, *Junzi* is an exemplar of virtuous conduct and spiritual living. A person of fortitude, he is noble by character and sticks to the innate goodness of his heart. Decorous in his conduct, *Junzi* unhesitatingly does that which is right in all circumstances with *zhi*, wisdom, and devotes his life to promoting a flourishing human community under the ritual norm and propriety system of *Li*. In the modern version, a good man retains spiritual depth and human-heartedness and shows great fortitude and decorousness. But he acts properly with worldly wisdom and long-term vision in different circumstances and is concerned with the self and family responsibility. Preoccupation with personal interests and profits is legitimate and glorified.

Unlike TV dramas, short videos or infotainment articles that are read or watched daily, male *nongmingong* turn to these articles only when the masculinity crisis is painfully felt. More than just relaxing, they considered these pieces to be enlightening sources of advice, according to which they constantly adjusted their understanding of what it means to be a man, and to borrow Choi and Peng's (2016) term, practiced masculine compromise.

Homing's digital media engagement, discussed at the end of section 6.2, is telling. He lost his life inspiration not just because of work injury, but also because, as we can tell from his words quoted earlier, of his inability to earn higher income, get

⁸⁸ It is worth noting that among this same group of workers, WeChat articles on *po-xi* relationships were also very popular. This is manifest in the fact that although they do not post much in WeChat Moments, these articles often appear there, some even with comments. Unlike articles on the same theme among women workers that are usually critical of the patriarchal family, those reposted by male workers are often critical of individual woman's behaviour for violating *fudao*, the traditional female virtue. Perhaps out of shyness or because they genuinely think of these topics about women and family as trivial and unimportant, they showed no interest in discussing these articles in detail, in both day-to-day talk and in the interviews.

⁸⁹ Those with profound capacity and importance to behave naturally in any circumstances.

⁹⁰ Those who cannot transcend personal concerns and prejudices, and act for their own gain.

married and live a ‘normal’ life, which for him are the prerequisites to being a real man. In his hometown, the Confucian tenet that a man should ‘stand firm’ at the age of 30 is widely held. Feeling disgraced and kicked out of society, from time-to-time a sense of powerlessness and desperation crept over him. Explaining his passion with these masculinity guides, he accepted the adapted *Junzi* image without much reservation:

I think most of what these articles say are right and are quite useful when I felt lost and uncertain about myself. I am now more dedicated, learn to compromise and to be practical. Previously I cared too much about quick returns and instant benefits, now I understand the limit of myself, the importance of worldly wisdom. You have to improve yourself and work hard before you are ‘qualified’ to expect more. This is what a true man should do.

7.7 Conclusion

This chapter continued the discussion of *nongmangong*’s subjective experience from the previous two chapters but turned the spotlight from the point of production to that of media consumption. This draws on British cultural Marxism that intended to provide a socialist understanding of “the significance of working class affluence, consumer capitalism, and the greatly expanded role of the mass media” in post-war Britain (Dworkin 1997: 79). A central intervention in this regard was to redefine social struggle, for the transformation affected the working people’s whole way of life and reshaped their identity in new and complex ways that went well beyond the point of production.

The decision to focus on digital media consumption in this chapter was not a blind following of this tradition but was based on three of my observations: first, the relatively new yet ubiquitous phenomenon of *nongmingong* watching or reading media content of their own choice on their own screens, on and off the shop floor; second, the social relations of production and power structure underlying the digital content industry that produced these contents; and third, the rise of the industry and its intricate relationship with China’s capitalist crisis and the state’s response to it through strategic deployment of ICTs and prioritization of consumption. At this particular stage of China’s capitalist development, if *nongmingong* are nowhere near

affluence, the relevance of media, a central, modern ideological institution (Thompson 1995), as the discursive battleground of class formation is nevertheless growing. As cultural scholar Sun Wanning (2014) argued, media and cultural practices are integral to the construction of subaltern identity, and this newfound front of labour politics is as important as the construction site and the factory workshop.

In her pioneering work in the field, *Subaltern China* (2014), Sun offered a panoramic view of how a whole array of actors, including the state, urban cinema, market journalism, independent filmmakers, intellectuals, activists, worker poets and ordinary *nongmingong*, each occupying distinctive positions in social relations of production and operating with distinctive modalities of power and concerns, interact with each other on the cultural front. Her concern was whether and what forms of subaltern consciousness, defined as the level of awareness of working class socioeconomic subordination and willingness to talk back to power, emerged from these intricate dynamics. In her book, Sun's exploration spans *nongmingong's* engagement with hegemonic mediation of various sorts and forms of self-representation, whether influenced by cultural brokering or not.

What is most relevant here is Sun's discussion of *nongmingong's* engagement with urban cinema featuring *nongmingong*. Her arguments are twofold. Firstly, urban cinema as a crucial potential site for subaltern visibility was dominated by the logic of commercial cinema and the mainstream moral grammar of the society. This has led to a recognition of *nongmingong* in terms of economic contribution and long-overdue social and economic justice but has meanwhile rendered *nongmingong* invisible as rights-bearing political subjects, presenting individual luck as the solution to their problems.

Secondly, Sun found *nongmingong's* engagement with urban cinema to be motivated by a much-needed relief from daily drudgery, personal preference of stars, and identification with the stories. She was pessimistic about its potential for raising class consciousness. This is not because she subscribed to the conventional wisdom among labour activists that *nongmingong* lacked the literacy to appreciate the intellectual stimulation afforded therein. Following Williams, she argued their viewing habits have their root in "ways of living" (Williams 1961: 125) – "the punishingly harsh physical demands" (Sun 2014: 113) and changes in

socioeconomic conditions will allow them to develop a desire for intellectual stimulation. She concluded by pointing to a paradoxical relationship between *nongmingong*'s socioeconomic conditions and subaltern consciousness formation through media:

while a subaltern consciousness may indeed be formed through active and creative engagement with the production and consumption of media products, such active and creative engagement is unlikely to come about without radical improvements in migrant workers' socioeconomic conditions (Sun 2004: 113).

In this chapter, while I appreciate Sun's proposition of media as a power-laden site of class struggle and class formation, my approach diverges from hers in two main ways. First, as discussed previously, following Katznelson and Zolberg (1986), my approach to class formation distinguishes between class consciousness and class disposition. For the two authors, this distinction is useful because, according to their historical studies, the link between class consciousness and class action should not be taken for granted, for an historically shared definition of class position does not necessarily lead to class conflicts and vice versa. Class consciousness is a slippery notion and at best an ephemeral moment that is difficult to empirically pin down.

If the notion of class consciousness concerns class action itself and assumes the necessary link between the two, the notion of class disposition rejects this link, reminding us that class formation is a non-teleological process full of contingency, and directs our attention to the motivational constructs and inclination to behave among the working class. In so doing, it opens up a space of inquiry and allows us to put working class formation and the possibilities of class action back into its specific historical and social context, urging us to examine the complexities of how working class people themselves experience and define their own lived experiences and the motivational construct thus emerging, as well as the factors and power dynamics that influence this process.

Second, my approach to the text-audience relationship focuses on the interpretive process itself: the ways in which worker-audience and various media texts mutually shape each other, for a microsociology of everyday audiencing as such accounts for how discursive power constrains and enables while acknowledging the worker-

audience's agency. In Sun's analysis, the cinematic text is more or less treated as a monolithic whole. This is perhaps best manifested by the fact that although she argued that *nongmingong's* viewing habits should be understood in relation to their ways of life, this could not be found in her explanation of *nongmingong's* engagement with urban cinema.

Based on this approach, my findings show *nongmingong* engagement with digital media content is marked mainly by what I call the 'entertainment-seeking mode of viewing', although some also find its use instructive. Linking it to their ways of life, I argue it should not be understood as 'mere entertainment' that fills the spiritual void of a generally modern, urban kind. Echoing Sun's observation, digital media allows them to deal with the particular pressures, sufferings and tensions of *dagong* experience in present-day China, not least by affording them a space to temporarily escape from daily miseries. Although this does not solve their life problems, the pleasure and relief are nevertheless real – so too are the associated senses of pleasure, freedom and self-control. In a time of surging prices and a local context of rapid gentrification, digital media stands out among the few options they have.

Four strands of digital media content have been identified by my informants as interesting, relevant or thought-provoking: *shenghuoju*; the *Luogui* theatre; political infotainment; and gender-themed articles and videos. These include representations of urban middle class life, though most concern their own lives.

At the level of the texts, my analysis shows similar results to Sun. Despite their different themes, these contents are urban-centric, prioritise the voice of the state, acknowledge the marginal status and social and economic justice owed to them, while presenting market, individual efforts and an omnipotent party state that 'Serve the People' as the solution to their problems. On each specific subject matter, the representations downplay the influence of class and economic subordination while overemphasizing the factor of that particular subject matter. Rural subjects as political subjects missing from Sun's urban cinema cannot be found here, and neither are representations of *nongmingong's* productive activities, politics of production and collective struggle.

In terms of reception, in explaining why they find such content interesting and how they interpret it, I have argued that, contrary to Sun's claim that *nongmingong* watch

films merely for fun and without desire for intellectual stimulation, they constantly draw on what I call their ‘bitter and precarious structure of feeling’, a notion by which I seek to capture their subjective experience of and before *dagong*, for example, that of material impoverishment, informal employment status, separation from the family, inconstant, unpredictable yet strongly-enforced government policies, urban discrimination, and the heavy burden of traditional gender roles, among others.

The use of the words ‘bitter’ and ‘precarious’ to describe their structure of feeling is a strategic choice. The word ‘bitter’ is chosen from these workers’ daily language and seeks to convey the nature of this subjective experience, for *chiku* or *shouku*, eating bitterness, was from my impression the single most used term when they talked about their own lives. And with ‘precarious’ I intend to capture the ‘structural’ side of this not-yet-fully-articulated subjective experience. The term became widely used, especially in labour and migration studies, since Standing’s (2011) influential intervention in which he defined precarity in the context of present-day advanced capitalism in three aspects: production (low income and unstable and short-term employment); redistribution (the decline of social welfare and security); and citizenship (citizens without effective political, cultural and social rights). But in the case of *nongmingong*, while these three aspects all characterize the scene⁹¹, the particular sense of uncertainty, impoverishment, injustice, capricious fate and helplessness engendered by the authoritarian nature of the hierarchically organized party-state should be emphasized.

From an interpretative process, *nongmingong* position and imagine themselves in relation to their middle-class counterparts, the state, their opposite gender and the rural-urban duality. Altogether we see a particular configuration of their motivational structure descended from engagement with hegemonic representations: although they exhibited strong moral critiques of the market, there is little evidence of them being sceptical about the market mechanism itself. Most still consider *dagong* as *the* better way to free themselves from gendered restrictions and rural backwardness. In this sense, it actually consolidates their conviction and belief in market mechanisms

⁹¹ It should be noted that there is a difference between the Chinese case with its advanced capitalist context in the general trend of this development. For example, in the past two decades, government efforts to extend urban citizenship to *nongmingong* have been substantial, although the actual effect merits further investigation.

and individual efforts. A strong sense of distrust with the party-state is also reaffirmed.

Based on the discussion so far, it can be concluded that the hegemonic representations offered by the digital content industry largely fail to provide an alternative and progressive vision for *nongmingong* to understand the inequalities they face. In its actual reception by *nongmingong* themselves, it has the effect of contributing to the subsumption of class discourse or the process of ‘de-politicization’ (Pun and Chan 2008; Wang 2008; Lin 2015) that lies at the heart of contemporary Chinese cultural politics⁹², while disguised as the problem of gender, state or rural-urban divide only, in the name of sympathy and moral critique.

⁹² The notion of the subsumption of class discourse captures a historical paradox in class politics and class discourse in China. At a time when China is trying to turn itself into the world’s factory and a new working class is structurally forming, the prevalent political ideology of neoliberalism has delivered a death sentence to ‘class analysis’, and has refused to recognize the materiality of the formation of a new class. The concept of class was subsumed in local scholarship and replaced by the concept of stratification, a concept that has gained in popularity since the 1990s, leading to an inevitable process of depoliticization.

Chapter 8 Conclusion

8.1 Summary of the findings and contribution

This thesis set out to understand *nongmingong*'s subjective experience of China's recent ICTs-driven economic restructuring as it pertains to work and leisure, with a particular focus on how their everyday practices, identities and possibilities for action are shaped by the changing conditions of technological mediation in these realms. Questions regarding *nongmingong*'s work and life, the institutional arrangements and the miscellaneous forms of inequalities they face have been central to Chinese sociology in the past 40 years. From different understandings of the genesis of *nongmingong* as a social group and its relationship with the historical and contemporary development of Chinese modernity, scholars have approached and explained the phenomenon from different perspectives, providing different solutions.

As discussed in Chapter 2, liberal-minded sociologists, disillusioned by Maoist socialism that "takes class struggle as the key link", tend to see *nongmingong* as emancipated migrants who – as the reform revealed – are liberated from the shackles of Maoist socialism and finally free to sell their labour power in the market. For them, the poverty, hardship and inequalities the workers must endure in urban workplaces has everything to do with the derailed socialism and its legacy, and little to do with the market. Their analysis centres around the administrative-driven rural-urban duality, and the solution to the *nongmingong* problem lies in the incremental administrative reform towards the dismantling of old socialist institutions – particularly the *hukou-based* dual citizenship status system, the dual labour market and the dual social welfare system, and the establishment of a perfect market system in which rural-to-urban migrants and urban citizens can compete in an equal and fair manner.

Those sociologists who belong loosely to the 'new left' collective in China foreground the role of both state and capital in the birth of *nongmingong* as China's new working class, as a contrast to and in tandem with the old state workers. They emphasise the role of different types of capital, whether foreign direct investment, state-owned capital or *minjian ziben*, domestic private capital, and understand the Chinese state not as a homogeneous entity operating in a vacuum, but as having its own internal logics and contradictions – for example, central-local relations, the relationship between different governmental department and functionalities,

operating with its own historical mandate of continuing the century-long exploration of Chinese modernity as a socialist endeavour and within the contemporary context of the neoliberal expansion of global capitalism. For these sociologists, the *nongmingong* question is first of all a labour question, and *nongmingong* as an emerging working class identity has more continuities than discontinuities with working class groups around the globe, especially in newly-industrialised third-world countries. What is unique about *nongmingong* is the particular process of proletarianization it has been through. This is marked by China's socialist revolution, its changing relationship with global capitalism, its rural-urban duality and industrialisation and urbanisation as two highly disconnected processes (Pun 2016; Smith and Pun 2018).

For these left-wing sociologists, the inequalities and suffering *nongmingong* face cannot thus be explained fully by analysing the administrative-driven rural-urban duality alone. They instead draw our attention to the intersection of rural-urban duality, market forces, gender, *minzu* (ethnicity), place identity, among others, under global capitalism. They agree with their liberal-leaning colleagues that the *hukou*-based rural-urban duality needs reform but diverge in that they do not believe that equalities can be achieved simply by removing the underlying institutional arrangements and establishing a liberalised market system. Rather, they call for the establishment of a bottom-up mechanism through which *nongmingong* can collectively organise themselves and have their own voice heard, which can then inform policy-making and legislation in such areas as industrial/employment relations, social security, land reform, agricultural development and the construction of the "socialist countryside" (Lü 2012; Gu et al. 2014).

On the other hand, as critical communication scholar Zhao Yuezhi (2007) pointed out, China's pursuit of modernity is a process of industrialisation and urbanisation; it is simultaneously a digital revolution. As Chapter 3 has established, in the past 70 years, ICTs have always been integral to China's modernisation, from a strategic technology of self-reliance in the Maoist era, through a means of relinking with global digital capitalism at the start of the reform and an apolitical solution to development in the post-Tiananmen era, to restructuring/upgrading through networking. As a general purpose technology, the role of ICTs in China's economic development is complex and multiple and they have been adopted to transform

almost every element and process of production in order to boost productivity or upgrade the economy, giving rise to a proliferation of new arrangements of production across industrial sectors.

As a result, the old labour question returns. Questions about the implications of ICTs for labour relations/conditions and worker subjectivities began to be asked, for example: to what extent is the very nature of labour altered by ICTs, what new arrangements of production emerge, what new forms of domination and resistance have crystallised and whether and to what extent are ICTs emancipatory or do they reproduce old inequalities? Research in this regard has in recent years focused primarily on knowledge workers – mostly urban middle class – in cultural and creative industries, for example, student interns in big Internet companies, journalists, editors for news websites, and citizen journalists in crowdsourcing news agencies (for example, Cao and Xu 2014; Yao 2014; Yao and Liu 2017; Xia 2018, 2019). It was not until recently, with the decline of the export-oriented growth engine and the state-led pursuit of wholesale economic digitalisation that the working class labourscape became increasingly mediated by ICTs. My research captures this transitional moment and seeks to join the debate on the implications of ICTs on Chinese labour.

Several years into this development, some efforts have been made to answer these questions. As an emerging field, although research has been scant, scholars have nevertheless focused on different *platform* sectors, for example, domestic service, ride-hailing, and food delivery, and touched upon issues ranging from how platform enterprise has taken shape in context, through new modes of labour use and control, to platform workers' strategies of negotiation and resistance (Liang 2017; Chen 2017, 2018; Sun 2019; Chen et al. 2020). In this thesis, my research builds on and contributes to this ongoing debate with a thoroughly worker-centred perspective. Specifically, I shift the focus from a particular platform to the digital transition of the economy in general. This leads me to contextualise the platform sector in its relationship with, on the one hand, other new mediated arrangements of production emerging in the transition, and, on the other, its continuity with the factory production regime that used to dominate the Chinese working class labourscape, reflecting on to what extent it is new. This in turn has allowed me to discuss workers' subjective experiences of the changes in the realm of production brought

about by ICTs, as well as the opportunities and challenges thus crystallised and the working class subjects thus formed, whether in work or everyday life.

1) **Understanding labour control in new mediated arrangements of production**

Under economic digitalisation, platform workers in China now serve both an ‘invisible boss’ and a traditional human boss (Chen et al. 2020). In response, a key debate in the field is to understand the changing nature of labour control – so far, scholars have focused on new forms of employment in platform enterprises and new ICTs-enabled managerial practices in the labour process. In this thesis, I have provided a detailed analysis of labour control in Didi in Chapter 5, and my analysis builds on existing literature and seeks to advance it in two ways. First, existing studies tend to see platform work as a *new* model, which ignores the fact that it is the product of capital’s endeavour to apply new technologies to restructure the old model. Second, a holistic perspective is absent, and attention is given more to the role of ICTs at the point of management. This is problematic because labour control extends beyond management, but is exercised through the production regime as a whole; similarly, ICTs are not just adopted at management level, neither do they operate independently from non-technological components of the regime, but are infrastructural to the entire production regime.

My analysis draws on Braverman’s notions of conception, execution and deskilling, and Burawoy’s formulation of the labour process and production regime (see also Smith and Thompson 1998 and Thompson and Smith 2010 for a review and update). The data for my analysis was drawn from three sources: ethnography of drivers’ day-to-day work and Didi’s platform design; interviews with drivers; and secondary sources including government policies about the platform economy and interviews and research papers given or published by Didi’s managers and engineers in the media.

The starting point of my analysis was the macro dimension of enterprise’s relationship with the state. My findings suggest that the state has high stake in promoting the development of platform enterprises like Didi and has introduced favourable policies while implementing only lax regulation. For the state, Didi represents innovation, higher efficiency and higher productivity. It allows the state to

reconfigure its growth pattern, spur economic growth and help mitigate the cost of economic crisis and transition. Didi took off quickly largely thanks to relatively lax government oversight at the start. And it was only after it seized national market leadership that the first set of industry laws took effect. This is in sharp contrast with the conditions of labour-intensive manufacturing industries in the PRD where local governments have strategically strengthened the enforcement of labour law and environmental law to accelerate its relocation in order to propel industrial upgrades.

In terms of the labour market, if 30 years ago SOE reform and the relaxation of *hukou* provided the much-needed labour force for the sweatshops (Lee 1998; Pun 2016), now the decline of manufacturing and the de-capacity in coal and steel industries have provided a large potential labour pool for platform enterprises. For Didi, this has meant an oversupply in the labour market, especially after it secured a national monopoly with the power of financial capital and ICTs. On the other hand, Didi, among other platform enterprises, defines its relationship with the drivers in terms of cooperation rather than employment, while, as Chen et al. (2020) have revealed, it actively exploits the flexibility enabled by the third-party labour agencies through subcontracting. This helps Didi to evade employer responsibilities for their workers as stipulated by labour laws, significantly cutting its costs and making it easier to dismiss drivers.

In the immediate labour process, ICTs contribute to the automation – hence deskilling – of the task of delivering a taxi service. Local knowledge of the city, for example, road and traffic conditions, and the ability to solicit riders that used to be a necessary prerequisite for a capable driver are no longer needed, as a digital map and an order dispatching system have been integrated into the app. This has made it possible for many – especially migrants – to take up ride-hailing, but it also lowers the skill threshold, thus undermining drivers' bargaining power.

The pricing and order dispatching subsystems built into Didi's digital infrastructure allocate tasks to drivers and assign each ride a price. Despite their partnership status, the drivers have no say in either process. The systems are designed solely by Didi's managers and engineers according to the 'global optimal' principle, which means coordinating multiple orders to complete the most possible orders in a given timeframe safely. The algorithm considers riders' needs but defines drivers by their car specs, and there is no button for drivers to input their needs and preferences.

Although the app has a 'reject' function, the company has set an upper limit for order rejection. Once this limit is exceeded, the drivers can get fined or even 'delisted' from the app.

Also central to labour control in Didi is its payment system, which is a commission-based system where a proportion of the fee of each ride completed is extracted in the name of information service provision. As stipulated in the contract, it is Didi who has the final say regarding how much will be taken from each order. The smooth extraction of the commission is enabled by the e-payment system where riders pay directly to Didi, who then settles daily with drivers. Like the piece rate system, under the commission-based system, the more orders one completes, the more one earns. But unlike the piece rate system, under the commission-based system, the drivers know exactly how much of their gross income is taken by the company, making the extraction of surplus relatively transparent.

Customer feedback and service as a device of labour control is also built into and automated through Didi's app. The rider rating function allows customers to rate each ride delivered according to the criteria set by the company. A less obvious way ICTs enhance labour control in the platform model is that it facilitates the managers' continuous re-conceptualisation of the task. While in the factory system it is the production process manager who carries out long-range observation, research and analysis to optimise the production process, in Didi, much of this work is automated through big data.

In Didi's daily operation, these subsystems do not operate independently, but intersect with each other. Exactly how they intersect to exercise labour control depends on what the managers see as effective to secure and maximise surplus labour. An example in this regard are the incentive schemes, which require drivers to complete a certain number of orders to receive a particular bonus, with the threshold varying across different regions and changing across time, but normally requiring 12-15 hours' work. Another example is that the order dispatching system is linked to the rider rating system, which is further supplemented by a time-consuming, rider-leaning complaint system comprising the complaint function on the app and a hotline. In its actual operation, this effectively saves Didi the onerous task of dispute resolution and gives it more space to manoeuvre in exploiting driver-rider relationships, either for a larger driver pool or a higher rider loyalty. Further, the fact

that the digital systems are inhuman and lack the intelligence and flexibility of human workers further tightens control, with the space for negotiation and complaint-lodging in workplaces with human managers that is functional to organise consent (Burawoy 1979) effectively removed, not to mention that sometimes drivers even have to pay the price of technological imperfection.

On top of this, Didi has developed many offline apparatuses to complement this highly automated system. For example, Didi driver's club and its affiliated WeChat groups are an offline centre for driver recruitment and dispute settlement; *shenfang*, anonymous rider, is a surveillance mechanism that allows the company to enforce its code of conduct among its designated drivers.

To summarise, labour control in the platform model is both old and new. Didi's platform regime continues to be characterised by disorganised market despotism (Lee 1999; Chan 2010; Lüthje et al. 2014), but this is now mediated by digital technologies, as digital apps, algorithm, cloud technology and machine learning are deployed in every possible way to deskill tasks, optimise production process and reconfigure, tighten, automate and dehumanise control of the workers in the labour process. If as Lee (1999) convincingly argued three decades ago that SOE reform precipitated the transition of factory regimes in China from organised dependence to disorganised despotism, the ongoing digital transformation of the economy gives rise to a mediated version of this disorganised despotism: what I call technological despotism.

2) Platform jobs reconsidered

Studies so far have centred on platform jobs as *the* archetypical ICTs-enabled arrangement of production. This is well-founded, for in China, the platform economy represents a strategic move by the state to restructure old industries, spur economic growth and create jobs, and its development is propelled by the joint force of the state and capital. It is gaining momentum and will continue to do so in the future. For my respondents, platform jobs are indeed a real and meaningful option. This notwithstanding, in its shadow, my research points to the existence of other ICTs-mediated arrangements of production equally popular among *nongmingong*.

One such arrangement, discussed in detail in Chapter 4, is *rijie*. *Rijie* came into existence in a time of the decline of manufacturing on the one hand, and labour shortage on the other. It is an informal form of labour use created mostly by small-to-medium labour intermediaries through the location-based social connections afforded by WeChat to meet capital's demands for flexible, cheap labour. It bears many similarities with gig jobs: a casual and non-permanent nature, payment on a piece-work basis, variable working hours, little job security, dim career prospects, and mediation by digital platforms. Within the immediate context of industrial China, it resembles agency dispatching or temporary jobs. What makes *rijie* distinctive is that it is based primarily – in some cases entirely – on ICTs-enabled connections, which adds an extra layer to its informality.

For one thing, although gig workers, dispatch agency workers and temporary workers do not form formal relations with their employers, they do sign legal contracts with the labour agencies or gig platforms that recruit them. This provides them at least some form of institutional protection, however unfair the terms and conditions and unmeaningful the protection might be (Feng 2019a; Feng 2019b). However, *rijie* operates in a regulatory vacuum, for no written contracts of any kind are signed. In disputes, no institutional resources can be mobilised to protect themselves, and there is no way they can lodge legal and meaningful complaints and take the intermediaries or their employers to court.

The ICTs-enabled connection on which *rijie* is based can also be disembedded from any offline convention, connections and even locations, and its existence is subject to the will of the intermediary. With WeChat, the intermediaries now need no physical shopfront or stalls to operate. This is problematic when WeChat groups are often the only connection between workers and intermediaries, for once the group is deleted, the intermediary can be nowhere to be found. If previously labour intermediaries had to operate in the physical location of the shopfront, giving the workers some leverage to use *nao*, create a disturbance, as a strategy to, for example, get wages (Pun 2016), now even this option is closed off.

The case of *rijie* reminds us that platform jobs are only one ICTs-mediated form of production. In the recent transition of the Chinese economy, ICTs have not just been deployed by the state and financial capital to restructure old service industries, but are in the meantime adopted by other actors within the realm of production to

mitigate the cost of transition. The arrangements of production these practices help create may be less known, but usually more informal and exploitative in their respective ways, especially when the informal economy has always employed a substantial portion of the labour force in China (Huang 2009; Friedman and Lee 2010; Lee 2016). Although *rijie* appears less often in government reports and the media, and no large-scale survey data is available to gauge its scale, almost all my respondents reported experience with it, and this was driven not by any peculiarities of the group, but by their shared conditions with other *nongmingong* under wider economic transition. Its informality and exploitative nature hence merit more scholarly debate and attention from media policymakers.

My research and analysis of *rijie* provides a theoretical and methodological framework to discern and analyse these less visible ICTs-enabled work arrangements. The theoretical framework is a synthesis of Burawoy's three-element framework of production regime and the mutual construction of technology and society, which in turn calls for a bottom-up methodology, mapping how actors within the production regime adopt ICTs to obscure and secure surplus labour amid rapid transition.

3) Bringing the workers back

A third way this thesis advances the literature concerns *nongmingong*'s subjective experience of production. Studies to date have centred disproportionately around platform sectors, which ignores the diversity of their mediated work practices. Besides, in their actual analysis, the approach is worker-centred, but the drivers are defined more often as employees in terms of employment precarity and market status than as workers in terms of their position within capitalist relations of production. This leaves important questions unanswered, such as why they choose to work with platforms in the first place, and how their class and gender identities and life history relates to their experience of production.

My analysis brings the workers back in (Burawoy 1979; Lee 1998; Shen 2007). To do this, I highlight the fact that China's current ICTs-driven industrial transition is built on the now declining labour-intensive, export-driven growth regime, and is uneven across sectors, giving rise to a spectrum of (un-)mediated production regimes

(Shen 2006). In navigating this changing labourscape, workers make their own choices about engagement and disengagement, which, as my findings suggest, have close relations with their class and gender identities, life history and concerns.

Most workers practice multi-jobbing, keeping factory jobs while taking up ICTs-enabled jobs as a side-line. This is because, in a time of transition, manufacturing jobs – despite declining overtime hours (and hence wages), degrading working conditions and aggravated exploitation and enhanced control – still offer baseline income and social security on which they can rely to cover the daily expenses of their three-generation families. Precisely for this reason, these middle-aged, married workers, whether male or female, tend to be conservative in their experimentation with ICTs-enabled opportunities.

The decision about which ICTs-enabled jobs to pick is gendered and defined in relation to the family. Male workers tend to define themselves as the main breadwinners, and would exploit resources at hand to do jobs promising instant or predictable income, while female workers are inclined to define their womanhood as caregivers, wives and mothers, with the exception of some young women who see themselves more as individuals. ICTs do not seem to have afforded them the same opportunities as men. *Weishang* is a popular choice among women but compared to Didi and other ‘male’ options, it seldom materialises as an effective source of income. Here, history seems to repeat itself, for in Lee’s (1999) analysis of the historical transition from central planning to market socialism, market opportunities for second jobs or job changes were also biased against women because of their lack of marketable skills and because their heavier domestic responsibilities deprive them of the flexibility to take advantage of such opportunities. Like Lee’s SOEs women who typically stuck to inferior factory jobs, a typical family strategy generally requires my female respondents’ continual attachment to factory jobs.

In terms of the daily work, those who assume a higher position in the factory hierarchy along the lines of managerial ranks and skill levels generally have more time, energy, *guanxi* networks and flexibility to practice engaging in side-lines. By contrast, rank-and-file workers must usually work excessive, long hours – up to 16 a day – on a low hourly rate, while enduring higher physical and psychological risks and frequent labour rights infringements. If for the former, ICTs-enabled jobs are an opportunity with which they can translate their economic and social capital into extra

income, for the latter, ICTs allow them to earn as much as before but in a more precarious setting.

Compared to the conservatism of the middle-aged, some young men are emboldened to quit their factory jobs and pursue the new ICTs-enabled opportunities of Didi. Most buy their cars with family savings; others invest all their betrothal and wedding gifts. For them, factory jobs are associated with repetitive and tedious tasks, poor wages, harsh disciplinary practices and dim prospects; with a career in Didi they aspire to *erli*, become established, that is, to gain independence from or become the pillar of their natal family. It is worth pointing out that this family support is gendered, with sons usually receiving support and daughters expected to marry up. Having said this, the young drivers did not consider Didi a permanent solution, but an opportunity to quickly amass a fortune with which they could afford to learn skills (e.g. barber, automobile repair) and start their own individual businesses back home. If the economy can be said to have upgraded through ICTs, what defines the inspiration of these working class young men for a sustained, stable livelihood has not (Pun and Lu 2010; Li and Tian 2011).

A key word they use to describe their day-to-day work experience with Didi is freedom. For them, being a Didi driver is freer than working in factories as it allows them to choose not to work when in dire situations, and they no longer have to bear the managerial despotism and depressing physical and social environments of the factory. This is nothing like the utopian scenario of overall autonomy and control over work as put across by the company. It is hence understandable that Didi does not provide the workers with a wonderland of fair, decent and unalienated work. Rather, their experience with Didi's technological despotism can be best described, as summarised in Chapter 5, as "betrayal, antagonism and indignity", "being controlled, taken advantaged of and exploited", with some feeling their masculinity challenged. This has much to do with its imperfect and inhumane technological system, drivers' lack of voice within the technological system, the commission-based payment system, the excessively high bar of the incentive scheme, the sharp contrast of driver-Didi relationships before and after it seized market leadership, and preferential treatment towards riders.

In this process, factory experience casts a long shadow over their experience with Didi as an important way they evaluate Didi's platform regime is by comparing it the

factory regime. This is evident in how they define ‘freedom’ on Didi; it also manifests itself in their explicit refusal of Didi’s use of ‘partner’ and ‘co-operator’ to define them. The platform-based restructuring of the service sector of which Didi is the epitome happened in the post-2008 era, a time when China’s revised Labour Contract Law was implemented with a government resolution, which has led to an increase in the awareness of labour rights among *nongmingong* (Gallagher et. al 2014). This underlies their understanding of Didi and their motivation, appeal and strategy of resistance.

Drivers’ experiences of Didi are also informed by daily interactions with each other, both online and offline. That they no longer need to gather in a geographically confined space to work does not stop them from forging meaningful connections with each other. In this regard, ICTs – more specifically, WeChat groups – form either by themselves or by local businesses seeking to provide services to them, are a useful space in a similar way as Pun and Smith’s (2007) dormitory are for factory workers. News and interpretations of Didi’s development and market strategies are often circulated and debated; similar to Ding’s (2014) Hu’nanese taxi drivers in Shenzhen who are connected through intercoms, these online chat spaces allow them to negotiate help when problems arise, for example, police inspections or when their cars break down in the middle of nowhere. They also constantly exchange the whereabouts of female sex workers who are increasingly invisible from the street after the government-led anti-prostitution campaign. WeChat aside, they also constantly meet each other in offline barbeque and beer sessions, a rare moment of relaxation after a long day, and in busy points of the city where they gather for riders. These are equally important sites where they discuss and complain about work, inform each other of the latest government policies and exchange views about Didi.

It is from these shared life histories, experiences and interactions that they build up a relationship they call “*jianghu yiqi*” and “*jiurou pengyou*”, which provides a solid social and cognitive basis – and hence opportunities – for the mobilisation and organisation of collective action and resistance. In the two strikes I observed, these experiences and connections were invoked and mobilised. The strategy of mobilisation focused on Didi’s labour control and exploitation, particularly its extraction of an excessive proportion of their gross income. Messages of solidarity

with a clearly defined ‘us’ drivers as antithetical to Didi the company and an explicitly articulated demand for fair work conditions were widely circulated across different online groups. As in factories, strikes and wildcat actions and individual forms of resistance, like climbing up utility poles to attract police and media attention, are still the main forms of resistance, and no explicitly political appeal of institutionalised self-organisation in the form of, for example, trade unions, like the recent Jasic case, is made (Pun 2019; Chan J 2020). Shared place of origin, which used to be prominent in forging solidarity under the factory regime (Lee 1998; Chan 2010), were not even mentioned, while gender – in relation to the discourse of masculinity – has become a new source of solidarity.

Collective resistance aside, individual drivers’ use of bot apps to subvert Didi’s technological infrastructure of labour control was found to be pervasive. In this thesis, I consider this a new mode of resistance that may open up more possibilities for struggle, but I also wish to acknowledge its historical continuity with the radical Luddites who destroyed textile machinery as a form of protest (Thompson 1980). The fact that these apps were produced by an alternative software industry, consisting of programmers of similar social location with the workers, and that these bot apps are considered illegal in China, reminds us that lower class people are also capable of producing and exploiting technology, and that technological design itself constitutes a site of domination and struggle.

4) *Nongmingong* as a holistic people

A final contribution to the field is that I reiterate the relevance of seeing *nongmingong* as a holistic people who are not only producing but have a life outside production. Chinese labour sociologist Shen Yuan (in Wang 2015) once observed an “ascending spiral” pattern in *nongmingong* studies, from studies of their migratory process and post-migration lived experience in urban areas, through an emphasis on the politics of production and possibilities for contentious politics, to the more recent refocus on the politics of reproduction and its intersection with the politics of production. Although I do not consider the latest trend as an ‘ascendance’ from an earlier focus on migrant experience, as underlying the two strands of research are two different images of the group, I do agree with his advocacy of a reproduction

turn, as well as the rationale he laid out for this: to study reproduction is to explore possibilities of political consciousness, contentious politics and the transformation of labour-capital relations by closely examining workers' everyday lives, which, like production, is a site where capitalist relations of production and reproduction plays out and a site of domination and resistance.

Building on this proposition, in this thesis I pointed out that under the digital transformation of the Chinese economy, this reproduction turn is becoming more relevant, for digital transformation happens not just in the realm of production, but is also a process in which *nongmingong*'s everyday lives are (re-)commodified through and consequently mediated by ICTs. As my discussion in Chapter 6 shows, the digital transformation of the economy resulted in not only the restructuring of China's service sector, but also its media landscape. Changes in the media market, particularly its further segmentation and the rise of the multi-channel network model of content production and distribution, the rapid penetration of smart phones, and the reform of the telecommunication industry have precipitated notable changes in *nongmingong*'s daily consumption of media and the role of media consumption in their lives. While previously they had to go to the factory's common room or nearby corner shops to watch TV, watching favoured content at their chosen time and place has now become commonplace.

For almost all my informants, living in the industrial zone where most businesses are centred around existential-level needs, they found watching or reading digital content one of the few affordable options to entertain themselves after a long day's work. When asked to name 5-10 articles or videos they found most relevant or inspiring, a gendered pattern was manifested, with what I call the *luogui* genre and gender-related articles popular among both gender groups, men preferring political infotainments and women preferring what they called *shenghuoju*. A textual analysis shows that these contents, despite their respective themes, are urban-centric, prioritise the voice of the state, and acknowledge the marginal status and social and economic justice owed to *nongmingong*, while presenting market, individual efforts and/or an omnipotent party state that 'Serves the People' as the solution to their problems. On each specific subject matter, the representations downplay the influence of class subordination while overemphasizing the factor of that particular subject matter.

In interpreting these contents, *nongmingong* position and imagine themselves in relation to their middle class counterparts, the state, their opposite gender and the rural-urban duality, invoking what I call the ‘bitter and precarious structure of feeling’. Although they exhibited strong moral critiques of the market, there is little evidence of them being sceptical of the market mechanism itself. Most still consider *dagong* as the better way to free themselves from gendered restrictions and rural backwardness, thus consolidating their conviction in market mechanisms and individual efforts. Besides, a strong sense of distrust toward the party-state is reaffirmed. Overall, the subsumption of class discourse continues to be reinforced, even in a time when the media market is segmented to the extent that a subsegment is developed to explicitly address *nongmingong*, and their daily consumption of the media contributes to the process of ‘de-politicization’ (Pun and Chan 2008; Wang 2008; Lin 2015) that lies at the heart of contemporary Chinese cultural politics.

8.2 Reform, ICTs and class formation in China

This thesis set out to understand *nongmingong*’s experience of the ongoing digital transformation of the Chinese economy, and provides an opportunity to reflect on the recent reform. To mitigate the economic, social and environmental crisis that resulted from the old export-driven growth regime and to reclaim its diluted economic autonomy, the state mobilised the power of ICTs as an apolitical solution to reconfigure its growth pattern and move the country upward in the global value chain. In this process, the state bolstered a discourse of innovation, developmentalism and nationalism and introduced favourable policies in areas of ICTs-enabled innovation and restructuring, encouraging various types of capital to participate in the commodification of a wider range of economic sectors and social realms. Against this backdrop of aggressive informatisation and mounting technological optimism, this research reveals the other side of the story: in the shadow of the burgeoning sharing economy (CNNIC 2020), the productivity dividend of ICTs does not much benefit *nongmingong*, and it poses more challenges than opportunities to them.

It is true that digitalisation has managed to create new job opportunities like *rijie*, *weishang* and Didi for *nongmingong*, which have allowed them to earn a good wage, make ends meet and sustain their lifestyles in a time of economic volatility. Some

have even earned slightly higher income than before. But most did not experience a significant increase, except for Didi drivers during the company's cash-burning expansion frenzy or those who assumed higher position within the factory hierarchy, either by exploiting managerial flexibility or because they possessed more marketable skills. For most rank-and-file workers, the best they could expect was to maintain their previous level of income at a higher cost. Usually, they had to juggle several jobs and work for an excessive amount of time. All experienced tightened workplace control of some sort – more informal work arrangements, less social security, abysmal work environments and frequent employer violations of labour laws. Some even faced threats to their lives and sexual assault.

The new platform model – widely praised in mainstream media, government reports and much of the academic literature – did not improve their situation much.

Although most Didi drivers would never want to return to the factory, this is not because Didi offers an ideal alternative, but because it allowed them to stay away from the depressing work environment of the factory, its physical constraints, managerial despotism and the sense of hopelessness and indignity associated with it, giving them a sense of hope for the future and the freedom – albeit basic and limited – to not work in dire circumstances. The actual situation of the drivers was much less rosy, for thanks to ICTs, the new platform regime subjected them to a reconfigured labour control of technological despotism. Work arrangements were even more informal and their situation more precarious. Managerial domination multiplied, even more unfettered and labour control more sophisticated and dehumanised, especially when platform managers can now dismiss drivers without legal costs and can recruit from a massive pool of disgraced factory workers. Many drivers experienced Didi's platform regime as alienating and their sense of estrangement, exploitation, powerlessness and indignity was not dissimilar from – if not deeper than – when they worked in factories.

The digital transformation of the economy also gave rise to a burgeoning and further segmented digital media market, which, along with the popularisation of smart phones and drop in telecommunication service fees, gave the workers a rare moment of affordable relief after a long day's backbreaking work and an opportunity to temporarily escape from their bitter and precarious life. Media consumption also helped some break the monopoly of the sometimes-corrupt local government in

relation to information about peasant-benefiting policies from the central government, and helped others learn about the norms of urban society, thus facilitating their integration into it. But this same process also helps naturalise the market system and rural-urban duality that are both central to their life problems, reinforcing their conviction regarding the logic of competitive market individualism, obstructing the workers from seeing the larger picture, and undermining the possibilities of a collective identity and social change through collective efforts of demanding equality.

Beyond concerns with the immediate opportunities and challenges, the ongoing economic digitalisation has profound implications for class formation among *nongmingong*. As I have established, the transformation is in its nature the ICTs-enabled reorganisation of the economic structure and social arrangements of capitalism in both production and reproduction spheres, which constitute the material base of class formation. This is happening in a time of national and global capitalist crisis, a time when universal casualness characterises Chinese workplaces; when China is witnessing the constitution of a new political subject – one in a growing position of power – capable of setting out political demands and reigniting the mobilisation of labour globally; and when, due to structural antagonism to capital, workers and employers are pressed into combined struggles along lines of common class interest in cultures of solidarity, their legal situation may be disadvantaged (Pun 2019).

Against this background, this reorganisation, by providing a temporary fix to *nongmingong*'s life problems amid crises, undermines the class solidarity factory workers had on the grounds of similar arrangements of production, common lifestyle and similar market/life chances associated with the factory, and channels *nongmingong* into different production regimes, facing different market opportunities and forms of precarity. This echoes Huang (2018) and Pia's (2019) concern about the looming threat of automation for Chinese labour. What has transpired since is that worker diversity and division is now generated not just through migration, rural-urban divide, labour agency, state control and factory management, but also by different personal and familial market capacities in exploiting the opportunities offered by the digitalisation of the economy.

However, this does not undermine the material base of class formation, but instead consolidates it. The new platform regime fails to present a radical, equal alternative to the old. Universal casualness continues to characterise work arrangements. Its particular pattern of arrangement helps intensify labour-capital conflicts and fosters labour-capital antagonism, especially given the recent increase in *nongmingong*'s consciousness of labour rights, and their newly gained freedom in and access to a wider range of interpersonal and mass communication resources during and after work. On top of these, as production is increasingly mediated through ICTs-enabled platforms, technology itself constitutes a point of resistance, which opens new possibilities for broader social forces to contribute to class formation.

The process of class formation is becoming ever more complicated. Through investigation into *nogmingong*'s daily media consumption, echoing Pun (2003) and Sun (2014), my research suggests that what further complicates this picture is that workers' class-based political consciousness not only takes shape in production, but also in reproduction/consumption. Workers' practices of consumption have close relations with their status in the realm of production, but the two do not necessarily converge or determine each other. Given these complexities, how the class formation process will develop is a contested realm, and further research into *nongmingong*'s wider ICTs-mediated way of life is needed to gauge its directions and trends.

To contextualise the findings within a longer historical context, as I have demonstrated in chapter 3, ICTs have long been integral to the unfolding of Chinese modernity, and China's state-led, market-oriented, techno-driven developmentalism has repeatedly marginalized, if not failed, Chinese working class since the economic reform in the 1980s. In this light, the recent digital transformation of the economy does not seem to reverse the trend but deepen it. The findings prompt us to reflect on the question of whether and to what extent the current use of digital technologies for development in China still fulfils the promise of socialism and egalitarianism and serves the interest of the country's peasant and working class as enshrined in its Constitution. Dallas Smythe (1974) raised this question to high-level officials of socialist China in the early 1970s, and roughly a decade ago Zhao Yuezhi (2007) followed suit. It seems to me that this question remains relevant today. My evaluation based on the discussion so far is pessimistic, but this does not mean that there is no hope, for there are many bottom-up technological inventions and forms of

techno-social arrangements from which inspiration can be drawn to conceive a better ICTs-mediated development and society. For Smythe, the technology under question is bicycles, and for Zhao, it is mobile phones. Maybe it is time to ask, after platforms and data, what comes next?

8.3 ICTs, capitalism and the future of work

Beyond the immediate context of China, its recent reform, and its post-reform developments in general, are the larger transformations in global capitalism under the impact of globalisation, ICTs and changing modes of political and economic governance in recent decades. As in China, these transformations have produced changes in work and transformations within working life and workers' subjectivities across the globe. The implications of digital technologies on changing forms of work and labour precarity are hence a global question. This has given rise to debates across national contexts, where scholars seek to understand the nature of the transformation and its implication on the arrangements and futures of work and labour as well as worker subjectivities and resistance.

One line of research contends that the idea of a working class defined by its direct relationship to production is outmoded. Researching mainly in the context of advanced capitalism, scholars in this tradition typically confront a society that has undergone a process of de-industrialisation in the post-war era and seen the rise of the creative, financial and ICTs sectors as the new pillar industries. They observe that in these societies, all aspects of life have been absorbed into the capitalist nexus, including our ability to communicate, and therefore all non-capitalists must be regarded as part of an undifferentiated multitude that takes the place of the working class (Hardt and Negri 2000). Proponents of this tradition have engaged in elaborate attempts to link this multitude to Marx's theoretical edifice of capitalism, asking what sorts of commodities the multitude produces and how value thus produced accrues to capital. In what is becoming increasingly known as the digital labour debate, scholars have discussed how digital labour should be conceptualised, and addressed the increasingly blurred boundaries between work and play, production and consumption, and propose various new terms like "playbour", "prosumption", "co-creation" or "free labour" to capture the change. Based on this, they envision

various versions of radical progressive politics (Andrejevic 2003; Kücklich 2005; Gill and Pratt 2008; Hesmondhalgh 2010; Dean 2012).

A second line of thought argues that the ‘precariat’ constitutes a new class in and for itself alongside the traditional proletariat (Standing 2011). They do not attempt to locate them with any precision in relation to capitalist production processes but define the precariat in terms of their employment status, work as a form of employment, and digital technologies as intermediaries that enable new arrangements in the labour market. For these scholars, the solution to the insecurities and the sense of meaninglessness of the precariat is not to propel radical changes in capitalist relations of production through class solidarity and struggle, but the establishment of an ideal work arrangement that features transparency, accountability, worker power and democratic ownership. Some within this tradition advocate that societies should accommodate themselves to an ever-increasing share of on-demand employment and automated labour, rather than to preserve and extend the hard-won protections of traditional, full-time employment arrangements. They hence support the idea of universal basic income as an institutional arrangement in preparation for a society where robots take over most of the tasks of the human labour (Standing 2014, 2017; Schor and Attwood-Charles 2017; Gray and Suri 2019; Woodcock and Graham 2019; Graham 2019).

A third line of thought shares the Marxist influence of the multitude argument but stresses the continuity between contemporary developments and the past. Schiller (1999) argued that digital technologies do not alter the fundamental logic of the operation of capitalism, but capitalism does exploit digital technologies to restructure itself. McKercher and Mosco (2008) and Mosco and McKercher (2008) addressed the changing nature of work, workers, and their organizations in the media, information, and knowledge industries. Huws (2014) provided a similar view: “it is still possible to apply Marx’s theory in current conditions, to define what is, or is not, a commodity, to identify the point of production of such commodities, whether material or immaterial, and to define the global working class in relation to these production processes” (262-263).

My research follows this last line of thought. It revives the relevance of the old questions of the politics of production through relevant concepts like conception, execution, deskilling, production regime, the politics of production and relations in

production that were developed long ago, and established the continuity between new digitally mediated forms of production with its older counterparts. Besides, while most research produced under this tradition has focused on cultural or knowledge workers (McKercher and Mosco 2008; Mosco and McKercher 2008; Wang 2011; Yao 2014), my focus on *nongmingong* as China's new working class provides me a vantage point to reflect on the implications of digital capitalism on the working class in developing economies. It also expands the scope of inquiry to the politics of workers' everyday lives and demonstrates that the politics of reproduction is equally central to understanding worker subjectivity.

This provides me a vantage point from which to ponder the relationship between technology and the future of work. If for many Western observers, the future of work lies in the automation of work, the replacement (and emancipation) of human beings by machines and the inevitability of entering a post-scarcity society (for example, Benanav 2019; Gray and Suri 2019) – hence the call for the establishment of universal basic income (Standing 2017) – the lesson I learn from this study of a non-Western, working class case in a national context is that it is still too early to make a prediction. Nothing is inevitable about the future of work. The process of platformisation or automation, like the process of mechanisation Burawoy debated with Braverman, never pushes itself forward smoothly but is a multi-layered, struggle-laden process that takes place in local/national contexts. In this process, the dynamics between labour and capital set limits on the separation of conception and execution. The managers strike the balance between efficiency and domination while workers' increasing power and struggle emanating from their lived experiences of production and reproduction are also determinative – rather than derivative. This in turn has to do with the connections between local contexts and global capitalism (especially its position in the global value chain and what the state sees as the balance between economic growth and political autonomy), local configuration of state-enterprise relations and labour market arrangements, and the technology in question. Class politics still matters, and the alternative lies in both class power and alternative technological design, especially in the Global South.

8.4 Limitations and future directions

Upon reflection, this research is more exploratory than explanatory, and it has many limitations. While it provides important insights regarding new forms of labour organisation and control, *nongmingong*'s classed, gendered and aged engagement with the changing labourscape as well as its implications for class formation in China raises many more questions. In what follows, I summarise some of the limitations of the project as presented in this thesis and raise some questions for further inquiry.

First, as I have pointed out in the method chapter, because of my identity as a young, male university student, my access to interview opportunities and home visits with young female workers during fieldwork was limited. Thus, my discussion of female workers' subjective experiences of the changing labourscape and the formation of female working class subjects is partial and tentative. A systematic inquiry with a gendered perspective into this issue and a comparison between different genders would deepen our understanding in this regard.

Second, *rijie* as a new mediated arrangement of production and workers' experience of it should have been explored more thoroughly. While currently public attention about digital economy and flexible use of labour is mainly focused on the platform sector and scholarly attention on student interns, dispatch agency workers and workers of ethnic minorities (Su 2010; Chan et al. 2015; Feng 2019b; Ma 2019), the existence of the dispersed yet prevalent practice of *rijie*, its socioeconomic origins and scale, the way it operates, and the ways in which it infringes labour rights should be acknowledged while the resulting extreme precarity among the workers should be recognised and actions should be taken by labour rights authorities to address these issues.

Third, although my fieldwork involved rural home visits with the workers, this was barely discussed in the present thesis, which is urban-centric. In doing so it missed an important part of *nongmingong*'s experience with China's increasingly ICTs-mediated labourscape – the state-led ICTs-driven rural rejuvenation project and the burgeoning rural ecommerce sector in particular. An exploration of to what extent this presents *nongmingong* with an option of self-reliance and sustained livelihood deepens our understanding of the social consequence of current reform pertaining to *nongmingong* and class formation. Similarly, future research should also look at

platforms other than Didi, providing a thick description of their platform regimes, mechanisms of labour control and workers' experience with it, for arrangements of production and labour condition vary significantly across different platforms.

Fourth, my analysis in the thesis points out that, similar to Smith and Pun's (2007) dormitory, ICTs and the new arrangements of production afford *nongmingong* a space, both online and offline, to communicate with each other, form a relationship they call "*jianghu yiqi*" and "*jiurou pengyou*", and to develop shared understanding of the platform itself and their relationship with the platform. This collective experience in turn paves the way for collective action. How this works should be explored further, for example: what communicative resources they draw on in their discussion, the structure of the online group itself, and how their online and offline lives actually intersect.

The phenomenon whereby most *nongmingong*-turned-drivers actively embraced bot apps for resistance merits more research, especially because these apps are not produced by Internet giants and distributed through app stores, but by a local, 'underground' software industry through an offline network of distribution comprising of mobile phone repair shops and WeChat groups. It would be worth conducting an ethnography to document the kinds of technological innovations they pursued, how they conceived of them, how this process of conception relates to their social location, what alternative visions and imaginaries of ICTs are developed, and what constraints from the state and other market players face them. It would also be interesting to talk to users of these *shanzhai* apps to see why some of them are successful while others are not, especially in terms of negotiating or counterbalancing managerial dominance. For those action-minded, it would be interesting to explore the possibility of bringing together grassroots app developers and labour NGOs toward a new resistance.

The final point I want to make is to advocate for researching *nongmingong* as a holistic people. As I have argued earlier, a focus on reproduction provides a nuanced understanding of *nongmingong*'s subjectivity formation – this is becoming all the more relevant in the digital age and in a time when the state is determined to re-orient its economic growth to rely more on consumption, not just among urban the middle class, but also the working class.

Bibliography

- Abbate J (1999) *Inventing the Internet*. Inside technology. Cambridge, MA: The MIT Press.
- ACFTU (2010) *Report on New-generation migrant workers*. Beijing: All-China Federation of Trade Unions.
- Anagnost A (2004) The Corporeal Politics of Quality (Suzhi). *Public Culture* 16(2): 189–208.
- Andrejevic M (2004) *Reality TV: The Work of Being Watched*. Critical media studies. Lanham, Md.: Rowman & Littlefield Publishers.
- Ang I (1989) *Watching Dallas: Soap Opera and the Melodramatic Imagination*. London ; New York: Routledge.
- Ang I (1991) *Desperately Seeking the Audience*. London: Routledge.
- Ang I (1996) *Living Room Wars: Rethinking Media Audiences for a Postmodern World*. London: Routledge.
- Athique A (2016) *Transnational Audiences: Media Reception on a Global Scale*. Cambridge, UK: Polity.
- Avgerou C, Mansell R, Quah D, et al. (eds) (2007) *The Oxford Handbook of Information and Communication Technologies*. Oxford: Oxford University Press.
- Bai N and He Y (2003) Migrating back or to the cities? reseach on backward migration of rural migrants. *Social Sciences in China* (04): 149–159.
- Bakardjieva M (2005) *Internet Society: The Internet in Everyday Life*. London: Sage Publications.
- Baym NK (2000) *Tune in, Log on: Soaps, Fandom, and Online Community*. New media cultures. Thousand Oaks, Calif.: Sage Publications.

- Baym NK (2015) *Personal Connections in the Digital Age*. Second edition. Malden, MA: Polity Press.
- Benanav A (2019) Automation and the Future of Work. *New Left Review* 119(9/10).
- Bengtsson S (2014) Faraway, so close! Proximity and distance in ethnography online. *Media, Culture & Society* 36(6): 862–877. DOI: [10.1177/0163443714531195](https://doi.org/10.1177/0163443714531195).
- Berry C (2006) *China on Screen: Cinema and Nation*. Film and culture. New York, NY: Columbia University Press.
- Bian Y (1997) Bringing strong ties back in: indirect ties, network bridges, and job searches in China. *American sociological review* 62(3): 366–385. DOI: [10.2307/2657311](https://doi.org/10.2307/2657311).
- Bird SE (2011) Are we all producers now?: convergence and media audience practices. *Cultural studies* 25(4–5): 502–516. DOI: [10.1080/09502386.2011.600532](https://doi.org/10.1080/09502386.2011.600532).
- Blank G and Reisdorf BC (2012) THE PARTICIPATORY WEB: A user perspective on Web 2.0. *Information, Communication & Society* 15(4): 537–554. DOI: [10.1080/1369118X.2012.665935](https://doi.org/10.1080/1369118X.2012.665935).
- Boellstorff T (2015) *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton: Princeton University Press.
- Bogue DJ (1969) *Principles of Demography*. New York ; Chichester: Wiley.
- boyd danah (2014) *It's Complicated: The Social Lives of Networked Teens*. New Haven: Yale University Press.
- Branstetter L and Lardy N (2006) *China's Embrace of Globalization*. Working Paper Series 12373, Working Paper, July. National Bureau of Economic Research. DOI: [10.3386/w12373](https://doi.org/10.3386/w12373).
- Brants K (1998) Who's afraid of infotainment? *European Journal of Communication* 13(3): 315–335. DOI: [10.1177/0267323198013003002](https://doi.org/10.1177/0267323198013003002).
- Braverman H (1974) *Labor and Monopoly Capital*. New York, NY: Monthly Review Press.

- Bresnahan T and Trajtenberg M (1995) General Purpose Technologies: ‘Engines of Growth’? *Journal of Econometrics* 65(1): 83–108.
- Burawoy M (1979) *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism*. Chicago, IL: The University of Chicago Press.
- Burawoy M (1985) *The Politics of Production: Factory Regimes Under Capitalism and Socialism*. London: Verso.
- Burawoy M (2008) Another thirty years: A special preface to the Chinese edition of Manufacturing Consent. In: *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism*. Beijing: The Commercial Press.
- Burawoy Michael and Lukács J (eds) (1992) *The Radiant Past: Ideology and Reality in Hungary’s Road to Capitalism*. Chicago: University of Chicago press.
- Butollo F (2015) *The End of Cheap Labour?* Chicago, IL: University of Chicago Press.
- Butollo F and Lüthje B (2017) ‘Made in China 2025’: Intelligent manufacturing and work. In: Briken K, Chillas S, and Krzywdzinski M (eds) *The New Digital Workplace: How New Technologies Revolutionise Work*. Macmillan International Higher Education.
- Cai F (2007) *Floating Population in Transition China*. Beijing: Social Sciences Academic Press.
- Cai P (2017) *Understanding China’s Belt and Road Initiative*. Australia: Lowy Institute. Available at: <https://www.lowyinstitute.org/publications/understanding-belt-and-road-initiative> (accessed 16 June 2020).
- Candea M (2007) Arbitrary locations: In defence of the bounded field-site. *Journal of the Royal Anthropological Institute* 13(1): 167–184. DOI: [10.1111/j.1467-9655.2007.00419.x](https://doi.org/10.1111/j.1467-9655.2007.00419.x).
- Cao J (2009) Communication technology and gender: A case study of the use of cellphone by migrating domestic women in Shanghai. *Journalism & Communication* 16(01): 71-77+109.

- Cao J and Xu X (2014) New Communication technologies and urban knowledge workers as the new urban poor. *Journalism Bimonthly* (2).
- Carpentier Nico (2011) *Media and Participation: A Site of Ideological-Democratic Struggle*. Bristol: Intellect.
- Castells M (1996) *The Rise of the Network Society*. Cambridge, MA: Wiley-Blackwell.
- Castells M (2010) *The Power of Identity*. Oxford, UK: Wiley-Blackwell.
- Central Committee General Office and State Council General Office (2016) *Outline of the National Informatization Development Strategy*. Beijing: Central Committee General Office and State Council General Office.
- Chan A (1998) Labour relations in foreign-funded ventures, Chinese trade unions, and the prospects for collective bargaining. In: O’Leary G (ed.) *Adjusting to Capitalism : Chinese Workers and the State*. Armonk : NY, M. E. Sharpe: Routledge.
- Chan A (2001) *China’s Workers under Assault: The Exploitation of Labor in a Globalizing Economy*. Armonk, N.Y.: M.E.Sharpe.
- Chan CK (2010) *The Challenge of Labour in China: Strikes and the Changing Labour Regime in Global Factories*. London ; New York: Routledge.
- Chan CK-C and Hui ES-I (2014) The development of collective bargaining in China: from “collective bargaining by riot” to “party state-led wage bargaining”*. *The China Quarterly* 217: 221–242. DOI: [10.1017/S0305741013001409](https://doi.org/10.1017/S0305741013001409).
- Chan CK-C and Ngai P (2009) The Making of a New Working Class? A Study of Collective Actions of Migrant Workers in South China. *The China Quarterly* 198. Cambridge University Press: 287–303. DOI: [10.1017/S0305741009000319](https://doi.org/10.1017/S0305741009000319).
- Chan CK-C, Pun N and Chan J (2010) The role of the state, labour policy and migrant workers’ struggles in globalized China. In: Bowles P and Harriss J (eds) *Globalization and Labour in China and India: Impacts and Responses*. London: Palgrave Macmillan UK, pp. 45–63. DOI: [10.1057/9780230297296_3](https://doi.org/10.1057/9780230297296_3).
- Chan J (2019) Jasic workers fight for union rights. *New politics* XVII(2).

- Chang J and Halliday J (2006) *Mao: The Unknown Story*. New York: Anchor.
- Chen F (2003) Between the State and Labour: The Conflict of Chinese Trade Unions' Double Identity in Market Reform. *The China Quarterly* 176. Cambridge University Press: 1006–1028. DOI: [10.1017/S0305741003000596](https://doi.org/10.1017/S0305741003000596).
- Chen F (2010) Trade Unions and the Quadripartite Interactions in Strike Settlement in China. *The China Quarterly* 201. Cambridge University Press: 104–124. DOI: [10.1017/S0305741009991093](https://doi.org/10.1017/S0305741009991093).
- Chen J and Gallagher M (2013) Urban social insurance provision : regional and ownership variations. In: Besharov D and Baehler K (eds) *Chinese Social Policy in a Time of Transition*. New York. NY: Oxford University Press, pp. 86–100.
- Chen JY (2017) Thrown under the bus and outrunning it! The logic of Didi and taxi drivers' labour and activism in the on-demand economy: *New Media & Society*. DOI: [10.1177/1461444817729149](https://doi.org/10.1177/1461444817729149).
- Chen JY, Sun SP and Qiu JL (2020) *Deliver on the Promise of the Platform Economy*. IT for Change. Ottawa, Canada: International Development Research Centre.
- Chen Y (2010) An analysis of the new generation of migrant rural workers' social network built by using QQ. *Chinese journal of journalism and communication* 32(08): 80–85.
- Chen Yilun (2018) Beleaguered Didi Is Said to Lose \$585 Million in Just Six Months. *Bloomberg.com*, 7 September. Available at: <https://www.bloomberg.com/news/articles/2018-09-07/beleaguered-didi-is-said-to-lose-585-million-in-just-six-months> (accessed 30 December 2019).
- Chen Yujie (2018) Mind the gap: When getting-a-ride becomes an app behavior in China. In: Galperin H and Alarcon A (eds) *The Future of Work in the Global South*. Ottawa, Canada: International Development Research Centre.
- Chi Z (1998) A historical overview of China's 'mingong tide wave'. *Sociological Studies* (04): 102–111.
- China Labour Bulletin (2019) An overview of China's labour relations in 2018. In: *China Labour Bulletin*. Available at:

<https://clb.org.hk/content/2018%E4%B8%AD%E5%9B%BD%E5%8A%B3%E5%8A%A8%E5%85%B3%E7%B3%BB%E6%A6%82%E5%86%B5%E5%9B%9E%E9%A1%BE> (accessed 9 January 2020).

Chinese Academy of Information and Communications Technologies (2019) *White Paper on the development of Digital Economy and Employment in China*. Beijing: Chinese Academy of Information and Communications Technologies.

Chinese Academy of Information and Communications Technologies (2020) *White Paper on the development of Digital Economy in China*. Beijing: Chinese Academy of Information and Communications Technologies.

Choi SY-P and Peng Y (2016) *Masculine Compromise: Migration, Family, and Gender in China*. 1st ed. Berkeley, Calif: University of California Press.

Clifford J, Marcus GE, Fortun K, et al. (2010) *Writing Culture: The Poetics and Politics of Ethnography*. 25th anniversary ed. / with a foreword by Kim Fortun. Berkeley, Calif: University of California Press.

CNNIC (2020) *The 44th Statistical Report on Internet Development in China*. Beijing: China Internet Network Information Centre (CNNIC).

Crothall G (2018) China's Labour Movement in Transition. In: *Made in China Journal*. Available at: <https://madeinchinajournal.com/2018/07/07/chinas-labour-movement-in-transition/> (accessed 9 January 2020).

Dahrendorf R (1959) *Class and Class Conflict in Industrial Society*. Palo Alto, California: Stanford University Press.

Dai C (2019) Collective labour activism in 2018: trends and characteristics. In: *China Labour Bulletin*. Available at: <https://clb.org.hk/content/2018%E5%B9%B4%E8%A1%8C%E5%8A%A8%E5%9E%8B%E9%9B%86%E4%BD%93%E5%8A%B3%E5%8A%A8%E4%BA%89%E8%AE%AE%E7%9A%84%E8%B6%8B%E5%8A%BF%E3%80%81%E7%89%B9%E7%82%B9%E5%8F%8A%E6%88%90%E5%9B%A0%E5%88%86%E6%9E%90> (accessed 9 January 2020).

Dean J (2012) *The Communist Horizon*. London ; New York: Verso.

Didi Chuxing (2018) Driver agreement of Didi Premiere and Didi Express Services. Didi Chuxing. Available at:

https://dpubstatic.udache.com/static/dpubimg/dpub2_project_11677/index_11677.html (accessed 30 December 2019).

Didi Chuxing (n.d.) Terms and Conditions for Didi Driver. Available at:

https://dpubstatic.udache.com/static/dpubimg/dpub2_project_11677/index_11677.html (accessed 30 December 2019).

Dikötter F (2008) *The Age of Openness: China before Mao*. Hong Kong: Hong Kong University Press.

Dikötter F (2011) *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958-1962*. London: Bloomsbury Publishing.

Dikötter F (2013) *The Tragedy of Liberation: A History of the Chinese Revolution 1945-1957*. London: Bloomsbury Publishing.

Ding W (2014) *Mobile Homelands*. Beijing: Social Sciences Academic Press.

Ding W and Song C (2010) On the road: mobile phones and nongmingong's autonomy - a case study on job-seeking practices of nongmingong from Shuangfeng Village in western China. *Modern Communication* (09): 95–100.

Dirlik A (1989) *Revolution and History: Origins of Marxist Historiography in China, 1919-1937*. Berkeley, Calif.: University of California Press.

du Gay P (1997) *Doing Cultural Studies: The Story of the Sony Walkman*. Culture, media, and identities. London ; Thousand Oaks [Calif.]: Sage, in association with The Open University.

Du Y and Bai N (eds) (1997) *Migrating out of the Village: Empirical Studies of Labour Migration in Rural China*. Economic Science Press.

Duara P (1991) *Culture, Power, and the State: Rural North China, 1900-1942*. Palo Alto, California: Stanford University Press.

Duara P (1997) Awakening China. *China Information* 12(3). SAGE Publications Ltd: 137–138. DOI: [10.1177/0920203X9701200314](https://doi.org/10.1177/0920203X9701200314).

Dworkin DL (1997) *Cultural Marxism in Postwar Britain: History, the New Left, and the Origins of Cultural Studies*. Durham, NC: Duke University Press.

Edwards R (1979) *Contested Terrain: The Transformation of the Workplace in the Twentieth Century*. New York: Basic Books.

- Emerson RM, Fretz RI and Shaw LL (2011) *Writing Ethnographic Fieldnotes*. 2nd ed. Chicago guides to writing, editing, and publishing. Chicago, Ill. ; London: The University of Chicago Press.
- Fan S (2018) *Striking to Survive: Workers' Resistance to Factory Relocations in China*. London: Haymarket Books.
- Feigenbaum E (2003) *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age*. Stanford, California: Stanford University Press.
- Fenby J (2015) China's corruption probe bites deep. *BBC News*, 20 February. Available at: <https://www.bbc.com/news/world-asia-china-31503967> (accessed 16 June 2020).
- Feng X (2019a) Regulating labour dispatch in China: A cat-and-mouse game. *China Information* 33(1): 88–109. DOI: [10.1177/0920203X18791398](https://doi.org/10.1177/0920203X18791398).
- Feng X (2019b) Trapped in precariousness: migrant agency workers in China's state-owned enterprises. *The China Quarterly* 238: 396–417. DOI: [10.1017/S0305741018001807](https://doi.org/10.1017/S0305741018001807).
- Fiske J (1987) *Television Culture*. London: Routledge.
- Fiske J (1992) Audiencing: a cultural studies approach to watching television. *Poetics* 21(4): 345–359. DOI: [10.1016/0304-422X\(92\)90013-S](https://doi.org/10.1016/0304-422X(92)90013-S).
- Fiske J and Hartley J (2003) *Reading Television*. New York: Routledge.
- Frazier MW (2010) *Socialist Insecurity: Pensions and the Politics of Uneven Development in China*. 1st ed. Cornell University Press.
- Friedman E (2014) *Insurgency Trap: Labor Politics in Postsocialist China*. Ithaca: ILR Press.
- Friedman E and Kuruvilla S (2015) Experimentation and decentralization in China's labor relations. *Human Relations* 68(2): 181–195. DOI: [10.1177/0018726714552087](https://doi.org/10.1177/0018726714552087).
- Friedman E and Lee CK (2010) Remaking the world of Chinese labour: a 30-year retrospective. *British Journal of Industrial Relations* 48(3): 507–533. DOI: [10.1111/j.1467-8543.2010.00814.x](https://doi.org/10.1111/j.1467-8543.2010.00814.x).

- Fu H, Su Y and Ni A (2018) Selling motherhood: gendered emotional labor, citizenly discounting, and alienation among China's migrant domestic workers. *Gender & Society* 32(6): 814–836. DOI: [10.1177/0891243218805684](https://doi.org/10.1177/0891243218805684).
- Fuller L (1992) *Work and Democracy in Socialist Cuba*. Labor and social change. Philadelphia: Temple University Press.
- Fuller L (1999) *Where Was the Working Class?: Revolution in Eastern Germany*. Urbana: University of Illinois Press.
- Gallagher M, Giles J, Park A, et al. (2015) China's 2008 Labor Contract Law: implementation and implications for China's workers. *Human Relations* 68(2): 197–235. DOI: [10.1177/0018726713509418](https://doi.org/10.1177/0018726713509418).
- Gallagher ME (2005) *Contagious Capitalism: Globalization and the Politics of Labor in China*. Princeton, NJ: Princeton University Press.
- Gallagher ME (2014) China's workers movement & the end of the rapid-growth era. *Daedalus* 143(2): 81–95. DOI: [10.1162/DAED_a_00274](https://doi.org/10.1162/DAED_a_00274).
- Gan Y and Cui Z (eds) (1997) *The Political Economy of China's Reform*. Oxford University Press (Hong Kong).
- Gao C and Yang B (2015) New generation migrant workers: people without 'homeland'--an virtual ethnography based on QQ Group 'SZer in Beijing'. *Youth Exploration* (04): 84–90.
- Gao L (2009) Lookout: The risks of neoliberalism in China. *China and World Affairs* (15): 99-105+294.
- Gao M (2008) *The Battle for China's Past: Mao and the Cultural Revolution*. London: Pluto Press.
- Georgiou M (2012) Watching soap opera in the diaspora: cultural proximity or critical proximity? *Ethnic and Racial Studies* 35(5): 868–887. DOI: [10.1080/01419870.2011.628040](https://doi.org/10.1080/01419870.2011.628040).
- Gill R and Pratt A (2008) In the Social Factory?: Immaterial Labour, Precariousness and Cultural Work. *Theory, Culture & Society*. DOI: [10.1177/0263276408097794](https://doi.org/10.1177/0263276408097794).

- Gindin S and Panitch L (2013) *The Making Of Global Capitalism: The Political Economy of American Empire*. London ; Brooklyn, NY: Verso.
- Goodman D (2014) *Class in Contemporary China*. Cambridge: Polity.
- Graham M (2017) *Towards a Fairer Gig Economy*. Meatspace Press.
- Graham M (ed.) (2019) *Digital Economies at Global Margins*. Cambridge, Massachusetts: The MIT Press.
- Graham M, Lehdonvirta V, Wood A, et al. (2017) *The risks and rewards of online gig work at the global margins*. 10 July. Oxford, UK: Oxford Internet Institute. Available at: <https://www.oii.ox.ac.uk/blog/towards-a-fairer-gig-economy/> (accessed 29 December 2019).
- Gray M (2019) *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*. Boston: Houghton Mifflin Harcourt.
- Gu X, Pun N, Yan H, et al. (2014) *Social Economy in China: Theory and Practice beyond Capitalism*. Social Sciences Academic Press.
- Guo J (2015) *Seeking 'Gesangmeiduo': Fieldnotes of Ethnography on Mobile Film Screening in Changdu, Tibet (Xuzhao Gesangmeiduo: Xizang Changdu Diqu Liudong Dianying Fangying Tianye Yanjiu Shilu)*. Publishing House of Minority Nationalities.
- Guo J (2016) 'Thinking with writing': On writing fieldnotes during fieldwork. *Chinese Journal of Journalism and Communication* 38(09): 170–176. Available at: <http://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFQ&dbname=CJFDLA-ST2017&filename=GJXW201609012&v=Mjk5NjR1eFITN0RoMVQzcVRyV00xRnJDVVJMT2ZadWR2RkNua1ViL01JaWZUZWJHNEg5Zk1wbzIFWm9SOGVYMUw=> (accessed 10 January 2019).
- Guo X and Wang J (2011) Second-generation migrant workers: between the push and pull of urban China. *China Agricultural University Journal of Social Sciences Edition* (03 vo 28): 5–10.
- Guo Y and Sun L (2002) "Speaking Bitterness": A Mechanism of the Formation of National Identity among the Peasantry. *Chinese Academy* 3(4): 130–157. Available at: <http://www.cqvip.com/qk/84473x/200204/8328757.html>.

- Gupta A and Ferguson J (1997) *Anthropological Locations: Boundaries and Grounds of a Field Science*. Berkeley: University of California Press.
- Hall S (1986) The Problem of Ideology-Marxism without Guarantees. *Journal of Communication Inquiry* 10(2): 28–44. DOI: [10.1177/019685998601000203](https://doi.org/10.1177/019685998601000203).
- Hall S (ed.) (1997) *Representation: Cultural Representations and Signifying Practices*. Culture, media, and identities ; v. 2. London: Sage Publications & Open University.
- Hall S (2000) Who Needs ‘Identity’? In: du Gay P, Evans J, and Redman P (eds) *Identity: A Reader*. Oxon: Routledge, pp. 15–30.
- Halliday F (1999) Internationalism in Practice: Export of Revolution. In: Halliday F (ed.) *Revolution and World Politics: The Rise and Fall of the Sixth Great Power*. London: Macmillan Education UK, pp. 94–132. DOI: [10.1007/978-1-349-27702-5_4](https://doi.org/10.1007/978-1-349-27702-5_4).
- Hammersley M (1992) *What Is Wrong with Ethnography? Methodological Explorations*. London: Routledge.
- Hammersley M and Atkinson P (2007) *Ethnography: Principles in Practice*. 3rd ed. London: Routledge.
- Harwit E (1998) China’s Telecommunications Industry: Development Patterns and Policies. *Pacific Affairs* 71(2): 175–193. DOI: [10.2307/2760975](https://doi.org/10.2307/2760975).
- He J (2015) An exploration of the meaning of Internet to second-generation nongmingong in Shanghai. *Journalism Quarterly* (02): 81–87.
- He J and Kuijs L (2007) *Rebalancing China’s Economy : Modeling a Policy Package*. 41859, 1 September. The World Bank. Available at: <http://documents.worldbank.org/curated/en/872251468746665867/Rebalancing-Chinas-economy-modeling-a-policy-package> (accessed 17 June 2020).
- He Z (1991) A History of Telecommunications in China: Development Policy Implications. In: Lee PSN (ed.) *Telecommunications and Development in China*. Cresskill, NJ: Hampton Press, pp. 55–88.

- Heilmann S and Perry EJ (eds) (2011) *Mao's Invisible Hand: The Political Foundations of Adaptive Governance in China*. Cambridge, Mass: Harvard University Asia Center.
- Heimer M and Thøgersen S (2006) *Doing Fieldwork in China*. Honolulu, HI: University of Hawaii Press.
- Hershatter G (2011) *The Gender of Memory: Rural Women and China's Collective Past*. Berkeley: University of California Press.
- Hesmondhalgh D (2010) User-generated content, free labour and the cultural industries | ephemera. *ephemera: theory and politics in organisation* 10(3/4).
- Hine C (2015) *Ethnography for the Internet: Embedded, Embodied and Everyday*. London: Bloomsbury.
- Hine C (2017) Ethnography and the Internet: Taking Account of Emerging Technological Landscapes. *Fudan Journal of the Humanities and Social Sciences* 10(3): 315–329. DOI: [10.1007/s40647-017-0178-7](https://doi.org/10.1007/s40647-017-0178-7).
- Hochschild AR (2003) *The Managed Heart: Commercialization of Human Feeling*. University of California Press.
- Hong Y (2008) Distinctive Characteristics of China's Path of ICT Development: A Critical Analysis of Chinese Developmental Strategies in Light of the Eastern Asian Model. *International Journal of Communication* 2(0). 0: 16. Available at: <https://ijoc.org/index.php/ijoc/article/view/296>.
- Hong Y (2011) *Labor, Class Formation, and China's Informationized Policy of Economic Development*. Lanham, Md: Lexington Books.
- Hong Y (2013) Repurposing telecoms for capital in China: system development and inequality. *Asian Survey* 53(2): 319–347. DOI: [10.1525/as.2013.53.2.319](https://doi.org/10.1525/as.2013.53.2.319).
- Hong Y (2014) Between corporate development and public service: the cultural system reform in the Chinese media sector. *Media, Culture & Society* 36(5). SAGE Publications Ltd: 610–627. DOI: [10.1177/0163443714532978](https://doi.org/10.1177/0163443714532978).
- Hong Y (2017a) *Networking China: The Digital Transformation of the Chinese Economy*. Champaign: University of Illinois Press.

- Hong Y (2017b) Reading the 13th Five-Year Plan: Reflections on China's ICT Policy. *International Journal of Communication* 11(0). 0: 24. Available at: <https://ijoc.org/index.php/ijoc/article/view/6366>.
- Horton D and Wohl RR (1956) Mass communication and para-social interaction. *Psychiatry* 19(3): 215–229. DOI: [10.1080/00332747.1956.11023049](https://doi.org/10.1080/00332747.1956.11023049).
- Howard P (1988) *Breaking the Iron Rice Bowl: Prospects for Socialism in China's Countryside*. Armonk, N.Y. and London: M.E. Sharpe.
- Howell J and Pringle T (2019) Shades of authoritarianism and state–labour relations in China.
- Hu A and Jefferson G (n.d.) Science and Technology in China. In: Brandt L and Rawski T (eds) *China's Great Economic Transformation*. Cambridge: Cambridge University Press, pp. 286–337.
- Huang D (2017) *Framing Migrant Workers: New Media and Discursive Construction of Citizenship in Transitional China*. Beijing: Communication University of China Press.
- Huang P (ed.) (1997) *Looking for Survival: Sociological Analysis of Rural Migrants to Cities in China*. Yunnan People's Press.
- Huang P and Cui Z (2005) *China and Globalisation: Washington Consensus or Beijing Consensus*. Beijing: Social Sciences Academic Press.
- Huang Y (2008) *Capitalism with Chinese Characteristics: Entrepreneurship and the State*. Cambridge University Press.
- Huang Y (2012) The “making out” game outside the factory: a case study of “making out” production in Pearl River Delt area. *Sociological Studies* 27(04): 187-203+245-246.
- Huang Y and Sharif N (2017) From ‘Labour Dividend’ to ‘Robot Dividend’: Technological Change and Workers’ Power in South China. *Agrarian South: Journal of Political Economy* 6(1). SAGE Publications India: 53–78. DOI: [10.1177/2277976017721284](https://doi.org/10.1177/2277976017721284).
- Hui ES and Chan CK-C (2014) The politics of labour legislation in southern China: how foreign chambers of commerce and government agencies influence

- collective bargaining laws. *International Labour Review* 153(4): 587–607. DOI: [10.1111/j.1564-913X.2014.00217.x](https://doi.org/10.1111/j.1564-913X.2014.00217.x).
- Hung H (2008) Rise of China and the global overaccumulation crisis. *Review of International Political Economy* 15(2): 149–179. DOI: [10.1080/09692290701869654](https://doi.org/10.1080/09692290701869654).
- Hung H (2013) Labor Politics Under Three Stages of Chinese Capitalism. *South Atlantic Quarterly* 112(1). Duke University Press: 203–212. DOI: [10.1215/00382876-1891341](https://doi.org/10.1215/00382876-1891341).
- Hung H (2015) *The China Boom: Why China Will Not Rule the World*. New York: Columbia University Press.
- iLabour (2013) *Foxconn Union Research Report*. Hong Kong: iLabour Research Team.
- Jia L and Winseck D (2018) The Political Economy of Chinese Internet Companies: Financialization, Concentration, and Capitalization. *International Communication Gazette* 80(1). SAGE Publications Ltd: 30–59. DOI: [10.1177/1748048517742783](https://doi.org/10.1177/1748048517742783).
- Jin Y (1998) Rural women under de-agriculturalization. *Sociological Studies* (05): 108–116.
- Jin Y (2000) *The Decline of Patriarchy*. Chengdu, Sichuan: Sichuan People's Press.
- Jones L and Zeng J (2019) Understanding China's 'Belt and Road Initiative': beyond 'grand strategy' to a state transformation analysis. *Third World Quarterly* 40(8): 1415–1439. DOI: [10.1080/01436597.2018.1559046](https://doi.org/10.1080/01436597.2018.1559046).
- Katznelson I and Zolberg AR (1986) *Working-Class Formation: Nineteenth-Century Patterns in Western Europe and the United States*. Princeton: Princeton University Press.
- Ke L and Li H (2001) *Villagers in the City: The Migrant Population in Urban China*. Beijing: Central Compilation and Translation Press.
- Keane M and Chen Y (2019) Entrepreneurial solutionism, characteristic cultural industries and the Chinese dream. *International Journal of Cultural Policy* 25(6). Routledge: 743–755. DOI: [10.1080/10286632.2017.1374382](https://doi.org/10.1080/10286632.2017.1374382).

- Keane M and Yu H (2019) A Digital Empire in the Making: China's Outbound Digital Platforms. *International Journal of Communication* 13(0). 0: 18. Available at: <https://ijoc.org/index.php/ijoc/article/view/10995>.
- Kipnis A (2006) Suzhi: a keyword approach. *The China Quarterly* 186: 295–313. DOI: [10.1017/S0305741006000166](https://doi.org/10.1017/S0305741006000166).
- Kücklich J (2005) Precarious Playbour: Modders and the Digital Games Industry. *Fibreculture journal* (5). Open Humanities Press.
- Kuruvilla S, Lee CK and Gallagher ME (eds) (2011) *From Iron Rice Bowl to Informalization: Markets, Workers, and the State in a Changing China*. Ithaca, N.Y.: ILR Press.
- Lan P-C (2006) *Global Cinderellas: Migrant Domesticity and Newly Rich Employers in Taiwan*. Durham, NC: Duke University Press.
- Lan Y (2005) *Village in the City*. Beijing: SDX Joint Publishing House.
- Landes DS (1969) *The Unbound Prometheus: Technical Change and Industrial Development in Western Europe from 1750 to Present*. Cambridge, England: Cambridge University Press.
- Langer J (1997) *Tabloid Television: Popular Journalism and the 'Other News'*. Communication and society. London ; New York: Routledge.
- Leah L and Livingstone S (2006) *Handbook of New Media: Social Shaping and Social Consequences of ICTs*. Updated student ed. London: Thousand Oaks: Sage Publications.
- Lee CK (1998) *Gender and the South China Miracle: Two Worlds of Gactory Eomen*. Berkeley, Calif ; London: University of California Press.
- Lee CK (1999) From Organized Dependence to Disorganized Despotism: Changing Labour Regimes in Chinese Factories*. *The China Quarterly* 157. Cambridge University Press: 44–71. DOI: [10.1017/S0305741000040200](https://doi.org/10.1017/S0305741000040200).
- Lee CK (2007) *Against the Law: Labor Protests in China's Rustbelt and Sunbelt*. Berkeley, Calif.: University of California Press.

- Lee CK (2016) Precarization or Empowerment? Reflections on Recent Labor Unrest in China. *The Journal of Asian Studies* 75(2): 317–333. Available at: <https://www.jstor.org/stable/24738610>.
- Lee CK and Selden M (2007) Durable inequality the legacies of China's revolutions and the pitfalls of reform. In: Foran J, Lane D, and Zivkovic A (eds) *Revolution in the Making of the Modern World*. London: Routledge.
- Leidner R (1993) *Fast Food, Fast Talk: Service Work and the Routinization of Everyday Life*. University of California Press.
- Leung N and Pun N (2009) The Radicalisation of the New Chinese Working Class: a case study of collective action in the gemstone industry. *Third World Quarterly* 30(3): 551–565. DOI: [10.1080/01436590902742321](https://doi.org/10.1080/01436590902742321).
- Li C (2005) Prestige stratification in the contemporary China: occupational prestige measures and socio-economic index. *Sociological Studies* (02): 4-102+244.
- Li C (2006) Non-institutional paths of migrants' status attainment: migrant labors and non-migrant labors in comparison. *Sociological Studies* (05): 85-106+244.
- Li C (2015) Between labor and the state: the birth and transformation of labor NGOs in China. In: *Labor and Employment Relations Association (LERA) 67th Annual Meeting, 2015*.
- Li H (2003) Strength of relationship and virtual community - a perspective of nongmingong research. In: Li P (ed.) *Nongmingong: Social and Economic Analysis of Rural-to-Urban Migrants*. Beijing: Social Sciences Academic Press.
- Li H (2009) *Village China Under Socialism and Reform: A Micro-History, 1948-2008*. Palo Alto, California: Stanford University Press.
- Li H (2011) Cellphone: the construction of social relationship in information communication - research on second-generation migrant workers' use of cellphone. *China Youth* (05): 60-64+47.
- Li P (1996) Social network and social status of migrant workers. *Sociological Studies* (04): 42–52.
- Li P (2004) *The End of the Village: The Story of Yangcheng Village*. Beijing: The Commercial Press.

- Li P and Tian F (2011) The new generation of migrant workers: social attitudes and behavioral choices. *Chinese journal of sociology (shehui)* 31(03): 1–23.
- Li Q (2002) Several theoretical problems on China's urbanisation and migrant population. *Journal of Jiangsu Administration Institute* (01): 61–67.
- Li Q (2003) An Analysis of Push and Pull Factors in the Migration of Rural Workers in China. *Social Sciences in China* (1).
- Li Q (2004) *Migrant workers and social stratification in China*. Beijing: Social Sciences Academic Press.
- Li T (2018) 5 sentenced for selling Didi Orders (xiaoshou didi qiandanshenqi 5 ren huoxing, cengqu geda chengshi tuiguang chengxu). *Beijing Youth Daily*, 18 July. Available at: http://www.xinhuanet.com/legal/2018-07/18/c_1123141081.htm (accessed 6 January 2020).
- Li X (2019) Small is Beautiful? An Exploration of Viable Business Model of Media Organizations under the Lens of Attention Economy: The Case of Guangzhou. *Communication and Society*: 43–73.
- Li Y (2006) Representation and identity construction of a marginalized group: an analysis of reports on nongmingong present-day Chinese urban newspapers. *Journalism and communication* (02): 2-14+94.
- Li Y, Sun L and Shen Y (eds) (2006) *Social Stratification in Contemporary China*. Beijing: Social Sciences Academic Press.
- Liang M (2017) Strong control and weak contract: mode of labour usage in domestic under the Interent. *Journal of Chinese Women's Studies* 0(5): 47.
- Liao R (2019) China's Didi reportedly lost a staggering \$1.6 billion in 2018. In: *TechCrunch*. Available at: <http://social.techcrunch.com/2019/02/14/didi-reported-1-6-billion-loss/> (accessed 29 December 2019).
- Liker JK, Haddad CJ and Karlin J (1999) Perspectives on Technology and Work Organization. *Annual Review of Sociology* 25: 575–596.
- Lin C (2006) *The Transformation of Chinese Socialism*. Durham, North Carolina: Duke University Press.

- Lin C (2013) *China and Global Capitalism: Reflections on Marxism, History, and Contemporary Politics*. London: Palgrave Macmillan.
- Lin JY (2011) *Demystifying the Chinese Economy*. 1 edition. Cambridge: Cambridge University Press.
- Lin JY, Cai F and Li Z (1996) *The China Miracle: Development Strategy and Economic Reform*. Sha Tin, N.T., Hong Kong: Chinese University of Hong Kong Press.
- Lin S, Sidaway JD and Woon CY (2019) Reordering China, Respacing the World: Belt and Road Initiative as an Emergent Geopolitical Culture. *The Professional Geographer* 71(3): 507–522. DOI: [10.1080/00330124.2018.1547979](https://doi.org/10.1080/00330124.2018.1547979).
- Lin X (2013) *Gender, Modernity and Male Migrant Workers in China: Becoming a 'modern' Man*. Routledge contemporary China series 99. London: Routledge.
- Liu N (2018) Reshaping and wrestling: study of rural culture in online video clips—a case study of the Kuaishou app (chongsu yu jueji: wangluo duanshipin zhongde xiangcunwenhua yanjiu--yi kuaishou app weili). *Journal of Hubei University(philosophy and social science) (hubeidaxue xuebao zhexue shehuikexueban)* 45(06): 161–168.
- Liu P (2019) Why Wang and Gan? Revisiting and Historicising Wang Zhong and Gan Xifen's Theories of Journalism. *Chinese Journal of Journalism and Communication* 41(04). Available at: <http://www.cnki.com.cn/Article/CJFDTotat-GJXW201904002.htm> (accessed 6 June 2020).
- Liu X and Tian F (2018) The study of social structure in the past 40 years: the exploration by Chinese sociologists. *Jiangsu Social Sciences* (04): 33–46. DOI: [10.13858/j.cnki.cn32-1312/c.2018.04.005](https://doi.org/10.13858/j.cnki.cn32-1312/c.2018.04.005).
- Livingstone S (1992) The resourceful reader: interpreting television characters and narratives. *Annals of the international communication association* 15(1): 58–90.
- Livingstone S (1998) Relationships between media and audiences: prospects for audience reception studies. In: Liebes T and Curran J (eds) *Media, Ritual and Identity: Essays in Honor of Elihu Katz*. London: Routledge.

- Livingstone S (2003) The changing nature of audiences: from the mass audience to the interactive media user. In: Valdivia A (ed.) *Companion to Media Studies*. Oxford, UK: Blackwell Publishing.
- Livingstone S (2007) Internationalizing media and communication studies: Reflections on the International Communication Association. *Global Media and Communication* 3(3): 273–279. DOI: [10.1177/1742766507082570](https://doi.org/10.1177/1742766507082570).
- Livingstone S (2010) Giving people a voice: On the vritical role of the interview in the history of audience research. *Communication, Culture & Critique* 3(4): 566–571. DOI: [10.1111/j.1753-9137.2010.01086.x](https://doi.org/10.1111/j.1753-9137.2010.01086.x).
- Livingstone S (2013) The participation paradigm in audience research. *The communication review* 16(1–2): 21–30. DOI: [10.1080/10714421.2013.757174](https://doi.org/10.1080/10714421.2013.757174).
- Livingstone S and Das R (2013) The end of audiences?: theoretical echoes of reception amid the uncertainties of use. In: Hartley J, Burgess J, and Bruns A (eds) *A Companion to New Media Dynamics*. Oxford, UK: Wiley-Blackwell.
- Long E (1986) Women, Reading, and Cultural Authority: Some Implications of the Audience Perspective in Cultural Studies. *American Quarterly* 38(4): 591–612. DOI: [10.2307/2712696](https://doi.org/10.2307/2712696).
- Lu BC, Koo A and Pun N (2019) Attempting to transgress neoliberal value: Constructing a micro-foundation of social values of working-class youth in vocational schools in China. *The Sociological Review* 67(5): 1050–1065. DOI: [10.1177/0038026119845552](https://doi.org/10.1177/0038026119845552).
- Lu X (1986) *Research on household registration system*. Shanghai: Shanghai People's Press.
- Lu X (1991) *Contemporary Rural China and Chinese Peasants*. Beijing: Knowledge Press.
- Lu X (2002) *Study on Contemporary Chinese Social Class*. Beijing: Social Sciences Academic Press.
- Lü X (2003) The problematics of 'mingong itde wave'. *Dushu* (10): 52–61.

- Lu X (2007) Nongmingong problem needs to be tackled from its root: an interview with Lu Xueyi. In: Dushu (ed.) *Reform: Reflection and Progress*. Beijing: SDX Joint Publishing House.
- Lu X (2009) Reflection on the first step of reform in rural China. *Social Science Front* (01): 1–20.
- Lü Xi (2012) *Villages and Revolutions*. Shanghai: East China Normal University Press.
- Lu Y (2003) *The Hukou System: Social Control and Social Differentiation*. Social image series. Beijing: The Commercial Press.
- Lüthje B (2019) Platform Capitalism ‘Made in China’? Intelligent Manufacturing, Taobao Villages and the Restructuring of Work. *Science, Technology and Society* 24(2): 199–217. DOI: [10.1177/0971721819841985](https://doi.org/10.1177/0971721819841985).
- Lüthje B, Luo S and Zhang H (2013) *Beyond the Iron Rice Bowl: Regimes of Production and Industrial Relations in China*. Campus Verlag.
- Ma X (2019) Ethnic minority empowerment and marginalization: Yi labour migrants outside China’s Autonomous Regions. *China information* 33(2): 146–164. DOI: [10.1177/0920203X18800192](https://doi.org/10.1177/0920203X18800192).
- Madison S (2012) *Critical Ethnography: Methods, Ethics, and Performance*. 2nd ed. Los Angeles, [Calif.]; London: SAGE.
- Mandel E (1980) *Long Waves of Capitalist Development: A Marxist Interpretation*. Cambridge: University Press.
- Marcus GE (1995) Ethnography in/of the world system: the emergence of multi-Sited ethnography. *Annual Review of Anthropology* 24: 95–117.
- Martín J (1993) *Communication, Culture and Hegemony: From the Media to Mediations* (trans. E Fox and RA White). Communication and human values. London: Sage.
- McElveen CL and R (1AD) Debunking Misconceptions About Xi Jinping’s Anti-Corruption Campaign. In: *Brookings*. Available at: <https://www.brookings.edu/opinions/debunking-misconceptions-about-xi-jinpings-anti-corruption-campaign/> (accessed 16 June 2020).

- McKercher C and Mosco V (2007) *Knowledge Workers in the Information Society*. Critical media studies. Lanham: Lexington Books.
- Meehan ER (1984) Ratings and the institutional approach: a third answer to the commodity question. *Critical Studies in Mass Communication* 1(2): 216–225. DOI: [10.1080/15295038409360032](https://doi.org/10.1080/15295038409360032).
- Milkman R (1987) *Gender at Work: The Dynamics of Job Segregation by Sex during World War II*. Working class in American history. Urbana: University of Illinois Press.
- Montgomery L (2009) Space to grow: Copyright, cultural policy and commercially-focused music in China. *Chinese Journal of Communication* 2. DOI: [10.1080/17544750802639044](https://doi.org/10.1080/17544750802639044).
- Montgomery L and Fitzgerald B (2006) Copyright and the creative industries in China. *International Journal of Cultural Studies* 9(3). SAGE Publications Ltd: 407–418. DOI: [10.1177/1367877906066886](https://doi.org/10.1177/1367877906066886).
- Morley D (1992) *Television, Audiences, and Cultural Studies*. London ; New York: Routledge.
- Mosco Vincent and McKercher C (2008) *The Laboring of Communication: Will Knowledge Workers of the World Unite?* Lanham, MD: Lexington Books.
- Murphy R (2002) *How Migrant Labor Is Changing Rural China*. Cambridge modern China series. Cambridge: Cambridge University Press.
- Naughton B (2010) *The Chinese Economy: Transitions and Growth* (tran. J An). Shanghai: Shanghai People's Press.
- Naughton B and Tsai KS (2015) *State Capitalism, Institutional Adaptation, and the Chinese Miracle*. Cambridge, England: Cambridge University Press.
- Naughton BJ (2006) *The Chinese Economy: Transitions and Growth*. 1st ed. MIT Press Books. Cambridge: The MIT Press.
- Naughton BJ (2018) *The Chinese Economy: Adaptation and Growth*. 2nd ed. Cambridge, MA, and London: The MIT Press.
- Neale S (1977) Propaganda. *Screen* 18(3): 9–40. DOI: [10.1093/screen/18.3.9](https://doi.org/10.1093/screen/18.3.9).

- Nolan P (2001) *China and the Global Economy: National Champions, Industrial Policy and the Big Business Revolution*. London: Palgrave Macmillan.
- Nolan P (2012) *Is China Buying the World?* Polity Press.
- O'Brien KJ (2013) Rightful resistance revisited. *Journal of peasant studies* 40(6): 1051–1062. DOI: [10.1080/03066150.2013.821466](https://doi.org/10.1080/03066150.2013.821466).
- O'Brien KJ and Li L (2006) *Rightful Resistance in Rural China*. Cambridge studies in contentious politics. Cambridge ; New York: Cambridge University Press.
- O'Reilly K (2012) *Ethnographic Methods*. 2nd ed. London ; New York: Routledge.
- Paccagnella L (1997) Getting the seats of your pants dirty: Strategies for ethnographic research on virtual communities. *Journal of Computer-Mediated Communication* 3(1): 0–0. DOI: [10.1111/j.1083-6101.1997.tb00065.x](https://doi.org/10.1111/j.1083-6101.1997.tb00065.x).
- Peng Q and Cao D (2016) Employment relations or Cooperation? - labour relations in car-hailing platforms like Didi Chuxing in the Chinese context. *Human Resources Development of China* (02): 93–97. Available at: <https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFQ&dbname=CJFDL AST2016&filename=ZRZK201602014&v=Mjg4OTdXTTFEGckNVUjdxZlp1ZHRGeTduVmJ6S1B6L1JaYkc0SDImTXJZOUVZSVI4ZVgxTHV4WVM3RGgxVDNxVHI=>.
- Perry EJ (1993) *Shanghai on Strike: The Politics of Chinese Labor*. Stanford, Calif.: Stanford University Press.
- Pia AE (2019) “We want everything”: a commentary to Pun Ngai’s the new Chinese working class in struggle. *Dialectical anthropology*.
- Press A (1991) *Women Watching Television: Gender, Class, and Generation in the American Television Experience*. Philadelphia: University of Pennsylvania Press.
- Propp V (1968) *Morphology of the Folktale* (tran. L Scott). 2d ed. / rev. and edited with a pref. by Louis A. Wagner [and a] new introd. by Alan Dundes. Publications of the American Folklore Society. Bibliographical and special series 9. Austin: University of Texas Press.

- Pun N (2003) Subsumption or Consumption? The Phantom of Consumer Revolution in 'Globalizing' China. *Cultural Anthropology* 18(4): 469–492. DOI: [10.1525/can.2003.18.4.469](https://doi.org/10.1525/can.2003.18.4.469).
- Pun N (2005) *Made in China: Women Factory Workers in a Global Workplace*. Durham, NC : Hong Kong: Duke University Press ; Hong Kong University Press.
- Pun N (2016) *Migrant Labor in China: Post-Socialist Transformations*. China today. Cambridge, UK ; Malden, MA: Polity Press.
- Pun N (2019) The new Chinese working class in struggle. *Dialectical anthropology* 43: 1–11. DOI: [10.1007/s10624-019-09559-0](https://doi.org/10.1007/s10624-019-09559-0).
- Pun N and Chan CK-C (2008) The subsumption of class discourse in China. *boundary 2* 35(2): 75–91. DOI: [10.1215/01903659-2008-004](https://doi.org/10.1215/01903659-2008-004).
- Pun N and Koo A (2019) Double contradiction of schooling: class reproduction and working-class agency at vocational schools in China. *British Journal of Sociology of Education* 40(1). Routledge: 50–64. DOI: [10.1080/01425692.2018.1507818](https://doi.org/10.1080/01425692.2018.1507818).
- Pun N and Lu H (2010a) A Culture of Violence: The Labor subcontracting system and collective action by construction workers in post-socialist China. *The China Journal* 64(64): 143–158. DOI: [10.1086/tcj.64.20749250](https://doi.org/10.1086/tcj.64.20749250).
- Pun N and Lu H (2010b) Unfinished proletarianization: self, anger, and class action among the second generation of peasant-workers in present-day China. *Modern China* 36(5): 493–519. DOI: [10.1177/0097700410373576](https://doi.org/10.1177/0097700410373576).
- Pun N and Ren Y (2008) The state and the migrant workers: unfinished proletarianisation. *Twenty-first Century* (107): 26–37.
- Pun N and Smith C (2007) Putting transnational labour process in its place: the dormitory labour regime in post-socialist China. *Work, Employment & Society* 21(1): 27–45. DOI: [10.1177/0950017007073611](https://doi.org/10.1177/0950017007073611).
- Pye LW (1978) Communications and Chinese Political Culture. *Asian Survey* 18(3). University of California Press: 221–246. DOI: [10.2307/2643217](https://doi.org/10.2307/2643217).

- Qin H (2013) *The Common Baseline of Modern Thought*. Nanjing: Jiangsu Phoenix Art Publishing House.
- Qiu JL (2009) *Working-Class Network Society: Communication Technology and the Information Have-Less in Urban China*. Cambridge, MA: MIT Press.
- Qiu JL (2018) China's digital working class and circuits of labor: *Communication and the Public*. SAGE PublicationsSage UK: London, England. DOI: [10.1177/2057047318755529](https://doi.org/10.1177/2057047318755529).
- Qu J (2001) Guanxi Strength in lifeworlds: Life trajectories of rural migrants in cities. In: Ke L and Li H (eds) *Villagers in the City: The Migrant Population in Urban China*. Beijing: Central Compilation and Translation Press.
- Radway JA (1991) *Reading the Romance: Women, Patriarchy, and Popular Literature*. Chapel Hill; London: University of North Carolina Press.
- Rajan R (2006) Financial System Reform and Global Current Account Imbalances. Boston, Massachusetts. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp010806> (accessed 17 June 2020).
- Rawski TG (2002) Will Investment Behavior Constrain China's Growth? *China Economic Review* 13(4): 361–372. DOI: [10.1016/S1043-951X\(02\)00093-7](https://doi.org/10.1016/S1043-951X(02)00093-7).
- Roach SS (2009) A Wake-Up Call for the US and China: Stress Testing a Symbiotic Relationship. Washington, DC.
- Rogers EM (2003) *Diffusion of Innovations*. New York: Free Press.
- Rosen J (2012) The people formerly known as the audience. In: Mandiberg M (ed.) *The Social Media Reader*. New York, NY: NYU Press, pp. 13–16.
- Rosenblat A and Stark L (2016) Algorithmic labor and information asymmetries: a case study of Uber's drivers. *International Journal of Communication*: 3758–3785. Available at: <https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=19328036&v=2.1&it=r&id=GALE%7CA491909937&sid=googleScholar&linkaccess=abs>.

- Salzinger L (2003) *Genders in Production Making Workers in Mexico's Global Factories*. ACLS Fellows' publications. Berkeley: University of California Press.
- Schiller D (1999) *Digital Capitalism: Networking the Global Market System*. Cambridge, Mass.: MIT Press.
- Schiller D (2010) *How to Think about Information*. Urbana: University of Illinois Press.
- Schnegg M (n.d.) Epistemology: The nature and validation of knowledge. In: Bernard HR and Gravlee C (eds) *Handbook of Methods in Cultural Anthropology*.
- Schor JB and Attwood-Charles W (2017) The "sharing" economy: labor, inequality, and social connection on for-profit platforms. *Sociology Compass* 11(8): e12493. DOI: [10.1111/soc4.12493](https://doi.org/10.1111/soc4.12493).
- Scott J (1999) *Gender and the Politics of History*. Rev. ed. Gender and culture. New York: Columbia University Press.
- Selden M (1995) *China in Revolution: Yen'an Way Revisited*. New York: Routledge.
- Sewell WH (2005) *Logics of History: Social Theory and Social Transformation*. Chicago studies in practices of meaning. Chicago ; London: University of Chicago Press.
- Sharif N and Huang Y (2019) Industrial Automation in China's "Workshop of the World". *The China Journal* 81(1): 1–22. DOI: [10.1086/699471](https://doi.org/10.1086/699471).
- Shen H (2018) Building a Digital Silk Road? Situating the Internet in China's Belt and Road Initiative. *International Journal of Communication* 12(0): 19. Available at: <https://ijoc.org/index.php/ijoc/article/view/8405>.
- Shieh G (1992) *'Boss Island': The Subcontracting Network and Micro-Entrepreneurship in Taiwan's Development*. New York : Peter Lang,.
- Silver BJ (2003) *Forces of Labor: Workers' Movements and Globalization since 1870*. Cambridge studies in comparative politics. Cambridge: University Press.
- Silverstone R (1994) *Television and Everyday Life*. Hoboken: Taylor and Francis.

- Silverstone R (2000) The sociology of mediation and communication. In: Calhoun C, Rojek C, and Turner B (eds) *The Sage Handbook of Sociology*. London, UK: Sage Publications, pp. 188–207.
- Smith C and Pun N (2006) The dormitory labour regime in China as a site for control and resistance1. *The international journal of human resource management* 17(8): 1456–1470. DOI: [10.1080/09585190600804762](https://doi.org/10.1080/09585190600804762).
- Smith C and Pun N (2018) Class and Precarity: An Unhappy Coupling in China’s Working Class Formation: *Work, Employment and Society*. DOI: [10.1177/0950017018762276](https://doi.org/10.1177/0950017018762276).
- Smith C and Thompson P (1998) Re-Evaluating the labour process debate. *Economic and Industrial Democracy* 19(4): 551–577. DOI: [10.1177/0143831X98194002](https://doi.org/10.1177/0143831X98194002).
- Smith MR and Marx L (1994) *Does Technology Drive History? The Dilemma of Technological Determinism*. Cambridge, Mass: MIT Press.
- Smythe D (2012) On the audience commodity and its work. In: Durham MG and Kellner DM (eds) *Media and Cultural Studies: Keywords*. KeyWorks in Cultural Studies. Hoboken, NJ: Wiley-Blackwell, pp. 185–203.
- Smythe D (n.d.) After bicycles? What? In: Smythe D (ed.) *Counterclockwise: Perspectives on Communication*. T. Guback, Boulder, CO: Westview Press, pp. 230–244.
- Smythe DW (1977) Communications: Blindspot of western Marxism. *CTheory* 1(3): 1–27.
- Snapshot (n.d.). Available at: <https://www.bloomberg.com/news/articles/2018-09-07/beleaguered-didi-is-said-to-lose-585-million-in-just-six-months> (accessed 30 December 2019a).
- Snapshot (n.d.). Available at: https://consent.yahoo.com/collectConsent?brandType=nonEu&.done=https%3A%2F%2Ftechrunch.com%2F2019%2F02%2F14%2Fdidid-reported-1-6-billion-loss%2F%3Fgucounter%3D1&sessionId=3_cc-session_04994260-5a32-4c04-bf84-8b72b25c4a4a&lang=&inline=false (accessed 29 December 2019b).

- Someren MW van, Barnard Y and Sandberg J (1994) *The Think Aloud Method: A Practical Guide to Modelling Cognitive Processes*. Academic Press.
- Sparks C (2012) Beyond political communication: towards a broader perspective on the Chinese press. *Chinese Journal of Communication* 5(1): 61–67. DOI: [10.1080/17544750.2011.647746](https://doi.org/10.1080/17544750.2011.647746).
- Sparks C and Tulloch J (2000) *Tabloid Tales: Global Debates over Media Standards*. Critical media studies. Lanham, Md.: Rowman & Littlefield.
- Spivak GC (1988) Can the subaltern speak? In: Nelson C and Grossberg L (eds) *Marxism and the Interpretation of Culture*. Basingstoke: Macmillan Education, pp. 271–313.
- Spradley JP (1979) *The Ethnographic Interview*. Fort Worth, Fla.: Harcourt Brace Jovanovich College Pub.
- Standing G (2014) *A Precariat Charter: From Denizens to Citizens*. London ; New York: Bloomsbury. Available at: <http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1717372>.
- Standing G (2017) *Basic Income: And How We Can Make It Happen*. Pelican introduction. UK: Pelican.
- Standing G (2019) *Plunder of the Commons: A Manifesto for Sharing Public Wealth*. Pelican book 33. London, UK: Pelican, an imprint of Penguin Books.
- Star SL and Bowker GC (2002) How to Infrastructure. In: *Handbook of New Media: Social Shaping and Consequences of ICTs*. 55 City Road: SAGE Publications, Ltd, pp. 151–162. DOI: [10.4135/9781848608245](https://doi.org/10.4135/9781848608245).
- State Council (1996) *The Ninth-Five-Year Plan of the People's Republic of China on National Economy and Social Development and Outlines of Objectives in Perspective of the Year 2010*. Policy, 17 March. Beijing: State Council of the People's Republic of China. Available at: http://www.npc.gov.cn/wxzl/gongbao/2001-01/02/content_5003506.htm (accessed 2 September 2018).
- State Council (2015) Guiding Opinion of the State Council on Actively Promoting “Internet +” (No. 40). State Council of the People's Republic of China.

- State Council (2018) *Report on the Work of the Government - Delivered at the First Session of the 13th National People's Congress of the People's Republic of China on March 5, 2018*. Beijing: State Council of the People's Republic of China.
- Su Y (2010) Student Workers in the Foxconn Empire: The Commodification of Education and Labor in China. *Journal of Workplace Rights* 15(3–4): 341–362. DOI: [10.2190/WR.15.3-4.g](https://doi.org/10.2190/WR.15.3-4.g).
- Sun L (2003) *Cleavage: Chinese Society since 1990s (Duanlie: 20shiji 90niandai Yilaide Zhongguo Shehui)*. Beijing: Social Sciences Academic Press (China) (shehuikexue wenxian chubanshe).
- Sun P (2019) Your order, their labor: An exploration of algorithms and laboring on food delivery platforms in China. *Chinese Journal of Communication* 12(3): 308–323. DOI: [10.1080/17544750.2019.1583676](https://doi.org/10.1080/17544750.2019.1583676).
- Sun W (2009a) *Maid in China: Media, Morality and the Cultural Politics of Boundaries*. Routledge studies in Asia's transformations. London: Routledge.
- Sun W (2009b) Making space for the maid. *Feminist media studies* 9(1): 57–71. DOI: [10.1080/14680770802619508](https://doi.org/10.1080/14680770802619508).
- Sun W (2014a) “Northern Girls”: Cultural Politics of Agency and South China's Migrant Literature. *Asian Studies Review* 38(2): 168–185. DOI: [10.1080/10357823.2014.901297](https://doi.org/10.1080/10357823.2014.901297).
- Sun W (2014b) *Subaltern China: Rural Migrants, Media, and Cultural Practices*. Lanham: Rowman & Littlefield.
- Swider S (2015) Building China: precarious employment among migrant construction workers. *Work, employment & society* 29(1): 41–59. DOI: [10.1177/0950017014526631](https://doi.org/10.1177/0950017014526631).
- Tan S (1997) Gender differences in rural labour mobility. *Sociological Studies* (01): 44–49.
- Tan S (1998) Topic among dagongmei: An analysis of over 100 letters from female workers in Zhili toy factory in Shenzhen. *Sociological Studies*.

- Tan S (2001) Mobility and the reconstruction of gender. In: *The Second International Forum on Rural Migrants*, Beijing, 2001.
- Tan S (2003) Nongmingong's migration: A literature review. *Social Sciences in China* (04): 84–101.
- Tang can (1996) Sexual harassment: the double identity and discrimination of urban migrant women. *Sociological Studies* (04): 117–126.
- Tang C and Feng X (2000) Division among migrant peasants in Henan Village. (3).
- Tang M (2019) *Tencent: The Political Economy of China's Surging Internet Giant*. 1 edition. New York, NY: Routledge.
- Thompson EP (1980) *The Making of the English Working Class*. London: Victor Gollancz.
- Thompson JB (1995) *The Media and Modernity: A Social Theory of the Media*. Cambridge, UK: Polity Press.
- Thompson P and Smith C (2010) *Working Life: Renewing Labour Process Analysis*. London: Red Globe Press.
- Tomba L (2002) *Paradoxes of Labour Reform: Chinese Labour Theory and Practice from Socialism to Market*. London: Routledge.
- Topklout (2019) *2019 China MCN Industry Development Research White Paper (2019 zhongguo MCN hanye fazhan yanjiu baipishu)*. Beijing: TOPKLOUT (kelaorui). Available at: <https://socialbeta.com/t/report-2019-China-MCN-white-paper-20190322> (accessed 5 December 2019).
- Tsang R, Boutot P-H and Cai D (2018) *China's mobility industry picks up speed: What are the big consequences of e-hailing, bike sharing and other mobility options?* Corporate, 16 May. Bain & Company. Available at: <https://www.bain.com/insights/chinas-mobility-industry-picks-up-speed/> (accessed 30 December 2019).
- Tsou T (2002) *Interpreting the Chinese Revolution (Zhongguo Geming Zaijieshi)*. Hong Kong: Oxford University Press (Hong Kong).
- Turkle S (2005) *The Second Self: Computers and the Human Spirit*. Cambridge, Mass.: MIT Press.

- Turkle Sherry (2011) *Alone Together: Why We Expect More from Technology And Less from Each Other*. New York: Basic Books.
- Tyler SA (2010) Post-modern ethnography: From document of the occult to occult document. In: Clifford J, Marcus GE, and Fortun K (eds) *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley, Calif: University of California Press.
- UNCTAD (2019) *Value Creation and Capture: Implications for Developing Countries*. 2019 Digital Economy Report. Geneva: United Nations Conference on Trade and Development.
- UNDP (2014) *United Nations Development Programme Annual Report 2014*. New York, NY. Available at: https://www.undp.org/content/dam/undp/library/corporate/UNDP-in-action/2014/UNDP_AR2014_english.pdf (accessed 14 November 2019).
- van Dijk J (2012) *The Network Society*. London: SAGE Publications.
- van Doorn N (2017) Platform labor: on the gendered and racialized exploitation of low-income service work in the ‘on-demand’ economy. *Information, Communication & Society* 20(6): 898–914. DOI: [10.1080/1369118X.2017.1294194](https://doi.org/10.1080/1369118X.2017.1294194).
- von Holdt K (2003) *Transition from below: Forging Trade Unionism and Workplace Change in South Africa*. Pietermaritzburg : London: University of Natal Press ; Global.
- Walder AG (1986) *Communist Neo-Traditionalism: Work and Authority in Chinese Industry*. ACLS Humanities E-Book (Series). Berkeley: University of California Press.
- Walder AG and Gong X (1993) Workers in the Tiananmen Protests: the politics of the Beijing workers’ autonomous federation. *The Australian journal of Chinese affairs* (29): 1–29. DOI: [10.2307/2949950](https://doi.org/10.2307/2949950).
- Wallis C (2013) *Technomobility in China: Young Migrant Women and Mobile Phones*. Critical cultural communication. New York, NY: New York University Press.

- Wang C (1995) *Social Mobility and Social Reconstruction: Research on Zhejiangcun*. Zhejiang People's Press.
- Wang C (2005) *One China, Many Paths*. London: Verso Books.
- Wang C (2010) Sociological analysis on the process and problems in second-generation migrant workers' integration into urban China. *Youth Exploration* (03): 5–15.
- Wang H (1998) Contemporary Chinese Thought and the Question of Modernity. *Social Text* (55). Duke University Press: 9–44. DOI: [10.2307/466684](https://doi.org/10.2307/466684).
- Wang H (2004) The year 1989 and the historical roots of neoliberalism in China. *Positions: east asia cultures critique* 12(1): 7–70.
- Wang H (2006) Reform and the historical destiny of China's working class: investigation report on the restructuring of Jiangsu Tongyu Group Company. *China Study* 9: 40–59.
- Wang H (2008) *Depoliticized Politics: The End of the Short 20th Century and the 1990s*. Beijing: SDX Joint Publishing House.
- Wang H (2011) *The End of the Revolution: China and the Limits of Modernity*. London: Verso Books.
- Wang H (2014) Two kinds of the new poor and their future: the fall-down and re-formation of class-based politics, and the political dignity of the new poor. *Open Times* (06): 49-70+6.
- Wang H (2015) From “Barefoot Electrician” to “Electronic Supervisor”: Technology and Labour Politics in the Electronics and Information Industry. *Open Times* (03): 34-48+5–6.
- Wang H (2016) The politica economy of communication and digital capitalism in contemporary Chinba. *Tianfu New Horizons* (03): 35–37.
- Wang H, Liu S, Sun L, et al. (1997) ‘Zhejiang cun’: a unique way Chinese peasants enter cities. *Sociological Studies* (01): 58–69.
- Wang J (2015) *Politics of Livelihood: A New Perspective on the Transformation of World's Factories' Industrial Relations*. Beijing: Social Sciences Academic Press.

- Wang W (2011) *Communication as Labour: A Case Study on Chinese Journalists*. Beijing: Communication University of China Press.
- Wang X (2016) *Social Media in Industrial China*. London: UCL Press.
- Wang Z (2005) 'State feminism'? Gender and socialist state formation in Maoist china. *Feminist Studies* 31(3): 519–551. DOI: [10.2307/20459044](https://doi.org/10.2307/20459044).
- Wang Z (2017) *Finding Women in the State: A Socialist Feminist Revolution in the People's Republic of China 1949-1964*. Oakland, CA: University of California Press.
- Webster E and Von Holdt K (eds) (2005) *Beyond the Apartheid Workplace: Studies in Transition*. Pietermaritzburg: University of KwaZulu-Natal Press.
- Webster F (2006) *Theories of the Information Society*. London: Routledge.
- Wemheuer F (2014) *Famine Politics in Maoist China and the Soviet Union*. New Haven: Yale University Press.
- Wen J (2001) From survival rational choice to social rational choice: analysis on the motivation of peasants' migration for employment in contemporary China. *Sociological Studies* (06): 19–30.
- Wen T (2013) *Eight Crises*. Beijing: Orient Press.
- Williams R (1973) Base and superstructure in Marxist cultural theory. *New left review* (82): 3.
- Williams R (1974) On high and popular culture. *The new republic*.
- Williams R (1977) *Marxism and Literature*. Marxist introductions. Oxford, UK: Oxford University Press.
- Wilson SM and Peterson LC (2002) The anthropology of online communities. *Annual Review of Anthropology* 31(1): 449–467. DOI: [10.1146/annurev.anthro.31.040402.085436](https://doi.org/10.1146/annurev.anthro.31.040402.085436).
- Woetzel J, Seong J, Wang KW, et al. (2017) *China's Digital economy: a leading global force*. Shanghai: McKinsey Global Institute.
- Woodcock J and Graham M (2020) *The Gig Economy: A Critical Introduction*. Newark: Polity Press.

- World Trade Organisation (2009) *World Trade Report 2009: Trade Policy Commitments and Contingency Measures*. Geneva: World Trade Organisation.
- Woronov TE (2016) *Class Work: Vocational Schools and China's Urban Youth*. Stanford, California: Stanford University Press.
- Wright W (1977) *Sixguns and Society: A Structural Study of the Western*. First Edition. Oakland, CA: University of California Press.
- Wu IS (2008) *From Iron Fist to Invisible Hand: The Uneven Path of Telecommunications Reform in China*. 1 edition. Stanford, California: Stanford University Press.
- Wu J (2017) *China's Reform: A Trilogy*. Beijing: CITIC Press Group.
- Wu Q and Li Z (2018) Labor Process Control and Job Autonomy in Sharing Economy: A Case Study of Online Car-hailing Drivers' Work. *Sociological Studies* (4): 137–162.
- Xia B (2018) Capital accumulation and work in China's internet content industry: Struggling in the bubble. *The Economic and Labour Relations Review* 29(4). SAGE Publications Ltd: 501–520. DOI: [10.1177/1035304618810987](https://doi.org/10.1177/1035304618810987).
- Xia B (2019) Precarious labour in waiting: Internships in the Chinese Internet industries. *The Economic and Labour Relations Review* 30(3): 382–399. DOI: [10.1177/1035304619863649](https://doi.org/10.1177/1035304619863649).
- Xia B and Fuchs C (2016) The Financialization of Digital Capitalism in China. *Westminster Institute for Advanced Studies* (4).
- Xiang B (2004) *Transcending Boundaries: Zhejiangcun: The Story of a Migrant Village in Beijing* (tran. J Weldon). China studies ; vol. 5. Leiden: Brill.
- Xie Z, Huang Q and Zeng F (2005) Current status: worked-related injuries stagnates modernisation porcess. *China Emergency Management*, 13 October. Beijing.
- Xu Y and Ye X (2020) Technology Upgrading and Labor Degrading?—A Sociological Study of Three Robotized Factories. *Sociological Studies* (3).
- Xue Y, Xian W, Chen Y, et al. (2017) *New Economy, New Jobs: Report on Employment by Didi Chuxing*. Beijing: Didi Policy Research Institute.

- Yan H (2003) Neoliberal Governmentality and Neohumanism: Organizing Suzhi/Value Flow Through Labor Recruitment Networks. *Cultural Anthropology* 18(4): 493–523. DOI: [10.1525/can.2003.18.4.493](https://doi.org/10.1525/can.2003.18.4.493).
- Yan H (2008) *New Masters, New Servants: Migration, Development, and Women Workers in China*. Durham: Duke University Press.
- Yang K (2008) A preliminary study on the use of mobile phones amongst migrant workers in Beijing. *Knowledge, Technology & Policy* 21(2): 65–72. DOI: [10.1007/s12130-008-9047-7](https://doi.org/10.1007/s12130-008-9047-7).
- Yao J (2014) *Knowledge Workers in Contemporary China: Reform and Resistance in the Publishing Industry*. Lanham:MD: Lexington Books.
- Yao J and Liu C (2017) Research on flexible employment relations in Crowdsourcing news production under new media. *Journalism Lover* (11).
- Yin S (2018) Alternative forms of media, ICTs, and underprivileged groups in China. *Media, Culture & Society* 40(8): 1221–1236. DOI: [10.1177/0163443718754653](https://doi.org/10.1177/0163443718754653).
- Yu J (2019) Didi’s Order dispatching rules revealed: more than 200 hundred intervening factors (Didi pilu wangyueche paidan guize: 200 duo ge yinsu yingxiang sicheng pipei). *Economic Daily*, 12 September. Beijing. Available at: http://www.ce.cn/xwzx/gnsz/gdxw/201909/12/t20190912_33141453.shtml (accessed 31 December 2019).
- Zeng G (2019) Identification of Rural-urban Divide and Online Sales of “Pristine” Agricultural [roducts: Internet+ Entrepreneurship, Media Practice and the Commodification of Private Life (chengxiang rentong yu yuanshengtai nongchanping de zaixian xiaoshou--"hulianwang+" chuangye, meijieshijian yu sirenshenghuo de shangpinhua). *Thinking (sixiang zhanxian)* 45(04): 42–51.
- Zhang H (2014) *Crisis Era and Subject Construction*. Taipei: ShowWe Information.
- Zhang L (1998) *Farewell to Ideal: A Research on the People’s Commune System*. Shanghai: Orient Publishing Centre.
- Zhang L (2008) Lean production and labor controls in the Chinese automobile industry in an age of globalization. *International labor and working-class history* 73(01): 24–44.

- Zhang L (2015) *Inside China's Automobile Factories: The Politics of Labor and Worker Resistance*. New York, NY, USA: Cambridge University Press.
- Zhang Q (2012) *Grassroot media: the resistance identities in the process of social transformation--a case study of Hmong videos of eastern Guizhou Province*. Thesis (PhD). Graduate School of Chinese Academy of Social Sciences, Beijing.
- Zhang S (2014) *Impact of Globalization on the Local Press in China: A Case Study of the Beijing Youth Daily*. Lanham, Maryland: Lexington Books.
- Zhao EJ and Keane M (2013) Between formal and informal: the shakeout in China's online video industry: *Media, Culture & Society*. DOI: [10.1177/0163443713491301](https://doi.org/10.1177/0163443713491301).
- Zhao Y (1998) *Media, Market, and Democracy in China: Between the Party Line and the Bottom Line*. the United States: University of Illinois Press.
- Zhao Y (2000) Caught in the Web: The Public Interest and the Battle for Control of China's Information Superhighway. *info* 2(1): 41–66. DOI: [10.1108/14636690010801311](https://doi.org/10.1108/14636690010801311).
- Zhao Y (2003) Transnational Capital, the Chinese State, and China's Communication Industries in a Fractured Society. *Javnost - The Public* 10(4): 53–74. DOI: [10.1080/13183222.2003.11008841](https://doi.org/10.1080/13183222.2003.11008841).
- Zhao Y (2004) The state, the market, and media control in China. In: Thomas PN and Nain Z (eds) *Who Owns the Media: Global Trends and Local Resistance*. Chicago, IL: University of Chicago Press, p. Part 2. 10.
- Zhao Y (2007a) After Mobile Phones, What? Re-embedding the Social in China's "Digital Revolution". *International Journal of Communication* (2007 (1)): 92–120.
- Zhao Y (2007b) Marketizing the 'information revolution' in China. In: Murdock G and Wasko J (eds) *Media in the Age of Marketization*. The Hampton Press communication series. Popular culture. Cresskill, NJ: Hampton Press.
- Zhao Y (2008) *Communication in China: Political Economy, Power, and Conflict*. Lanham: Rowman & Littlefield Publishers.

- Zhao Y (2012) Introduction to “Communication and Class Divide China”. *Javnost - The Public* 19(2): 5–22. DOI: [10.1080/13183222.2012.11009082](https://doi.org/10.1080/13183222.2012.11009082).
- Zhao Y and Schiller D (2001) Dances with wolves? China’s integration into digital capitalism. *info* 3(2): 137–151. DOI: [10.1108/14636690110801879](https://doi.org/10.1108/14636690110801879).
- Zhao Y and Wang F (2002) Determining factors of migrant workers’ economic status. In: *Migrant workers: Status quo, trend and policy*, Beijing, 2002.
- Zhao Y and Wu C (2014) State, market and class in mass entertainments--a political-economic analysis of reform-era Chinese television drama. *Journal of Tsinghua University(Philosophy and Social Sciences Edition)* 29(01): 26–41, 159. DOI: [10.13613/j.cnki.qhdz.002673](https://doi.org/10.13613/j.cnki.qhdz.002673).
- Zheng G, Sun H and Wan X (2015) From ‘the game of making out’ to ‘the game of boss’: labor control in the informal employment. *Sociological Studies* 30(03): 170-195+245.
- Zhou S (2018) *Tonggeng Annual Report on Work-related Injury*. 16 January. Dongguan, Guangdong: Tonggeng Social Work Centre.
- Zhou X (2007) *Relation-Based Hegemony: A Research of Labor Process of Construction Industry*. Tsinghua University, Beijing.
- Zhu D (2007) Looking back on Thirty Years’ Reform and Opening Up. Hong Kong.
- Zhu Y, Keane M and Bai R (2008) *TV Drama in China*. Hong Kong: Hong Kong University Press.
- Zou X (2005) The motivation of migrant workers’ flow to the city: the realistic interpretation of the theory of push-pull. *Rural Economy* (10): 104–109.

Appendice

Appendix I Glossary

<i>changmei</i>	<i>Factory girls</i>
<i>dagong</i>	working for a boss
<i>daling gong</i>	elder workers
<i>danwei</i>	work unit
<i>dianda</i>	Radio and TV Universities
<i>diao</i>	to rebuke and scold mercilessly
<i>diduan renkou</i>	low-end population
<i>erli</i>	become established
<i>fulazhang</i>	assistant line supervisor
<i>getihu</i>	small-scale individual or household entrepreneurs
<i>guanxi</i>	<i>connections, relationships, defines the fundamental dynamic in personalized social networks of power</i>
<i>hua jieji, ding chengfen</i>	determining class status of individuals and the family
<i>hukou</i>	household registration system
<i>jiqihuanren</i>	to replace workers with machines
<i>jingli</i>	departmental manager
<i>lazhang</i>	line supervisor
<i>laoxiang</i>	people from the same place-of-origin
<i>liucheng</i>	production process manager
<i>mangliu</i>	blind flow
<i>mianzi</i>	<i>face and favour</i>
<i>mingong chao</i>	tide wave of migrant labour
<i>nongmin</i>	peasant; people with rural hukou status

<i>nongmingong</i>	rural-to-urban migrant; migrant workers; peasant-turned workers
<i>pugong</i>	the rank-and-file workers, the lowest rank within the factory hierarchy
<i>rendi maodun</i>	the contradiction between limited arable land and oversized population
rijie	jobs remunerated daily
<i>shangpin jingji</i>	commodity economy
<i>shengguan</i>	production manger
<i>suzhi</i>	quality
<i>taigan</i>	Taiwanese managers
<i>tiefanwan</i>	iron rice bowl
three-generation family	a term describing the composition of Chinese families, especially those in rural areas. It consists of the core family, that is, children and parents, as well as four grandparents.
<i>xiangtu guanxi</i>	<i>sociality characteristics of a rural Chinese kind</i>
<i>xiaolingtong</i>	Little Smart, an inexpensive wireless technology which offers limited mobile service at the price of a landline. The service was officially terminated by the end of 2014.
<i>weishang</i>	micro business
<i>wenming chengshi</i>	civilized cities
<i>yu guoji jiegui</i>	joining the international track
<i>zuo shengyi</i>	doing business
ACFTU	All-China Federation of Trade Unions
CCP	Chinese Communist Party
EA	enterprise architect system
FDI	foreign direct investment
NBS	National Bureau of Statistics, the People's Republic of China
PRD	the Pearl River Delta

SOE	State-owned Enterprise
TVE	Township and Village Enterprise

Appendix II Dongguan and *Weida* in transition

The fieldwork for this thesis was conducted mainly between 2017-2018 in *Weida*, a medium-sized factory in Tangxia township, Dongguan specializing in manufacturing keystone modules, keystone patch panels, electrical jack and cables, all of them commonly used elements in enabling network connectivity. Apart from *Weida* and Dongguan, I also followed six of my colleagues back home before the Spring Festival of 2018, to Lincang, a municipal-level city bordering Myanmar in Yunnan Province, Tongren, a city in Guizhou Province, and Baise of Guangxi bordering Vietnam. In this section, I will mainly focus on the Dongguan and *Weida*. And I will briefly discuss details about the three villages I visited in its connection with how my understanding of *nongmingong* and their ICTs use evolved throughout the fieldwork, which can be found in the method chapter.

Located at the heart of the Pearl River Delta (the PRD), Dongguan borders the provincial capital of Guangzhou in the north and Shenzhen to the south, both megacities in China. Widely known as ‘the world factory’, throughout the past decades, it has been a magnet for FDI for its favorable land and tax policy as well as heavy investment in industrial infrastructure. During the heyday of China’s export-oriented regime of growth, it was home to more than 10,000 foreign-invested enterprises across an area of 6,785 square miles, including Apple, Canon, Samsung, Nokia, Apple, Coca-Cola, Nestlé, among others. Eight pillar industries of the city included electronics and communications equipment, electrical machinery, textile and clothing, furniture, toys, paper products, food and beverage, and chemical industries. This, with its livable humid subtropical climate and abundant sunshine and rainfall, made it one of the most popular destinations for *nongmingong*. According to the government’s most recent report, of the city’s 8.4 million inhabitants, only 2.1 million were registered as residents. Manufacturing aside, it was also well-known for its huge underground sex trade and expansive red-light districts, earning for it the nickname ‘the Eastern Amsterdam’.

In the recent decade, Dongguan is undergoing a profound transition in its industrial structure. Negatively influenced by the global capitalist crisis, particularly the Sino-US trade war, Dongguan has since mid-2000s witnessed waves after waves of factory shutdowns and factory relocations to inland China and Southeast Asian

countries. In its place, in my fieldwork, I found a number of small family-run workshops emerging, most of them at the downstream position in the subcontracting networks dominated by larger factories. The condition of the low-end, labour-intensive manufacturing sector was further undermined by the local government's move to impose more and more stringent environment policies. On the other hand, to keep its high economic growth rate and retain its status as the world manufacturing powerhouse, two strategies that have been high on the agenda of Dongguan's government are *jiqihuanrre*, to replace workers with machines, an initiative to upgrade the low-end manufacturing industry through automation, and a scheme to attract high-tech enterprises, with similar favorable policies as 40 years ago for the low-end manufacturers.

Socially, alongside this economic transition, at the time of my fieldwork, Dongguan was undergoing a process of gentrification. On the one hand, in the industrial towns, new town centers with high-rise middle-class residential area and shopping malls arose. On the other hand, in migrant villages, small real estate enterprises took over the residential buildings built by residents themselves, upgraded it and started their own renting business at a higher price. Around these migrant villages, more supermarkets, convenience store franchises and entertainment facilities were built. All these had significantly enriched local life; however, this was achieved at the cost of surging prices. In this regard, apart from the bankruptcy and relocation of manufacturing factories, these factors have also contributed to its loss of vast numbers of *nongmingong*.

Also eye-catching in Dongguan's streets were the cellphones stores and repair shops. The sheer amount and density of these shops would surprise many: almost in every main road of every migrant village in every industrial town, one could easily find shops as such. Most of these shops sold smart phones of domestic Chinese phone brands like OPPO, Huawei and Vivo. They were also part of the distribution network for many local software companies that developed software for, for example, local salesman. ICTs also presented in local life in less visible ways. For example, more and more workers began to work for ride-hailing companies like Didi and Shouqi, and food delivery companies like Meituan and Eleme. Taking taxis increasingly became an ICTs-based undertake even among *nongmingong*. In the street corners of

the town center, one could always spot a group of food delivery drivers gathering together, talking to each other while waiting for the next order.

Weida, as I just stated, was the manufacturing plant of a Taipei-headquartered electronics dealer. It was first established in the late 1990s, a time when the Dongguan government was still trying to reach out as much foreign direct investment as possible. Its original site was in Fenggang, Tangxia's neighboring industrial town that was also part of Dongguan. In the early 2010s, the local government of Tangxia Township decided to support the development of high-tech sector⁹³, and a crucial strategy in this regard was to build, right by the highway that connected Dongguan to Shenzhen, Hong Kong and Guangzhou, a science park. It is through this project that *Weida* moved to Tangxia to its current campus.

Like other foreign-invested⁹⁴ enterprises, top on *Weida*'s hierarchical management team were a group of *taigan* (Taiwanese managers) who oversaw the factory's overall production, administration and communications. The only mainlander in the team is a Hubei local who managed government relation for the factory and had little role in production.

From early to mid-2010s, *Weida*, like many other manufacturing factories in Dongguan, had felt keenly the pain of the global capitalist crisis, and associated with it, the rise in labour wages. In 2011, attracted by the favorable policy and the cheaper labour price there, *Weida*'s Taiwanese boss, through his connection with some custom officer in Guangzhou who came originally from Yanbian, a Korean Autonomous Prefecture to the east of Jilin Province in Northeast China, invested the company's second manufacturing facility there. Slightly after I left the *Weida*, with the effort of the Hubei manager, established its third manufacturing campus. More recently, I learned from the Hubei manager that *Weida* opened its fourth site in Thailand. These were widely discussed among my colleagues in Dongguan. The pain was also felt in the decrease of overtime work and the loss of colleagues. When I left the field at the end of April 2018, we had 30 of us working at the Panel group in *Weida*'s manufacturing Department One. At the time of this writing, almost half of them left for a new job, some in a different factory, others in the platform economy.

⁹³ This should not be confused with the more recent move of the Dongguan government to turn to the high-tech sector to pursue industrial upgrade.

⁹⁴ Although the Chinese government insisted that Taiwan was part of the People's Republic of China, for historical reasons, investments from Taiwan were nevertheless categorised as FDI.

Appendix III Migrant Working Lives: a brief life history of the some of the interviewees

Junhua, born in 1988, is from the mountainous Heyuan city, Guangdong Province, home to the largest Hakka population in China. Although administratively part of Guangdong, the frontier of opening up, because of the lack of preferential policies, its level of economic development resembles more its poorer neighbor of Jiangxi than its richer costal neighbors, and it has always been a major source of migrant labour outflow since 1992. Because of his parents' inability to cover the tuitions for him and his three siblings, he dropped out of middle school when he was 14, and started his first job as a packer two years later in a state-owned lunchbox factory in Heyuan. It did not take long for him to realize that private factories in Dongguan offered higher salary, hence his decision to move to Dongguan. Since then, he has spent all his life there, switching among different factories. At the time we met in early 2018, he worked as a carrier in a furniture workshop. He was very proud that it was with his support that his father was able to renovate their rural house that had long fallen into despair. Now his biggest concern was to get married.

Hu, originally from a mountainous village in Hengyang, Hunan Province, is the youngest interviewee and one of the gay workers I met during the fieldwork. We first met each other through the introduction of my gay colleague at *Weida*. Growing up as a left-behind child, ironically, he was not able to get closely along with his parents until he started his *dagong* career in the same factory they worked after finishing middle school. He soon left that factory because of his felt need to hide from his parents his gay identity. Aged 20, he became a sushi apprentice in a local Japanese restaurant in Tangxia after working in a motor factory for three months. Although the income was halved, he liked his current job as it allowed him to get up later in the morning and promised him a career in the catering industry, especially when Japanese food was gaining popularity in third- and fourth- tier cities in China. In his spare time, he was a video game player, a star trek fan, and a follower of many WeChat public accounts about urban office life. He was also a host at the gay live-

streaming platform Blued, where he was well-loved for his tattoos and his drag-queen style.

Boqing was a vocational school graduate majoring in Dental Technology in Changsha, the capital city of his home province Hunan. He chose this major in order to become a dentist, only to find that the program was designed to train denture technicians. Immediately after graduation, he landed in a denture factory in Changsha as an apprentice on a monthly wage of 1500 RMB, which was far from enough to cover even only his own basic living expenses. His plan to pursue a career in the dental industry was further impeded by the fact that one would need a university degree to do so in China's nascent dental industry. These led him to Dongguan 5 years ago and he had been part of the quality check team in a local electronics factory ever since. Aged 29, he confessed feeling being in a dilemma: He was certainly not content with his factory life, but saw no direction toward a better future. Like many of his urban peers, he was an NBA fan who knew all its basketball stars and teams like the back of his hand, and felt immense pressure as regards marriage.

Youcai started his own brick workshop at the turn of 2018, right after I followed him to Dashan village, Lincang, Yunnan Province. Dashan is located 40 minutes' drive from Laukkaing District, part of Myanmar's Shan State, and 2 hours' drive from downtown Lincang. He could recall trading home-raised pigs for money at local markets in Laukkaing, but never set his footstep on Kunming before he was 20, neither did his parents throughout their entire life. Born in 1991, after spending 8 years in primary school, he got his first job in Lhasa at the age of 14 where he worked at his cousin's construction site as an apprentice and then a bricklayer. After the project finished, he had to find his own way out. Since then, he had been a bamboo logger, a road mender and a pig dealer. In 2015, he even organized local villagers to work for the construction team designated by the municipal government to pave the road in his village, which he was very proud of since it was the first time his village was connected to the outside by asphalt road. Throughout the years, he had tried many industries but was never formally employed by any factories or

enterprises. He was very excited at first, but became increasingly tired of the uncertainty as he grew older. As he said: ‘basically I am doing whatever I think is profitable. And the trends are fleeting in small places like Dashan. I never know what I will do next. To be honest I hate this’.

Songlin is a father of two daughters who identifies himself as gay and now manages the quality check team in a local electronics factory. Aged 30, he quit school and started working at the age of 16 because his father – the then main breadwinner of the family - was caught in a serious car accident and became paralyzed in bed ever since. At that time, he was a top student at school and was entertained with high hope to become the village’s first university student. However, faced with his father’s accident, the heavy medical bills it generated and the problem of the livelihood of the family, especially his two younger siblings, as the eldest son of the family, he felt that he had no choice but to shoulder the family responsibility. Like many other *nongmingong* I met in Dongguan, during the first several years, he followed his cousin to Mawei Township, Fujian province and worked as *pugong* in a shoe factory. he too had had a period of time when he frequently changed his job. Five years ago, his father’s health deteriorated, which prompted him to consider marriage. After marrying his wife, he became more serious with his career. A week after their wedding, he left his already-pregnant wife at home to work in Dongguan. It is from that time he began to work his current boss, who later left their previous company and started his own. During our barbecue & beer talks, he confessed that he felt sorry for his wife given his gay self-identification. From time to time he would meet gay guys nearby on Blued⁹⁵, develop romantic relationships and occasionally have sex with them, but coming out and divorce are never an option for him. The only way he can think of to recompense her is to work as hard as possible and improve the material conditions of her life.

Nian obtained his *dazhuan* (junior college) diploma in Computer Science in his hometown Chongqing, but this failed to secure for him a programmer job in a time when the threshold of such jobs is a bachelor’s degree. He felt very depressed at

⁹⁵ Blued is a Chinese gay dating app that is popular among working-class people.

first, but soon decided that he did not want to spend the rest of his life in factories. Hence his decision to learn woodworking skills in a local furniture factory. Unfortunately, only two months after that he got seriously injured - he lost four of his five left-hand fingers – because of a mis-operation and the lack of protection. This time it took him a year to recover physically and another year to claim occupational injury compensation with the help of Tonggeng, a local NGO specializing providing legal assistance for occupational hazards victims. Until the time we met, he was never able to find another factory job. Instead, he had switched between multiple ICTs-enabled jobs, including Meituan driver, Huolala, Didi Express. More recently, he was a Didi Daijia, designated driver, starting a day's work from 3 pm and ending at 3 a.m. A handsome young man in his late 20s, he used to be very confident about his own attraction to the opposite sex, but this has for him long gone because of his poor economic condition and disabled hand. In our interview, he confessed strong desire for intimacy and company, and he made it explicit that this cannot come from family members and marriage, since he was too ashamed to go back home given his poor economic condition.

Shaojing is healthy and robust at first glance, but during our 2-hour interview conducted in his factor dorm, he took three 10-min breaks, lying on his bed. This is because he was diagnosed with Benzolism three years ago at the age of 26, an occupational disease that is not uncommon among migrant workers in the Pearl River Delta, and had suffered from blood dyscrasia ever since. The disease almost entirely ruined his life. Early in his *dagong* career, he showed enormous interest in mechanics and molding, and throughout the years he had acquired much knowledge/skills and abundant experience in these two fields. For a time, this had secured for him a technologist position within the factory, enjoying a salary and status comparable to that of a floor manager. He did consider hopping to a larger company, but every time his boss managed to persuade him to stay by offering better incentives. Everything changed overnight on the day he received his certificate of diagnosis, and the boss became even more impatient when his health got worse. Born and growing up in a mountain village in He'nan Province, one of China's most underdeveloped provinces with a population of almost 100 million, all of his family members – including his parents and his wife and daughter - made a living in

Dongguan, which means it is impossible for them to cover his medical bills. At the time we met, he spent all day in the dorm every day, constantly harassed and embarrassed by his co-workers and boss. No continuous treatment was guaranteed, either by the factory or by local bureaus of labour and civil affairs. He felt a profound sense of helplessness, anxiety and lostness, not knowing where his future was.

Leilei began to work for a local labor intermediary after spending a year in his uncle's family-run manufacturing shop and six months in a charging cable factory in Dongguan. We got to know each other because he volunteered to be my interviewee when I tried to build connections with workers outside *Weida* through a QQ group chat. Later he told me that it was not because he had much interest in the research topic itself, but because he was so boring doing his job during the day that simply wanted someone to talk with. Aged 25, he was not happy with his current job and thought of it as a waste of time. In a time of significant labor loss in Dongguan, most of the time, his job involved little more than sitting behind a job information board under a tree at a crossroads, burying head in his cellphone and waiting for the next person to come and consult. He had had enough of this but saw no viable way out. On the other side of his life, he is a talented musician who plays xiao flute, erhu and a little bit of pipa, all of which he learned from his grandfather during his happy childhood in a Chongqing rural village.

Gao Dage had worked as a mechanist in various factories in Dongguan when we met in a spring job fair in a migrant village near *Weida*. He used to run a convenient shop and a motorcycle repair shop by a main road in his hometown. Thanks to the busy traffic flow, his business went on well and life was well-off. But things changed after a new main road was built alongside the old one, which resulted in the diversion of a significant volume of the traffic. Not long after that, his business gradually became languished. Hence his decision to migrate to *dagong*. Unlike many others who started with *pugong* positions, with his knowledge and experience in mechanical repairing, he was from day one working as mechanists. As he confessed, compared to *pugong* jobs, mechanist positions were less affected by the economic

crisis, and he actually quitted his previous job to look for a new one with higher salary. He had a daughter who studied in a top university in Malaysia and now lived on her own. Compared to his *pugong* colleagues, he felt lucky for not having to worry about his daughter. His biggest concern now was to save some money, for he did not want to become his daughter's nuisance when he got older.

Li Dage came from the same small town with Gao Dage, a small town in Jinzhou, Hubei. He was 35 and unmarried when we met. He started his *dagong* career as a *pugong* in an electronics factory, and later in the toy industry. In order to improve his income and seek for more career opportunities, he began to serve a two-year apprenticeship in a local electronic factory as a mechanist and learn to operate computer numerical control machines. After the apprenticeship he became a technical worker, but that was exactly the time when computer numerical control machines became gradually outdated. Therefore, although he no longer needed to toil hard on the assembly line, his life was not improved much. During his spare time, he liked to play video games on his cellphone and read news. He kept a keen eye on news about his hometown and that about the central government. This, according to him, was because he wished his hometown would one day be developed enough for him to work from there.

Huoming used to work in the furniture industry in Dalingshan township, a town in Dongguan where it was the pillar industry. The first 5 years of his *dagong* experience had been a good memory for him, for although physically demanding and tired all the time, the job offered good income and he was proud that he was finally able to share the burden of the family. Born in a remote village in Bijie, Guizhou, both of his parents received little education and cultivated land for a living. Their conditions got even worse when his father was seriously injured and became paralysed in bed after a road accident when he was 15. Unfortunately, two years ago, one of his fingers got cut and everything changed for him overnight. His boss no longer wanted him and refused to assist him in applying for work injury insurance and compensation package. Meanwhile, he was lucky to meet Laohu, founder of Tonggeng, a labour NGO specializing in providing legal support for workers who

were injured or diagnosed occupational diseases. With the help of Tonggeng, he managed to go through the cumbersome process of application and claimed his benefits. At the time of our interview, he worked for an electronics factory as a *pugong*. When we met again in mid-2019, he became radicalised. Now, apart from his factory job, he was a dedicated volunteer at Tonggeng and an active disseminator of labour activism-related news and articles. Although he was harassed by local police in his hometown and was questioned by them for several times when he was back home for the Spring Festival in 2019, he firmly believed that he was doing the right thing.

Rizuo was originally from a village on the brooder of Vietnam and China, in Baise, Guangxi province. Having been single throughout his life, he was among the few male workers in our team, and also the most silent. This was because having worked in Dongguan for more than 15 years, his passion had been frittered away by the repetitive work and the doom prospect. He felt he was entrapped in a dilemma and could never walk out by hardworking. After he failed in his attempt to change his life with Didi and his father passed away in that same year, he began to participate in gambling. He was also keen to become wealthy overnight by winning the lottery. When I visited Hong Kong for a workshop during the fieldwork, he was very excited and told me to buy a book about how to win Mark Six lottery in Hong Kong for him.

Jincai was from Guizhou, and was 22 when we met. Before coming to *Weida*, she spent 5 years working 15 jobs in her hometown. This was because she was not allowed by her father to migrate out to *dagong* until she was married. In 2016, by arrangement of her father, she married her husband who she had met just three times. She agreed because she could no longer bear the tedious work and life in the small city of her hometown. She never set foot on her husband's village after their wedding, for she could barely get along with him. This was also why she decided to discontinue her pregnancy in early 2018 without her husband's knowledge.

Chaoming was in his late 30s. He was from Hubei. The year 2018 marked the eighth year he worked at *Sanko*. He was among the few who were married in his male

colleagues. Five years after getting married, he was now father of two daughters. During his spare time, he liked to watch movies, especially martial arts film. That had been how he spent the numerous Sunday nights in the past years. When I asked him what was his plan for future given the gloomy economy, he told me he dared not even just to think about it. He just wanted to work as hard as he could for as long as he could and saved as much money as he could. He now considered stability as the priority. This is because he was afraid that his wife might leave him. His wife, together with two daughters, was now back to her maternal home because she could not see the future living with him. From two years ago he went to Heyuan every month to visit them in order to make sure she was still his wife. He confessed that he could no longer take any risks and was afraid that any failure might lead him to lose his family.

Laoliu was the line supervisor at the Panel Line in Manufacturing Department I at *Weida*. She had worked in *Weida* for 13 consecutive years and became assistant line supervisor from the 10th year on.

Laocheng was the assistant line supervisor at the Panel Line in Manufacturing Department I at *Weida*. She had worked in *Weida* for 9 consecutive years and became assistant line supervisor from the 7th year on.

Roy obtained his college (dazhuan) diploma in English in 2010 from a local colleague in his hometown Hunan. Because of the lack of the fierce competition in urban white-collar jobs, after working two years at a local company, he saw no prospect for promotion and decided to quit. He then came to Dongguan and became a merchandiser in a local garment factory with the introduction of one of his relatives who was its departmental manager. with his expertise in English, he made a fruitful career in the factory. in the past five years, as more and more factories began to relocate to southeast Asian countries, as one of the few English-speaking merchandiser in town, he had received a dozen of offers to work overseas, most of them managerial position. However, he was very hesitant to accept them, for he worried about his mother who was diagnosed cancer 5 years ago. He was also eager

to get married. Previously he had a strong sense of inferiority because he was short – he was 1.58m tall. But now, as he did not know how long his mother could still wait, he was bolder in this regard. His biggest concern now was to get married and get himself established. For him, this was the way he could be filial to his mother.

Xuanfa was in his mid-20s but looked older in grey Odidos T-shirt and paint-splattered cotton short. I would not have guessed he had been married without his telling, as marriage became increasingly difficult for male *nongmingong* (Murphy et al 2011). He and his wife Shujuan first met each other online five years ago. Until they married in mid-2016, both worked as *pugong* in a toy factory, each earning 2000-3500 yuan per month. The job was OK, but the household income seemed modest when they considered having a child. Hence, Xuanfa decided to take up Didi while kept his job: “We invest all our savings - the betrothal gift and red envelopes from wedding - to make the down payment for an SUV. Nowadays, *gongchang yuelaiyue buhao zuo*, factory work is getting worse. We have to find a way out”. Shujuan on the other hand set up a *weishang* account, micro business, selling a range of products from cosmetics to menstrual pads.

Yichen did not appear in the thesis, but his story was also worth documenting. He grew up with his father who was a junior manager and divorced his mother when he was 5. until he was able to enter middle school, because of his rural *hukou* status, he had to go back to Xianning, Hubei, a city he had never set foot on before that, but was where he was registered. Facing a sharp change between the living and studying environment, he was totally at loss. Once a top student in Dongguan, after the sudden change in the way classes were delivered and teachers taught, and the sudden loss of once-close peers and playmates in Dongguan, he became weary of studying, even with under the strict discipline of his grandfather who used to be the headmaster of the primary school in his home village. Worrying that he might join some gang groups, his father spent a big sum of money to send him to a private school in Dongguan two years later. But that was already too late. He soon found himself no longer interested in studying but preferred to work. So he quit school when he was in Grade 8 and got his first job in a local McDonalds as a deliveryman.

Later, he also worked a range of other factory and service jobs and finally ended up in a local electronics parts factory where he was a stamping machine operator. Unfortunately, on the second day, due to the lack of training and of protective devices, he was already seriously injured, losing 4 of his 5 fingers of his right hand. This happened when he was 18 years old. At the time we met, he already recovered from the injury. However, life was getting more and more difficult – especially in terms of job hunting – for people with disability like him. Exclusions and mockeries seemed to him commonplace and filled his life. Hence his decision to migrate to work in Philippines. Last year when we caught up with each other on WeChat, he had been in Philippines for a year, was taking a course on mechanical engineering, and became a lower-level management.

Yu'er held a high school degree. I was introduced to him by a friend from Peking University in local community-based NGO in Shenzhen where he had been a core member for 5 years. He used to be an ordinary worker in a mega factory near the village the NGO was based, and the first 5 years he spent working there was demanding but for him rewarding. Around 2013, the company began its relocation plan and gave him and his colleagues two options: if he wanted to keep the job, then he had to move to Chongqing, where the new plant was located; otherwise he was dismissed. Like many others, he chose the latter because he did not consider Chongqing an ideal place to work, not least because of the low wage. However, in this process he was given no compensation at all, which was up to more than 20,000 yuan, equivalent of 4 months' wage. With the help of the NGO he fought back succeeded. He became better known among the workers after he published his experience of struggle in a worker-oriented WeChat-based alternative media. He thus became radicalised ever since. At the point of our talk, he worked night shift in a medium-sized local factory and was dedicated to enlightening his colleagues of their work-related entitlements and rights, forging solidarity among them. Besides, he was also a keen observer and active participant of labour movement in Guangdong from whom I learned a lot during the fieldwork.

Mianbange came originally from Xiangxi Tujia and Miao Autonomous Prefecture and was a member of the Tujia ethnic minority community. He was 37 and had had 25 years of *dagong* experience. Throughout his life, he had worked in 15 provinces in China, including Tibet, Inner Mongolia, Qinghai, Beijing, Shanghai, Fujian and Guangdong, among others. In these cities, he had worked various jobs. When he was younger, he worked mainly in the construction industry, and was proudly a member of the construction team that completed the Tibet-Qinghai highway, the highest and longest asphalt road in the world, and also the relatively shortest, as well as the best and safest road to Tibet. He also helped build China's National Stadium, the Bird's Nest, and some of the new underground stations and railways in Guangzhou and Shenzhen. This floating experience of work gave him no time and opportunity to engage in romantic relationship and it was not until he was 30 that he decided it was time to settle down. Until then, he had proudly rebuilt his old rural mud-and-straw house with bricks and renovated its roof. To settle down, he began to look for factory jobs. Experienced in construction, his first factory job was at a chemical plant where he was poisoned and lost almost all his hair. Finally, he quit without compensation from the boss. By recommendation of his wife, he secured a job at *Weida*. Having worked in construction sites for years, assembling jobs at *Weida* for him are a piece of cake.

Haonian used to major in auto-repairing in a vocational school in his hometown county. Because he saw no prospect with the study, he dropped out of school and joined his mother in Fuyong, Shenzhen, and worked in the mechanist team. Aged 18 and having no experience working before, factory work for him was more than tedious and tiring. But compared to going back to the vocational school, he preferred to stay in Dongguan. This was because he was tired of schoolwork; it was also because working in a factory allowed him much higher degree of economic freedom than studying in a small town, not to mention that he had made many friends and a girlfriend here. Growing up as a left-behind children whose childhood friends were now all out to Guangdong to *dagong*, he was eager for their company. But meanwhile, two years' *dagong* experience also changed him, in the sense that he gradually realised how bitter life was for his parents. Out of this concern, he began to

feel the family responsibility and became keen to shoulder the family responsibility from his parents.

Guixiang and Jihong were two migrant mothers I met during my visit to Dili, an NGO specialising in providing support for migrant mothers. Both of them worked in Foxconn before they got married and were ‘zuo bangongshi de’, working in the office (not on the assembly line). Interestingly, although they did not come from the same place of origin, both got the administrative position because they received training in computer and knew how to process words and statistics with computer software. As they recalled, training courses as such was very popular when they started to work, and there was actually a ‘xuediannaobao rechao’, computer course fever, in their hometowns. But this did not change their life as a woman, for it was still them who quit their jobs after they were pregnant and took care of family chores afterwards. This seems to them natural. Besides, both growing up as left-behind children, they were keen to bring their children with them and provide the best conditions they could for them, hoping that they could receive better education and suffer less after growing up.

Xiaohe was a college of mine at *Weida*. She was originally from a remote part of Yunnan and was a member of Bouyei ethnic minority group. I knew very little about her as she tended to keep silent during work. And I later learned from Laoliu that she did not even know how to write her name in Chinese, since she had spent all her 40 years’ life living in her Bouyei community in semi-tropical, high-altitude forests and spoke a Tai language, a language similar to Siamese, Laotian, Shan language and Zhuang. This unfamiliarity with the Chinese language had made things even more difficult for her. She used to work for the pin-inserting team where her colleagues were a group of Bouyei workers introduced to *Weida* by a *gongtou*, a Mandarin-speaking Bouyei labour intermediary, and was later ‘borrowed’ to the panel team as the orders for her team dwindled. As Laoliu found it difficult to communicate with her, she was soon borrowed out again to the wet printing team, a position all my colleagues would avoid. two weeks later, she quit the job.

Chensheng was a technician in a local plastic infusion factory and had worked with his boss for 6 years. They were previously colleagues in a plant of the same kind of a multinational company and his boss decided to start his own workshop 6 years ago. Being a founding member of his current plant, he enjoyed a very high level of flexibility in terms of work arrangements, for example, so long as he set the machine in its due course, he was the only one who could leave the factory early. He and his wife rented a room 5-min walk from their factory. To save some rent, they chose to rent an old house where it was very humid. The couple had two children, one was a 16-year girl who was in her first year in a local vocational school and the other was an 8-year-old son. Chensheng's parents were about to turn 70 and their health conditions worrying. Among his five brothers, only the youngest was now at home because of the leg disability resulted from a work-related injury 8 years ago. Without a full-time caregiver at home, he was worried about his parents' health as much as his two children's safety and study, especially given the rising amounts of child trafficking cases ever since his home village became the new forefront of commercial housing development. Therefore, from the year before last year, he installed many security CCTV cameras in and outside his house, which was linked to the 55' television set he bought during the Spring Festival last year, and two apps in his phone, which allowed him to check out whatever happened on the other side of the signal. He told me that he checked the apps every two hours, and would call his brother if he could not see his father. There was a time when his father fell to the ground because of high blood pressure. Thanks to the cameras, he was able to react in time.

Dayi worked in the garment industry in Guangzhou's largest urban village, Kangle village, which was also the biggest base for garment industry in China. We got to know each other during my visit to his home village. It was also him who warmly gave me a tour around the village. He was 30 and unmarried so far. Eager to get married, he attributed his singledom to his poor economic condition: until the time I visited, his house was among the few that was built by mud. The only brick house they had was built last year for his elder brothers' wedding. In his yard, his parents kept two farm cattle, which they relied on to farm their land up on the hill on which his house was built. He felt very embarrassed about this poverty. But he disliked

Guangzhou either, for he found the food there unclean, and life too busy. When I left his village, he told me that his plan for the next year was to look for some odd jobs in a nearby city; but when I caught up with him later, he was back in Guangzhou again, doing exactly the same job he did last years, working for the same boss.

Xiaoping came from Nanyang, Henan. Before she came to Shenzhen and began to dagong, she stayed at home for two years after middle school, and weaved handmade rugs and carpets which were in turn exported to the US and European countries. Although their products were usually sold at a price of 400-500 dollars or pounds, they could earn only 200 yuan for each item they produced, which took them around 6-9 months. Two years later, his father ran into a road accident and was seriously injured. To make things even worse, the driver runaway after he hit. Unable to afford the prohibitive lawyer fees, they did not get any compensation from the preparator. Facing conditions as such, she decided, at an age of 16, to go to Shenzhen to look for a job. Almost 20 years later, she became a mother of a son, and found it quite a headache that her son did not seem to like and listen to her at all. What worried her more was that he did not seem to show any interest in studying, which she had worked so hard to afford him to do and entertained high hope that he could change his life by going to a university.

Xiaomei was born in 1999, unmarried and a mother of two. She spent most of her childhood in a remote village in Lincang, Yunnan Province, a city that was not yet connected to the outside by highway, and was geographically on China's boarder with Burma. Although very tired, she enjoyed her time working in Dongguan. For her, factory jobs were easier and much less demanding than cultivating land or harvesting tobacco or tea. Besides, she liked factory job also because of the income and the economic autonomy from her father, as well as the beautiful clothes, wonderful food and close friends she has made here. For her, rural life was too boring.

Dazhong was 22 and had spent 7 years at *Weida* after dropping out of school. Because his mother was a forewoman here, his factory experience was less stressful

and arduous. He was even appointed the assistant line supervisor at the age of 19, but soon resigned from the position by himself because of his inability to manage. From 2014 on, he had quit *weida* three times to work for Meituan. Slightly before I left the field, he quit again and started a new job in Shenzhen, again in the food delivery industry.

Gaoqun originally came from a mountain village in Lupanshui, Guizhou province, and we first met each other at Kaiping's place over a weekend dinner. Aged 17, she was already a mother of two. She came to Dongguan and started to work in a printing facility after dropping out of school and getting married at 14. Two months after that she found herself pregnant and decided to resign to dip her toes into *weishang*, after her request to change for a different shift in the factory was declined.

Laoganma first arrived in a shoe factory in Fujian when she was 15 years old. Born in a mountainous village in Jiangxi, she was a top student when she was in primary and middle school. She lost the opportunity to continue her study in high school when her brother was admitted by a top middle school in her home city. To help her parents out and support her elder brother and younger sister, she started her *dagong* career. 10 years later, after both her brother and sister graduated from university, she was already 25, an age which was traditionally considered too old for an unmarried girl. She had had a lover previously who she wanted to marry but did not have the opportunity to do so, for according to their custom, once a woman was married, she was supposed to 'belong' to her husband's family and should contribute economically to his family. She finally married her current husband at the age of 26. But life has not been so fair to her. After she married and had three children, her husband was diagnosed severe Cirrhosis and was advised by the doctor not to work. what made her conditions more difficult was that her husband, after falling ill, developed a suspicion of her having extra-marital affairs with male workers in the factory. This has resulted in quarrels after quarrels. Her decision to come to work in *Weida* was actually a compromise with her husband, for her husband would not allow her to *dagong* unless he had someone who could keep her under watch – at *Weida*, this was his cousin who was the vice manager at Manufacturing Department

Two. She found this bearable during normal days when work was very busy, but during holidays, whenever she thought about this, she would feel very aggrieved and come to tears in bed.

Tang used to be a had worked in factories for more than a decade before hopping on to become a Didi driver since as early as 2014. In 2015, he came back to Dongguan with a group of fellow villagers. Together they formed a group to provide mutual support. 8 of them rented a 5-room apartment in order to reduce living costs. Every two months, one of their wives came to Dongguan to cook for them. Except for Tang and the other driver who bought their own cars, the remaining 6 drivers shared three cars that they co-invested.

Qihong was born after the 1990s and began to work after graduation from high school. She was admitted to a vocational school, but did not consider it a good option, for many of her fellow villagers who went to vocational schools ended up working in east costal factories. But she did learn some skills, Of which most useful to her career was computer skills. *Sanko* was her second factory where at the time of our talk she had worked for 5 years as a sheet-maker in the quality check team. It was also at *Sanko* where she met her beloved husband. Four months before we met, she happily found herself pregnant. And after that, her husband made a big decision, that is, to quit his line supervisor job and invest their 5-year savings – with some financial support from their parents - to open a workshop by themselves. When I visited them in the first half of 2019, they had done very well. With the friends and connections he made during his job as a line supervisor, her husband was able to secure enough orders to keep their machine humming. Altogether they had 5 employees, all of them their fellow villagers. Qihong, on the other hand, taught herself some basics in accounting and took over the accountant role in their business.

Hong had been the supervisor of the quality check team at *Sanko* since as early as 8 years ago. She impressed me a lot with the confident smile on her face. She was born into a relatively well-off family in Bijie, a mountainous area in Guizhou Province. perhaps because of this , her parents were relatively open-minded and did not

stopped her when she proposed to *dagong* at the age of 16. In our interview, she spent 20 minutes telling me in detail of her love story with her husband and how they almost missed each other because the postman lost her letter at a time when ICTs were not yet so commonplace. Talking about work, she lamented that she missed a valuable opportunity when she was young. she had been working and living in Shenzhen for 15 years. During the past 15 years, she had worked for only two factories. 8 years ago when her previous boss decided to relocate to Dongguan and asked her if she wanted to move. She rejected this offer because her then boyfriend (now her husband) did not want to give up his job. She told me she was very regretful, for if she made a different decision, she would be one of the most senior staff and would get at least departmental manager positions. this year marked the 9th year she spent at Sanko. Life for her was not bad. Everyone in Sanko knew about her and called her ‘Sister Hong’ with respect. She no longer even thought about promotion, for Sanko was a family-run factory where the managers were all family members of the boss. Her concern now was to do her job well while devoted the rest of her time in weishang. In her leisure time, she was a filmgoer and plaza dancer.

Aiping and her husband used to be a honeycomb briquet dealer during their initial years in Guangzhou. Later honeycomb briquet was banned from use in urban areas, hence they switched to factory jobs. for them, the central concern in their life was not to buy a house nor the education of their children, but their son’s disability. Their son was born deaf and could not hear anything without the cochlear implant, which was very expensive.

Bangshuan studied computer science at a local vocational school in Nanyang, Henan Province. He got his first factory job in the name of ‘internship’, a common way in which vocational schools in inland provinces collaborated with labour agencies in the Pearl River Delta to ‘provide jobs’ for their students. I added the quotation marks because it was not a proper internship, for the factory jobs they usually did had nothing to do with their major. For example, Bangshuan’s first job was assembling toys. But having had a taste of economic autonomy, Bangshuan never made his way back to his hometown. From then on, he had worked in more

than 8 factories. His employers included high-tech unicorn like Dajiang Drone and multi-national companies like Canon. When he learned that I came from a British higher education institute, he began to ask me about IELTS tests and TOFEL, for he planned to migrate to the US to work while looking for opportunities for studying. in his spare time, he was a game player and a dedicated reader, with particular interest in ancient Chinese history.

Huage was a veteran labour intermediary who had worked in the industry for more than 10 years. Originally from Hengyang, Hunan, he started to work in Shenzhen as a factory worker in the shoe industry, and moved to Dongguan together with his boss not long after that. He started to dip his toes in the labour intermediary industry 10 years ago. At the initial stage, this was no difference with working in a factory except the particular job he was made to do. Five years ago, he rented a shopfront near *Weida* and became an independent labour intermediary. Five years on, he told me that it was not easy for a waidiren, non-locals to survive in this industry, for they did not have the resources, especially connections with the government, that were much-needed in handling the issues and problems in running an agency. But recently, he began to reach collaborations with local vocational schools in Hengyang, which became new growth point of his business.

Appendix III Interview Guide⁹⁶

A. briefing

- 1) introduce yourself... (age, education, place of origin, hometown, job, family members, living conditions...)
- 2) When did your first migrate out to dagong? what had motivated your decision to do so? what was the circumstances (how was it related to your family, education and other conditions?)
- 3) how do you spend your day here in Dongguan? describe a normal workday and a normal weekend?

.....

B. work experience

- 1) How many jobs have you done in your dagong experience? what industries do they belong to? can you still recall why you quit each time?
- 2) Can you briefly describe your work environment? time rate or piece rate? working hours? What do you think of factory jobs? how would you describe it? how is it compare from previous?
- 3) What do you think is important if one wants to make factory life easier and more endurable? Any stories? what kind of relationship do you think is the most useful in factories?
- 4) What do you think of your colleagues on the shopfloor? Do you expect to make good friends in factories? what is your principles in your relationship with them? Have you guys had any conflict before? why? any stories?
- 5) What do you think of the managers and the way the manage on the shopfloor? what is your principles in your relationship with them? Have you had any conflicts with them before? why? any stories?
- 6) Have you had any experience of unfair treatment or anger during work? how do you react?
- 7) What would you say if your children want to dagong? why? what suggestions will you give them?

⁹⁶ this is a translated version of the original interview guide in Chinese.

- 8) What have motivated you to *dagong* throughout the past years? what is your main concerns in life? what do you consider as your way out?
- 9) what is your evaluation of the future of working in factories? why? what is your plan for the near future and in the long run? If it permits, will you choose to settle down in Dongguan or in your home city? why?

.....

C. think-out loud

- 1) What kind of ICTs do you use here in Dongguan, back at your rural home or anywhere else (cellphone, television, computers, internet café, text message, letters)?
- 2) Can you recall any past interesting experience with ICTs when you were young?
- 3) When did you get your first phone? why? how? what are your criteria of choosing a cellphone? is there any particular functions you look for most?
- 4) how much do you spend on these ICTs monthly?
- 5) Can you give me a tour of your cellphone? What apps do you use? Where did you first get to know them? Why do you download them and keep them? What uses do you find in them?
- 6) which ones do you use most or consider most important and useful for you? why? what do you often use them for and when do you use them?

Usually until this point during the interview, I have learned the main concerns of theirs that shape their uses of ICTs and the specific apps or activities they engage in. In actual interviews, these include work and income; family relations, digital media consumption, rural political participation, dating and sex (especially young gay men), parenting (especially children's education), self-organised entertainment. Questions specific to each of these issue areas are than posed. Below I use two of them as examples to give a sense of what kinds of questions get asked:

C1. work and income-related

- 1) what work and income-generating activities did and do you engage with online?
- 2) how did you learn about them? what leads you to it? Why do you decide to take up it? Why do you take up this one rather than another?
- 3) can you show me how it works on the app?
- 4) does its operation involve other platforms or apps? does its operation involve non-technical elements?
- 5) can you describe for me a typical day or scenario working with it? how long do you spend on it? how do you find it when compared with factory jobs?
- 6) how do you make profits from it? Is it remunerative enough? Do you think you are well-paid? if so, how do you achieve that? If not, why do you think this was the case?
- 7) what about the job do you like most? what do you dislike it? is there any way you can offset it?
- 8) what has kept you to it?

.....

C2. digital media consumption

- 1) where and when do you often watch digital media? why do you watch them?
- 2) What kind of content interests you most? can you names 5-10 pieces that you find most impressive, interesting, relevant or thought-provoking?
- 3) what are the social contexts you often watch them? Do you often share these contents to people around you? do you discuss these contents with others?
- 4) Can you show it to me, talk me through it or provide me a recount? What do you see in there? what do you think the item is about?
- 5) what in these items interest you most? why?
- 6) what are the elements in there that impressed you most? why? in what way?
- 7) what in the item is thought-provoking for you? what does it remind you of? what does it inspire you to think?
- 8) what do you find relevant in these dramas? in what way was it relevant?

.....

C3 ...

C4 ...

C5 ...

Appendix V Information sheet



Department of Media and Communications
PhD Dissertation Participant Information Sheet

Project Title:

Second-generation Factory *Nongmingong's* Use of Information Communication Technologies

Researcher:

Yang ZHOU, PhD researcher at The London School of Economics and Political Science, the U.K.

I would like to take part in a research study. Before you decide, I'd like to present to you this information sheet to give you an idea of why the research is being done, what it would involve for you. Please kindly take time to read the following information carefully. Should you have any questions or concerns, please do not hesitate to ask for more information.

What is the purpose of the study?

This study aims to understand the ways in which second-generation factory nongmingong use information communication technologies in their everyday life, as well as its consequences, especially given the particular social, cultural and work conditions.

The researcher hopes to identify ways in which such uses can be constructively, enabling and empowering, which will inform the workers, NGOs, government bodies among other stakeholders.

Who pays for the study?

This project is funded by China Scholarship Council (CSC), a governmental funding management body. It aims to support Chinese students who are interested in pursuing their own research project in a foreign higher education institution. Its priorities vary at different stages. For now they are education, politics, law, communications and media, public health, disaster management. So far, it has little record of censoring or interfering with its students' academic work.

What will your participation in the study involve?

The project uses two main methods - participant observation and individual interviews. The researcher will work and live in the factory and migrant villages, hence as a participant you do not need to spare extra time for the observation part. Other research activities will include interviews, user-guided social media tour, among others. Each of these sessions will take place only when the work schedule is not tight and will take for no more than an hour.

How will the project ensure the confidentiality and security of the information you provide?

During interview and observational note-taking, the real name of the interviewees will be jotted down in a table in a note (and then a word-document), each marked with a number and a pseudonym, which will be used instead of the real name in the recordings. It will also be used to name the recording/video files.

When transcribed for analysis and for dissemination purposes, other personal identifiable information will be stripped off before stored on the non-commercial LSE and Renmin University servers, as well as password-protected hard drives. These will not be shared either at this stage or in the long term.

An agreement with the management will be signed to avoid their use of the project as a way to spy on the participants.

What are the possible benefits and risks of this study?

As for the benefits, the participants, the researcher hopes, will be able to better understand the opportunities and challenges the media technologies in their hands and homes bring to them. The researcher will also provide as much help that is ethical as he can when required.

The researcher anticipates no potential risks out of the research process itself.

What are your rights?

The participation in the research is totally voluntary. Should you have any inquiries or need more information before reaching your decision, please feel free to contact the researcher.

No adverse consequences will follow if you do not want to participate, or if you want to withdraw from the research. It will also be accepted if you want to withhold your already given answers and interviews, or if you want to skip any portions of the research.

Any new information about the adverse or beneficial effects related to the study will be provided.

The participants are eligible for access to the output of the project in appropriate forms.

Who do you contact for your questions and concerns?

If you have any questions, concerns or complaints about the study at any stage, please feel free to contact me. My phone number is 18701218671. You can also find me on QQ or Wechat by 799784534 (Please indicate that you are a participant of the project when adding).

Appendix VI Consent form



Department of Media and Communications
PhD Dissertation - Participant Consent Form

Project Title:

Second-generation Factory *Nongmingong's* Use of Information Communication Technologies

Researcher:

Yang ZHOU, PhD researcher at The London School of Economics and Political Science, the U.K.

I have read the information sheet I've given about the research. (Please tick)

I understand what is involved in this phase of the research. (Please tick)

I am clear about my rights during the course of the research. (Please tick)

In case of online spheres, I understand that I will need to decide what is accessible to the researcher and what is not. (Please tick)

Name _____

Signature _____

Date _____

Appendix VII Likier et al. (1999)'s four paradigms of studying the relationship between technology and the organisation of work

Table 1 Paradigmatic views of technology impacts model

	Technological Determinism:	Management of Technology:	Political Interests:	Interpretivist:
Organizational Context:				
<i>Philosophy</i>	<ul style="list-style-type: none"> • Technology is a causal variable • Organizations must adapt to technology 	<ul style="list-style-type: none"> • Organizations are open-systems • Technology and organization can be planned and integrated 	<ul style="list-style-type: none"> • Static, predictable interests influence outcomes • Power differentials lead to conflict in capitalist enterprises 	<ul style="list-style-type: none"> • Technology is socially constructed • Technology implementation as an emergent process
<i>Culture</i>	Contingency perspective; technology determines management approach	Strategic focus; socio-technical systems orientation	Marxist, conflict perspective	Open dialogue about emergent meanings
<i>Org Design</i>	Traditional engineering	Planning and participation	Highly political; authoritarian	Emergent and dynamic learning organization
<i>Labor Relations</i>	Contingent on complexity of technology	Organic; matrix; flexible; open system; cross-functional	Bureaucratic; hierarchical; highly stratified; rigid roles; subdivision of labor	Organizing process
Nature of Technology Selection Process	Traditional and non-participative	Least antagonistic and most participatory	Highly adversarial	Negotiated order
Technology Implementation Process	Deterministic; measurable	Must fit with strategy	Control systems; labor displacing and deskilling	Socially constructed
Outcomes	Technology is a given; organizational impacts studied	Technology selection should occur only after other steps in planning process have been followed; technology choice depends on strategic goals of organization	Dependent upon relative bargaining power of labor vs. management	Process of negotiating interpretations and meanings
	Technology is put in place, and organization must adapt	There is a predictable process for implementing tech; steps must be followed sequentially; need user involvement	Management will attempt to control all decisions	Emergent; socially constructed
	Outcomes are predictable and measurable but technology may not perform as expected because of engineering bias in design	If tech mgmt steps have been followed, outcomes can be quantitatively measured	Technology unlikely to perform as expected because of employee resistance and lack of employee consultation	Outcomes open to interpretation; emergent and variable over time