An Intersectional Analysis of Social and Environmental Injustice Experienced by Migrant Women Workers in China: The Case of Guiyu

Submitted by

Ye Zhang

Bachelor of Administration, Public Administration

Master of Law, Chinese and Foreign Political Institution

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Social and Political Thought

Faculty of Education and Arts Australian Catholic University

January 2020

Statement of Authorship

This thesis contains no material that has been extracted in whole or in part from a thesis that I have submitted towards the award of any other degree or diploma in any other tertiary institution.

No other person's work has been used without due acknowledgment in the main text of the thesis.

All research procedures reported in the thesis received the approval of the relevant Ethics/Safety Committees (where required).



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Acknowledgements

This dissertation could not have been completed without the support and help from many people. I owe a special thanks to my principle supervisor, Romand Coles, who has been supportive throughout the writing and research process. From deciding on a research topic to conducting critical ethnographic research and writing the dissertation, Rom was always ready to offer support with concrete suggestions and spiritual comfort.

Much gratitude to my other co-supervisors, Lia Haro, Emilian Kavalski, Magdalena Zolkos, and Michael Ondaatje, who were generous with their support and feedback at different stages of my work. Thanks to David Schlosberg for being my panel member during the Confirmation of Candidature and Final Year Review, reading through my manuscripts, and offering great comments and suggestions every time. Much gratitude to other academic and professional staff who influenced my work and contributed to my growth these last four years directly or indirectly: Nikolas Kompridis; Allison Weir; Linda Martin Alcoff; Naser Ghobadzadeh; Kiran Grewal; Paula Gleeson; and Lisa Tarantino.

I would also like to show my thanks to the students at the Institute for Social Justice, for sharing their happiness and sorrow and offering me their support. Thank you to all the emotional and practical support from Cayathri Divakalala, Ulrike Prattes, Anne O'Brien, Simon Dougherty, Mahmoud Pargoo, Jianping Mao, Tina Dixon, Jennifer Newman, Semra Mese, Ayah Abubasheer, Julie Macken, and Jessica Martin.

This project could not have been completed without the generous help from the lovely people I have met during my fieldwork. A special thank you to Professor Xia Huo at Jinan University and Hua Liu in the Beijing office of Greenpeace for offering suggestions and help in conducting my fieldwork. A heartfelt thank you to all the participants in Guiyu who were incredibly generous in accepting me and my research, sharing their knowledge and experiences, and offering help whenever difficulties arose. They are the prime power that enabled me to explore the central problems of this project and I am grateful for them all.

I have much appreciation to my other friends who have offered their continuous emotional and concrete support during these last four years. Thank you to Tingting Li, Xiao Han, Hongbo Guo, Yuyuan Dong, Jiang Wang for enriching my life in Sydney. Thank you to people who are away in China but are always there to back me up: my mentors Josef Gregory Mahoney and Nan Yu; my brothers and sisters Hong Quan, Jinbin

Wan, Huan Zhang, Tuo Zhang, Zhaoran Huang, and Sufang Zhang; and my close friends Cheng Wang, Tingting Qu, Xiao Wang, and Yehua Wang.

I would like to thank my family members too, who have always been supportive of my work. Thanks to my mum, Xueping Zhang, who brought up my sister and I as a single mother, offering her support wherever she could and encouraging me to pursue my dreams. Thanks to my grandparents who are so kind and gave me a perfect childhood. Thank you to my aunt, Xiurong Zhang, my sister Shan Zhang, my brother-in-law Wenbin Tang, and my little niece Chenxi Tang for their continuous love and support.

I would like to express a special thank you to my dear husband Zhiman Xu, who has accompanied me throughout these last long and tough four years. Despite living in different hemispheres, I can always feel his encouragement, support, passion, and love—all of which helped me finish this dissertation.

Abstract

The town of Guiyu, located in the Guangdong Province in China, has been highly polluted by the electronic and electric waste (e-waste) recycling industry since 1990s and is now experiencing rigorous environmental governance. Migrant women workers in Guiyu are particularly vulnerable towards the effects of local environmental pollution and degradation in both their working and living spaces. The serious environmental governance carried out by the central and local governments in recent years also has brought them more risks than benefits. In this project, I aim to use feminist theory of intersectionality to analyse the social and environmental injustice experienced by migrant women workers in Guiyu. I shall mainly explore three questions: how power relations within different systems of oppression intersect to produce and maintain the social and environmental injustice they are faced with, how the intersectional power relations facilitate or restrict the formation of their agency, and to what extent intersectional solidary and alliance can be achieved to make profound political changes.

The feminist theory of intersectionality has been emphasised by many scholars to analyse the complex environmental injustice phenomena nowadays. Literature review shows that there are mainly three related themes in existing intersectional environmental justice studies: the formation of environmental injustice, the agentic orientation of vulnerable groups, and the political dynamics and possibilities. These three themes correspond well to the theoretical framework of power over, power to, and power with. However, I argue that a more textured and solid way of applying intersectionality to environmental justice studies should be embraced to capture more fully how power works intersectionally.

Based on an in-depth critical ethnographic research at Guiyu, I shall supply a contextualised and textured analysis on these three themes, waving together theories from environmental justice, intersectionality, power, agency, coalitional politics, and global ewaste politics. Firstly, in terms of the production of social and environmental injustice, I argue that incorporating the multi-dimensional perspective of intersectionality is particularly important. It allows us to capture the multiple faces of power based on different social categories and have a fuller picture of the complicated ways in which they are intersected. Secondly, I argue that we should embrace a more complicated understanding of the "intersectional agency" as a result of persistent negotiations from the

dominated with the intersected, multiple faces of power based on different social categories. The "intersectional agency" against social and environmental injustice among migrant women workers in Guiyu is more complicated and even internally tense instead of being an intact whole. Thirdly, I argue that it is critically important to avoid portraying intersectional solidarity among different activists and movements as an inevitable and automatic outcome of the intersected systems of oppression. The case of Guiyu shows that there are different types of obstacles and challenges to build intersectional politics on the ground.

Overall, the analysis of migrant women workers at Guiyu helps not only expand our understanding and theorising of environmental justice, intersectionality, and power, but also open more possibilities, visions, and challenges for us to promote environmental and political changes.

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List of Abbreviations

AMRC Asia Monitor Resource Centre

BAN Basel Action Network
BFFP Break Free from Plastic

BFRs Brominated Flame Retardants

BRS Basel, Rotterdam, and Stockholm Conventions

CEJ Critical Environmental Justice studies

CLB China Labour Bulletin

CNKI China National Knowledge Infrastructure

CPC Communist Party of China

CWWN The Chinese Working Women Network

CZWA China Zero Waste Alliance

EJM Environmental Justice Movement

ENGO Environmental Non-Governmental Organisation

EC Ecological Civilisation

EPA Environmental Protection Agency

E-waste Electrical and electronic waste
GAIA Global Anti-Incinerator Alliance

GE GoodElectronic network

GIS Geographic Information Systems

GM Globalization Monitor
GPS Global Position System

IAF Industrial Areas Foundation

ICRT International Campaign for Responsible Technology

ILO International Labour Organisation

IPEA Institute of Public and Environmental Affairs

LAC Labour Action China

LESN Labour Education and Service Network

NGO Non-Governmental Organisation

PRD Pearl River Delta region

PSB Public Security Bureau

PSC Public Security Committee

PVC Polyvinyl Chloride

SACOM Students and Scholars Against Corporate Misbehaviour

SEPA State Environmental Protection Administration

SEZs Special Economic Zones

SOMO The Centre for Research on Multinational Corporations

SVTC Silicon Valley Toxics Coalition

SYSU Sun Yat-sen University

UNGEI United Nations Girls' Education Initiative

WECF Women Engage for a Common Future

Glossary of Chinese Terms

chaiqian house removal

chengjia liye get married and have a career

chiku suffer the hardship

chuanzong jiedai the continuation of the family line

dajie older sister

difang shentou enemy infiltration

diu mianzi lose face

duozi duofu the more sons, the more blessings

eryuan shequ binary community

fanxiang nongmingong returning home migrant workers

funv zhuren representative of women's congress

gaige kaifang the reform and opening up

guan the official

guanxi personal relationships

huji zhidu governmental system of household registration

jianshe meili zhongguo build a beautiful country

jingwai didui shili foreign hostile forces

juzhuzheng residence permit

laoban boss

laoxiang fellow villager

laozhai the traditional old stockades

liushou ertong left-behind children of migrant workers

mianzi face

minjian shehuifolk societyminthe citizennenggandebeing capable

nongcun jiceng zizhi rural basic-level community self-governance

nongmingong peasant workers

quanmian erhai zhengce universal two children policy

quanzi interpersonal network

shaoshu minzu ethnic minorities

shehui zhui xinnongcun jianshe the construction of a new countryside

shengtai wenming ecological civilisation shimin shehui ecity-people's society

suzhi personal quality

waidide people from other provinces (Mandarin)

wailaigong migrant workers

waishengzai people from other provinces (Chaoshan dialect)

weixin dingyuehao WeChat subscription account

wenming shehui civilised society

xian wuran hou zhili develop first and clean up later

xiaomei younger sister xiguan get used to

xiguanjiuhaole it is just a matter of getting used to it xinshengdai nongmingong new generation of migrant workers

xinfang zhidu the official petition system

xinxing chengzhenhua guihua new urbanisation plan

yanglao songzhong be responsible to parents' living and burial yaojiren people on our own side (Chaoshan dialect)

zanzhuzheng temporary residence permit

zhifu achieve prosperity

zhongnan qingnv favouring boys over girls

zonghe suzhi comprehensive personal quality

zongzu the clan system

Introduction

Guiyu and the E-waste Industry

The town of Guiyu is one of China's largest electrical and electronic waste (e-waste) disposal sites. Despite being located in a rural area, there is not enough farmland to support its large population, with the locals having a long history of engaging with small businesses to earn a living. This situation is a result of two factors, the first being that Guiyu is located in a waterlogging area, which is a significant geographic disadvantage for agricultural development. The second is the local cultural tradition of "the more sons, the more blessings" (*duozi duofu*), which leads to overpopulation as locals keep giving birth to babies until they have "enough" sons. Thus, the local people have turned from farming to other small businesses for a living. The most common businesses involve collecting disposed waste from adjacent areas and trading where possible. This activity can be dated back to the 1950s and has gradually become one of the main sources of income for many local people (Greenpeace & Anthropology Department of Sun Yat-sen University [SYSU], 2003a, p. 6).

Guiyu people started to make a fortune through recycling e-waste in the early 1990s, when the importing of foreign waste increased after the reform and opening up (gaige kaifang) policy by Deng Xiaoping, which was put into effect in 1978. The annual import of solid waste increased from a total of less than 1 million tons annually prior to 1990 to 5.9 million tons in 2012 (J. G. Liu, 2018). The cumulative plastic waste export to China alone makes up 45% of all global exports (A. L. Brooks, Wang, & Jambeck, 2018). Raw materials, such as heavy metal, paper, and plastic, largely needed by the manufacturing industry, are cheaper and easier to create through recycling waste than through tapping new resources. This has facilitated the import of foreign waste and the growth of the waste recycling industry in rural China. As one of numerous waste recycling towns in China, Guiyu primarily engages with e-waste from foreign countries, including

¹ The total population of local people in Guiyu was 132,378 and the agricultural acreage was only 31,700 mu (about 2,113 hectares) in 2002, with the former increasing and the latter declining since then (Chaoyang Yearbook Compilation Committee, 2003; 2018).

² Waterlogging occurs when too much water in the plant's root zone reduces the oxygen available to the roots. Waterlogging restricts the growth of crops.

³ According to Liu (2018), this data comes from an official statistical report that only includes the legal imports. The total amount of solid waste being transported to China is much higher when illegal channels are factored in.

the US, Japan, Canada, South Korea, and the UK. Since the 1990s, nearly 80 per cent of the local families have become involved in and relied on e-waste recycling—mostly in the form of family workshops—which has dramatically increased the local people's income (Greenpeace & Anthropology Department of SYSU, 2003a, p. 4). Far fewer people are engaged in agricultural production.

While the growth of e-waste industry has improved the earning potential of the local people, it has also brought with it serious environmental problems. The river water in Guiyu is foul-smelling, black, and acidic. The groundwater is highly polluted and no longer drinkable, with drinking water now having to be transported from other nearby places. Chemical fumes hang heavy in the air and can be smelt as soon as people enter the town. The soil has also been proved to be highly polluted with dangerous chemicals and the planted crops are contaminated (Hao, Yi, Wu, Lu, & Fang, 2015; Yin et al., 2018) (see Figure 1).



Figure 1 A polluted river in Guiyu.4

The pollution can be largely attributed to the operating model of family workshops and their systems for dismantling e-waste. Family workshops are usually located in the owner's

⁴ Source: Ye Zhang, taken on March 6, 2018.

home (and thus are dispersed across the whole town) and release air, water, and solid waste at will without any effective supervision, with the sole goal being to reduce costs and increase profits. Stocks of e-waste can be seen at every corner of the town. The dismantling processes are rough and brutal, leaving both nature and people directly exposed to environmental hazards. For example, in the dismantling process:

circuit boards are cooked in woks over open charcoal fires to melt the lead solder, releasing toxic lead fumes... Wires are stripped by hand or burned in open piles to melt the plastics to get the copper and other metals inside... Plastic casings are burned, creating dioxins and furans—which are extremely hazardous to human health (Frey, 2012, p. 82).

The expansion of the local e-waste industry and the corresponding environmental damage being done to Guiyu can be attributed to four main factors. Firstly, due to strict environmental regulations, complicated dismantling procedures, and high recycling costs, developed countries are usually reluctant to deal with e-waste by themselves. They thus seek to export (e-)waste to Asian developing countries (China in particular), where laws and regulations are inadequate and labour costs are much lower. The report by the Basel Action Network (BAN) and Silicon Valley Toxics Coalition (SVTC) (2002) reveals that nearly 80% of e-waste from the US that could be diverted to recycling was exported to Asia, and 90% of that total was transported to China. In fact, the *Basel Convention on the* Control of Transboundary Movements of Hazardous Wastes and Their Disposal, which was proposed in 1989 and went into effect in 1992, has agreed to ban global e-waste trade between nations to prevent transferring dangerous waste from developed to developing countries.⁵ China has been attempting to regulate the import of solid waste through new laws and policies since 1995, but enforcing these measures has not been strong enough. A lot of e-waste arrives in China through illegal channels (Greenpeace & Anthropology Department of SYSU, 2003a). Intermediate traders transfer shipments of e-waste to Hong

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⁵ China signed the *Basal Convention* in 1992. As of 2018, there are 187 parties that have joined the treaty. The UN member states of East Timor, Fiji, Grenada, Haiti, San Marino, Solomon Islands, South Sudan, Tuvalu, and the United States are not parties to this treaty.

⁶ Related laws and regulations include, for example, Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes (2013 Amendment), Catalogue for Managing the Import of Wastes (2017 Amendment), Regulation on Management of the Recycling and Disposal of Waste Electrical and Electronic Equipment.

Kong and Hainan by providing misleading customs declarations. That e-waste is then delivered to mainland e-waste recycling centres, like Guiyu.⁷

The second factor is that the town-level local government⁸ has had little incentive to regulate and control the industry and its environmental pollution in its early years because of the economic growth brought about by the e-waste industry. In 2005, the e-waste industry generated nearly 1 billion-yuan, occupying 90% of the local industrial output value in Guiyu (Y. S. Yang, 2006). Reducing e-waste means that the local industry may collapse, thus leading to the unemployment of the locals. Before 2000, the local government even encouraged locals into e-waste businesses.

The third factor is that the local e-waste industry is entangled with the local clan system (*zongzu*). The Chinese clan system has a long and complex history, but briefly it refers to a patrilineal group of people who have the same surname and share common ancestors with a history of living together in the same village. Guiyu has 27 villages in total and each village has a common surname. The production and organisation of the whole e-waste dismantling industry— which includes everything from the initial receiving of illegal foreign e-waste to regionalised labour division and cooperation— is based on this village clan system (Greenpeace & Anthropology Department of SYSU, 2003a). The local power structures based on the clan system permeate the local political, economic, and social arenas, heavily influencing local policy-making and other social affairs.

Lastly, the development of Guiyu is inseparable from migrant workers. After the reform and opening up policy was put in place, millions of peasants migrated from their hometowns to urban cities to earn money. This migration has been the result of the combined effects of cheap labour demand in urban areas (as a result of attracting business and investments), farmers' break from the planned economy, and the looser implement of

⁷ Other examples of e-waste recycling centres are Taizhou in the Zhejiang province, Longtang town in Guangdong, and Huanghua in Hebei province.

⁸ The practical levels of local government in China include: provincial; prefecture; county/district, township; and basic autonomous organisations (including residential committees in urban areas and village committees in rural areas).

⁹ The total industrial output value at Guiyu gradually increases from 3.36 billion in 2011 to 11.1 billion in 2017 and then declines to 6.97 billion in 2019. No exact data about the percentage of industrial output value occupied by e-waste industry in recent years can be found from the local official statistical documents. However, the declination of the total industrial output value from 2017 to 2019, which is a result of the strict implementation of the foreign waste import regulation in 2017 as discussed below, confirms the importance of e-waste industry in local economy and the influence of environmental governance towards it.

huji zhidu (the governmental system of household registration). ¹⁰ Being located in the Guangdong province, the pilot region for reform and opening up, Guiyu became one of the most popular places for migrants. ¹¹



Esri, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS

Figure 2 Map of migrant women workers in 31 provincial level administrative areas. ¹² Figure 2 shows the number of migrant women workers in 31 provinces of China (excluding Hong Kong, Macao, and Taiwan), and reflects a higher number of migrant women workers in Guangdong versus other provinces. However, the initial development of Guiyu did not depend on transnational corporations and industries, but relied on individual family e-waste recycling workshops. These types of jobs are usually temporary and fluid, unlike those in the assembly lines of manufacturing plants. Informal employment—which refers to employment without a formal contract and social welfare—is the main form of

¹⁰ *Huji zhidu* is required by law in mainland China and determines where citizens can live. It is an important tool to help control migration into urban areas and maintain social stability. For a more detailed explanation on its history and impacts on migrant workers, see Chan and Zhang (1999)

and Z. Liu (2005).

¹¹ Guiyu is not located in an urban area but belongs to Shantou, which is one of the three Special Economic Zones (SEZs) in Guangdong (the other two are Shenzhen and Zhuhai) established in late 1970s. SEZs implement more free market-oriented economic policies to attract domestic and international investments. Guangdong has thus become one of the main destinations for migrant people who have wanted to find jobs and earn money.

¹² Created using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved.

employment in this area.¹³ Because e-waste dismantling work is very dirty and tiring, local people usually avoid it and hire migrant labourers at a low salary.

The environmental pollution in Guiyu started attracting attention in 2002 when international non-governmental organisations (NGOs), such as BAN and SVTC, released a report that revealed exactly how e-waste transferring was being done in Asia. This report uses the story of Guiyu as an example of e-waste recycling in developing countries. It shows how Guiyu has been transformed from a rural, poor village into an e-waste processing centre. The report reveals the rough recycling processes and the results of environmental pollution detection in Guiyu to show the harsh environment produced by e-waste recycling.

In 2003, Greenpeace and Anthropology Department of SYSU released a series of influential anthropological reports. The reports covered the history of Guiyu's development, the mode of production in its e-waste industry, the lifestyles of and relationships between local and migrant people, the local culture and its influence towards the industry, as well as the perspectives of local people and government organisations on the future of Guiyu. This research by Greenpeace also includes two interview records from migrant people and local people respectively, which show their different views on and concerns about the local e-waste industry, environmental pollution, and the influence of each on their lives.

Since then, Guiyu— widely regarded as the world's e-waste capital— has become increasingly well-known both domestically and internationally, out of increasing interest from the media, NGOs, and scholars. This attention has created serious trouble for the local people. In the local people's eyes, sacrificing the environment to earn a living is not wrong, as there has been a dearth of economic opportunities to replace such a line of work. The locals understand the importance of the environment but are afraid of losing their businesses and experiencing poverty again. In addition, the local people also feel aggrieved that their waste recycling is not being seen as a positive measure, that should not be suppressed but rather encouraged. Increased exposure and pressure from international communities has also led to attention from the central government. There is now serious environmental governance in Guiyu, which is a complicated situation that could be

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¹³ Informal employment is an important part of an informal economy in China, which has arguably been the result of the rising individual economy, private sector, and labour migration—all of which are a result of the economic shift from a centrally planned model to a market-oriented model (A. G. Hu & Zhao, 2006; Z. Z. Huang, 2009).

regarded as a "multi-player game," in which international NGOs, the media, central government, town-level government, local village committees, local people and the clan system, and migrant workers are all involved.

Environmental Governance and its Obstacles

China's economic growth since reform and opening up policy has been accompanied by serious nationwide environmental pollution and degradation, following a pattern of "developing first and cleaning up later" (*xian wuran hou zhili*). In recent years, tension between economic growth and environmental preservation has become increasingly serious. China's economic growth has been highly dependent on sacrificing the natural environment. To a large extent, the country's economic growth still relies on secondary industries that are prone to producing heavy environmental pollution. It will take a long time for China to finish the process of industrial upgrading and de-industrialisation. With the existence of "cancer villages" being disclosed, more serious environmental pollution cases being reported, and the heated debate over nationwide air pollution, environmental pollution has become one of the main concerns of the Chinese people and an urgent problem that the central government needs to solve.

In 2007, the concept of Ecological Civilisation (EC) (*shengtai wenming*) was first referred to in a report produced by the Seventeenth National Congress of the Communist Party of China (CPC), in which the creation of "a conservation culture by basically forming an energy- and resource-efficient and environment-friendly structure of industries, pattern of growth and mode of consumption" (J. T. Hu, 2007) was proposed. While emphasising the importance of a circular economy and renewable energy sources, this report also proposed controlling major environmental pollution and raising awareness of environmental conservation. In 2012, EC was given higher priority and proposed to be incorporated in all aspects of social, political, economic, and cultural civilisations to "build a beautiful country" (*jianshe meili zhongguo*). Furthermore, in 2017 the importance of a harmonious relationship between humans and nature was emphasised when the construction of EC was reaffirmed again in the report made by president Xi Jinping during the Nineteenth National Congress of CPC.

Besides conserving resources and protecting the environment, this report also highlighted people's increasing need for democracy, equality, justice, safety, and a clean environment (Xi, 2017). Since its profile was raised in 2007, EC has been given

increasingly more attention as a basic strategy for adhering to and developing socialism with Chinese characteristics for the CPC. It is a top-down environmental strategy that aims to deal with the increasingly severe environmental crisis in China and an ideological framework for leading the development of Chinese society and politics (Hansen & Liu, 2017). Environment related laws and policies, environmental regulation systems, and environmental protection projects shall be carried out within the EC framework. It incorporates all aspects of rural environmental renovation, circular development, sustainable energy, recycling, etc., and aims to involve local governments, industries and companies, NGOs, scholars, and citizens as they live in their daily lives. Wang-Kaeding (2018) describes it as "environmentalism with Chinese characteristics" compared to the "liberal environmentalism" that is popular in Western societies.

The order from central government to regulate nationwide waste disposal sites including in Guiyu—precedes the proposal of EC and can be dated back to the 2000s, when Guiyu started to become famous for its pollution and e-waste. Workgroups and inspection teams from the State Environmental Protection Administration (SEPA), as well as provincial and prefecture government officials visited Guiyu and set goals, tasks, and timelines of industrial transformation and upgrading for the town-level government.¹⁴ However, these regulations were not productive at the beginning. The town-level government and village committees usually reacted by delaying things in a perfunctory way. As mentioned, e-waste dismantling and recycling is the regional pillar industry for Guiyu. The local government experiences pressure for local economic growth and environmental protection requirements of higher-level government. Village committees are more passive towards environmental governance, as most village committee members themselves are involved in the e-waste industry. Being elected within the village and thus having close relationships within the clan system, village committee members are inclined to protect villagers and the workshops at as many different levels and in as many different ways as possible. 15

¹⁴ The local government must follow through with policies as required by the higher-level government, because the relationship between the higher- and lower-levels of government is that of leading and being led. This means that the higher-level administrative organs have the power of order, command, and supervision, and have the right to change or revoke the illegal or improper decisions of the lower-level administrative organs. The lower-level administrative organs have the obligation to obey and execute the decisions and orders of the higher-level administrative organs. Violating or rejecting these orders bears certain legal consequences.

¹⁵ For example, when there is an imminent inspection from above, the village committee may inform the villagers in advance to prepare for the examination.

The EC framework puts more pressure on the local government to take stringent measures to cope with much more severe supervision from higher levels of government. Faced with a high amount of pressure from those above and the risk of administrative accountability, the local government has to take targets and requirements more seriously. There are three main measures expected to be put in place as part of local environmental governance. These include blocking the illegal import of e-waste into Guiyu, eliminating illegal channels for purchasing the "three acids" that are used to separate metals from e-waste, and eradicating e-waste through unannounced inspections of family workshops. These measures are usually carried out as joint enforcement actions by multiple departments at different levels, including squads from the government, the environmental protection agency, the public security bureau, the administration of work safety, and the industrial and commercial administrative departments. There are also other government-led projects to improve living environment hygiene and restore polluted rivers, ponds, and lands (Chaoyang Yearbook Compilation Committee, 2018).

The Comprehensive Remediation Plan for E-waste Pollution in Guiyu District, Shantou City was approved by the Guangdong provincial government in 2013, which emphasised the establishment of the Guiyu National Industrial Park of Recycling Economy (Guiyuzhen guojia xunhuan jingji chanyeyuan, hereafter referred to as the Industrial Park) to facilitate local industrial upgrading and transformation. This Industrial Park has been financially supported by the central government and designed to accommodate all family workshops. Using high-tech environmental treatments, it aims to deal with air, water, and solid waste produced by e-waste dismantling operations in a centralised way (see Figure 3). Since its establishment in 2015, about 1,500 of the family workshops that have produced serious environmental pollution¹⁶ have been moved to the Industrial Park (Chaoyang Yearbook Compilation Committee, 2018, p. 199). That said, a lot of family workshop owners are not willing to pay the high administrative fees charged by the Industrial Park and to be supervised by the government directly. Only people with enough accumulated capital and strong backups can afford to move in. According to the data released by the town-level government, there were over 5,000 family workshops registered in the town prior to 2012 (Z. Liang, 2018). Therefore, even factoring in those that have

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¹⁶ The basic types of e-waste recycling work include: e-waste dismantling; sorting and smashing different kinds of plastics; melting circuit boards and other e-waste; and separating precious metals through strong acid dissolution, etc. The first two types of work generate less pollution than the latter two.

been banned or have moved into Industrial Park, there are still many other family workshops operating in the town. Most of these workshops, moreover, deal with simple dismantling and sorting works that are not regarded as producing pollution and are under the supervision of village committees. Many illegal workshops (without government registration) have been destroyed, with their owners arrested or fined. However, there are still unregistered workshops operating secretly, with many continuing to release pollution illegally outside the Industrial Park (Guiyu suliao, 2018a; 2018b).



Figure 3 Inside of the Industrial Park. 17

Another recent catalyst is the *Implementation Plan for Prohibiting the Entry of Foreign Garbage and Advancing the Reform of the Solid Waste Import Administration System* released by the General Office of the State Council in 2017. This plan sets out the following objective:

[T]he import of solid waste shall be strictly administered, and by the end of 2017, the import of solid waste posing a grave danger to the environment and triggering strong response from the people will have been fully banned; and by

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¹⁷ Source: Ye Zhang, taken on May 18, 2018.

the end of 2019, the import of solid waste which can be replaced by domestic resource will have been gradually ceased.

As a result of this policy, national customs have carried out several rounds of crackdowns on the smuggling of foreign waste. The import of solid waste in 2018 had declined by 46.5% year-on-year (D. Huang, 2019). Since its implementation, this policy has had an enormous influence on both international and domestic e-waste industries. On one hand, many developed countries who relied on waste exporting are now being faced with a serious accumulation of waste (Mcnaughton & Nowakowski, 2019). On the other, the international waste resources of many domestic workshop owners, like those in Guiyu, have been increasingly cut off. There have already been restrictions placed on importing waste in recent years and this policy makes the current situation worse. A local workshop owner says in a report, "Before 2013, there were still some channels to buy international e-waste... In 2016, there were some scattered foreign goods, which were reduced by half in 2017 and hardly seen this year [2018]" (Z. Liang, 2018). Nowadays, most of e-waste resources in surviving workshops come from Guiyu's domestic market. Many family workshops have quit the e-waste industry as a result of the more competitive, less-resourced domestic market.

Resistance from the local people is a huge obstacle to the environmental governance. This is because nearly all locals are involved in the e-waste industry at some level and the industry is strongly intertwined with the local clan system, both of which strengthen the locals' negotiating power and ability to resist. The local government is also afraid of triggering collective action. However, radical collective action organised by the local people has not yet occurred. In fact, there are ongoing compromises and negotiations between the local people and government. While the local government understands that it would be counter-productive to enforce regulations, local people also believe that the clan could help strive some space for them through making several compromises, such as reducing highly polluting dismantling processes (Greenpeace & Anthropology Department of SYSU, 2003a).

International NGOs such as Greenpeace, BAN, SVTC, and other local NGOs have done continual follow-up investigations in Guiyu. With the attention the town has received from the government, much less has been afforded to Guiyu by the NGOs. Among the many reasons NGOs have paid attention to Guiyu has been to set a precedent and urge electronic and electric producers and worldwide governmental organisations to take environmental actions. International NGOs do not directly intervene and take on-the-

ground activities in Guiyu. They influence mainly through pushing the government to strengthen e-waste import management and policy-making. ¹⁸ Leading electronic manufacturers such as Apple and Hewlett Packard are also their main targets. With respect to relationships with the government, Greenpeace Beijing, for example, functions more as an environmental adviser to governments. In 2006, Greenpeace was invited to attend the National People's Congress, during which the *Renewable Energy Law* was passed. Their ongoing efforts have led to great achievements, including the promulgation and implementation of the *Regulation on the Administration of the Recovery and Disposal of Waste Electrical and Electronic Products*, a policy which aims to standardise the recycling and disposal of e-waste and advance the comprehensive utilisation of resources and the development of a circular economy.

Guiyu's reputation as a waste producing town has changed radically throughout the years, once being characterised as the "capital of e-waste" to a "characteristic town of circular economy". There are increasingly positive reports on Guiyu in the media, with many discussing the processes, obstacles, achievements, shortcomings, and future of the town (C. L. Shi, 2018). Despite Guiyu looking much cleaner and tidier than before, several scholars have argued that the local water, air, and soil are so deeply polluted that it will be a long time before they are fully recovered (F. Wang, Kuehr, Ahlquist, & Li, 2013, p. 51). With respect to the development of the town's circular economy, the Industrial Park as a high-tech e-waste disposal centre fails to function as desired. The technologies used in Industrial Park cannot treat water and air waste appropriately. Piles of e-waste are stacked in Industrial Park and workers continue to use primitive methods for dismantling such waste. Some even claim that the function of Industrial Park has gone from "collective pollution control" to "collective pollution making" (Che & Zhan, 2015). Therefore, new production technologies, monitoring equipment, and sewage facilities are still urgently needed to change the backward processes of dismantling e-waste. Finally, there is one subject that has been conspicuously missing from discussions of e-waste and the whole

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¹⁸ Greenpeace (2004) listed their main activities and aims on toxic waste in its annual year report in 2004, including campaigning to stop the export of toxic trade from developed to developing countries; urging governments to tighten laws to monitor and stop toxic trade; calling on businesses to stop the use of toxic chemicals in their products; urging producers, such as electronics manufacturers, to callback their products at the end of the life cycle; and urging governments to set environmental regulations on "Extended Producer Responsibility." One example of the radical action taken by Greenpeace is that, members of Greenpeace Hong Kong stopped a ship that transferred foreign electronic waste containers from America to Hong Kong (as a transfer station). Through this action, Greenpeace Hong Kong achieved a chance to talk with the Hong Kong government and urge them to change the regulations on e-waste import (Greenpeace, 2008).

process of environmental governance: the role of migrant workers, without whom the ewaste industry could not have developed so quickly in Guiyu.

Migrant Workers and their Environmental Situations

Rural people who leave their farmland and work in urban areas are referred to as "peasant workers" (*nongmingong*) or "migrant workers" (*wailaigong*). The phenomenon of migrant workers working in urban areas has generated a lot of political, social, and cultural problems that have been widely discussed among scholars across disciplines. These discussions cover issues such as social security and institutional construction, discrimination and social inclusion, left-behind children's education (*liushou ertong*), ¹⁹ the new generation of migrant workers (*xinshengdai nongmingong*), ²⁰ returning-home migrant workers (*fanxiang nongmingong*), etc.

Migrant workers in Guiyu are from other, poorer provinces, including Hunan, Sichuan, Anhui, Guizhou, and Guangxi, and others. Introduced by fellow villagers, migrants initially arrive in Guiyu for the numerous job opportunities and low living costs. Even though the number and composition of the town's population of migrant workers continues to fluctuate thus being difficult to estimate,²¹ there are several characteristics that are consistent. Firstly, most of the early generation of migrant workers that came in the 1990s were middle-aged couples who either left their children in their hometown or brought them to Guiyu. Secondly, there are more single migrant men in Guiyu than single migrant women working in e-waste workshops. This is because e-waste work is tiring and dirty, which makes it less attractive to women seeking "decent" jobs like working in textile and toy factories. Thirdly, nowadays, after living in Guiyu for more than 15 years, some

¹⁹ The phrase "left-behind children" (*liushou ertong*) refers to children who stay in their hometown while their parents work in urban areas.

²⁰ The phrase "new generation of migrant workers" means those who were born after the 1980s. They have been argued to have different values and characteristics compared to the older generations of migrant workers.

²¹ It is necessary to note that it is nearly impossible to know the accurate demographic composition of these migrant workers and workshop owners, even when using official documents, other publications/resources, and my own fieldwork. The local government's data on migrant workers is based on registrations of migrant people in the police station. This is not accurate because only a few migrant workers have registered. Another reason is that this population and the work they do are highly fluid, meaning it is difficult to get a fixed sense of this population in this area. In 2011, the official number of migrant workers was 50,000. However, Frey (2012) indicates in his research that by 2012 there were around 150,000 migrant workers. According to estimations from different reports and studies, during the heyday of the e-waste industrythere were even more migrant people than local people—about 200,000 nowadays.

early migrant couples have developed their own community here, with their children getting married. Other early migrant couples continue working in Guiyu while their children study, work, and live elsewhere. Migrant workers' jobs range from e-waste related work, to three-wheel truck driving, pedicab driving, hotel security guarding, waiting, and small business (such as bicycle repair shops and restaurants) owning.

As mentioned, migrant workers take up most of the labour market in Guiyu. Most local people are not willing to do e-waste recycling work. Therefore, hiring migrant workers with low salaries is normal in this area. Compared with local people, migrant people are more vulnerable to the effects of local pollution. This is not only because of the harsh working conditions that are part of dismantling e-waste, but also their living environment and lifestyle.

The working conditions for migrant workers are rough and harsh (H. F. Jiang, 2013; Zhuang, 2017). Migrant workers work without any effective protection against air pollution and contaminated water. One of the most typical jobs in the industry is melting the circuit boards to get the metal parts. Workers sit directly in front of the stove with only a small fan above their heads. Both the air and water waste in these workshops have been proven to contain toxic heavy metals and organic compounds that can cause irreversible harm to their health (Brigden, Labunska, Santillo, & Allsopp, 2005). The horrible working environment has given various illnesses to the workers. Qiu et al.'s (2005) study shows that the prevalence of illnesses such as headache/vertigo and tetter/itch among migrant workers in e-waste workplaces is much higher than among workers in other workplaces.

Migrants' living spaces have also proven to pose higher risks of exposure to damaging chemicals. Even though the living areas of migrant workers are far from their workplace, higher levels of heavy metals such as copper and lead are found in the dust in workers' living spaces than in that of households with no connection to the e-waste industry (Brigden et al., 2005). The home environment is likely being polluted by the chemicals from the workplace through things like contaminated clothes. In a research study that looks at Taizhou— a similar e-waste recycling centre in China— migrant workers' daily routines were examined and revealed a number of risks (Wang et al., 2016). These range from health risks from PCBs (polychlorinated biphenyls), which were found to be 3.8 times greater than that of local residents. This is a result of migrant workers' exposure to these chemicals in the workplace and their patterns of activities contaminating their dwelling environments at the same time.

Comparatively speaking, children and women are more socially and environmentally vulnerable. The concept of environmental vulnerability implies that people are not necessarily equally influenced by the same environmental pollution (Cutter, Mitchell, & Scott, 2000). Children are arguably the most easily affected group. This is not only because of their vulnerable physical condition, but also their behavioral patterns. Being less health conscious, children have more of a chance of being exposed to pollution, for example through swimming in the polluted river. Children's habits (such as hand-tomouth behavior) also make them more susceptible to heavy metal pollution (Yin et al., 2018). Studies have verified that the level of heavy metals in the systems of most children in Guiyu exceeded the safety range (Peng, Huo, Xu, Zheng, & Qiu, 2005; Huo et al., 2007; Leung, Duzgoren-Aydin, Cheung, & Wong, 2008; Zeng, Xu, Boezen, & Huo, 2016). Water, soil, and air pollution have all been proven to have a greater influence on children, increasing their risks of contracting diseases related to bronchus (Z. F. Lin & Zhao, 2014), innate immunocyte (D. Sun et al., 2012), and hematopoietic function (J. D. Lin, 2010). In addition, research has also revealed that child labour is very normal in the informal e-waste management sectors and thus increases their risk of contaminating e-waste related illnesses (International Labour Organisation [ILO], 2014; 2015).

Another vulnerable group are women. Migrant women workers in China have long been argued to be more vulnerable than men workers in terms of their health, job opportunities, and likelihood of sexual harassment (Pun, 2005b). Investigations have shown that migrant women workers generally have lower salaries than men workers in this area (Greenpeace & Anthropology Department of SYSU, 2003a). Women— especially pregnant women— are very vulnerable to environmental pollution. Research has shown that the rate of spontaneous abortion in Guiyu is much higher than other places in China (K. Wu, Xu, Liu, Guo, & Huo, 2011; K. Wu et al., 2012). It is common knowledge among migrants that women who have not given birth to babies should not do the work of burning circuit boards, as this will influence their fertility in the future (H. N. He, 2004). Therefore, most of the time, older women choose to burn circuit boards and do other work that might be harmful to people's health. Some housework that is mainly performed by women, such as washing clothes, also increases one's chance of being exposed to pollution.²²

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 $^{^{22}}$ See the photo of "Woman washing clothes along a river" by Greenpeace: http://www.greenpeace.org/china/zh/multimedia/images/toxics/10/

Environmental governance has also greatly influenced migrant workers in recent years. Firstly, many migrant workers have left Guiyu because of decreasing work opportunities. The official number of migrant workers in Guiyu declined from 50,000 in 2011 to 20,000 in 2017 (Chaoyang Yearbook Compilation Committee, 2012; 2018). Many migrant people have also stopped doing e-waste recycling work and have turned to other jobs. Migrant workers are usually excluded from consideration in environmental policy-making and ignored by the local government and the media. For example, to a large extent, their working conditions in Industrial Park have not been improved (BAN, 2015). Even though migrant workers remain an important section of the local e-waste chain, there are no specific official documents or plans that consider their interests. Reports have shown that migrant workers are also faced with a large amount of personal security risk in the face of the enforcement of environmental governance by the local government (Jinri Guiyu, 2018). Workers are usually arrested and fined if the owner cannot be found during unannounced inspections of illegal workshops. Local village committees are also less loyal to migrant people than to local people.

The whole story of migrant workers in Guiyu raises questions around how we can better understand their environmental suffering, what has contributed to their socially and environmentally vulnerable situation (both before and after environmental governance came into play), and how migrant workers think about these issues. Environmental justice concerns with the unequal distribution of environmental resources and how pollution may affect certain groups of people, based on social categories such as race, class, gender, nationality, etc. From the above account, we can see that there is an uneven distribution of environmental risks and vulnerability for local and migrant workers in Guiyu based on their class, gender, and age. The intersections of specific historical, economic, and social conditions determine migrant workers' ability to live in decent and healthy conditions. The working and living environments, personal safety, health, and the future of migrant workers have all failed to be considered by the Chinese government. In fact, the issues of social and environmental injustice experienced by migrant workers have already attracted scholars' attention. In the next section, I shall examine the existing literature on this issue and draw forth the research questions of this dissertation.

Environmental Injustice Perpetrated Against Migrant Workers

The problem of environmental injustice generated by the global e-waste trade has been widely discussed among scholars. As some have argued, the world-system and globalisation itself can be understood as a process of "ecological unequal exchange" (Rice, 2007; 2009; Hornborg, 2012) or "accumulation by extraction and contamination" (Frey, 2006). The geographical distribution of e-waste, the macrosystems of production and consumption, the global legal system, and capitalism as a whole have all been examined to explore the power relations embedded in the global politics of waste disposal (Iles, 2004). Guiyu is typically regarded as a representative case in the issue of global e-waste transferring from developed to developing countries. Examinations of the maldistribution of e-waste between developed and developing countries—with Asian countries specifically— have brought to light the negative impacts the global e-waste trade has had on local health, safety, and eco-environments (Frey, 2012). Chinese scholars also treat this issue as an expansion of American environmental racism, seeing it as a sort of ecocolonialism of developing countries (Y. F. Xie & Ma, 2007; S. H. Guo, 2008; J. L. Wang, 2013; Y. Z. Zhao, 2015). Studies of this nature usually use Guiyu as an example to support their argument, with the problem of migrant workers mentioned as one aspect of the whole story.

As I have mentioned in previous sections of this thesis, the problem of migrant workers has also been referred to in other research. In addition to the aforementioned documents released by NGOs such as Greenpeace, there is also a lot of scientific research that has examined the negative influence of environmental contamination on people's health, particularly that of migrant workers, pregnant women, and children. These studies confirm that e-waste dismantling work has adverse effects on the workers' health (Qiu, et al., 2005; J. G. Liu, 2018). As cited above, the higher vulnerability of children and pregnant women to environmental pollution has also been widely argued from a medical point of view.

While the above works have demonstrated the miserable situation that migrant workers in Guiyu find themselves in, none have viewed it primarily from the perspective of environmental justice. In fact, the environmental injustice experienced by migrant workers in China has attracted the attention of some scholars in more recent years. A lot of research has explored the relationship between social differences and environmental risk distribution (Nie, 2013; Gong, 2014; Qi & Lu, 2015). Through quantitative analysis, these

studies have found that disproportional risk distribution does exist in China due to the differences in socioeconomic status (including education, income, migrant status, etc.). Multiple regression models show that people with lower socioeconomic status bear more environmental risks. Geographically speaking, migrant workers are more vulnerable to local environmental pollution and risks within cities (Y. S. Li & Liu, 2006; S. M. Wang, 2007; C. B. Ma, 2010; J. Chen, 2011; C. Y. Liu, 2012; J. Chen, Chen, & Landry, 2013; X. L. Sun & Shi, 2016; C. B. Ma & Schoolman, n.d.). Some scholars even argue that the environmental injustice experienced by Chinese migrant workers might in part be a result of the social and political processes similar to those that have been used to interpret racial differences in environmental risk exposure in America. As Schoolman and C. B. Ma (2012) argue,

Like racial minorities in the U.S., the vulnerability of migrants to state action— in the form of harassment, arrest, and expulsion— may further narrow their options with respect to where to live, and also with respect to political reform. (p. 142)

Discussions on environmental injustices perpetrated against migrant workers hold that migrant status is the root of the unequal distribution of resources, opportunities, and pollution. From an institutional point of view, *huji zhidu* has arguably helped create a binary social structure of rural and urban areas, which further enhances environmental injustice (Hong & Ma, 2004; Y. Guo, 2015). Under this system, when a rural person moves from his/her birthplace to an urban area, he/she is restricted with respect to access to social welfare (e.g. medical care and education) and urban employment, influence on policy decision-making, and even the right to buy property. Migrant workers, therefore, do not enjoy equal civil rights compared to urban residents.

The antagonistic local-migrant relationship has also been examined. D. M. Zhou (2000) refers the antagonistic relationship between locals and migrants as a "binary community" (*eryuan shequ*), whereby locals and migrants have different occupations, modes of consumption and entertainment, and lifestyles, all of which lead to their mutual misrecognition. Local residents and migrant workers are living in two different worlds, and most of the time they distrust, misrecognise, and even hate each other (Greenpeace & Anthropology Department of SYSU, 2003a). In an unfamiliar place, migrant people are usually discriminated against and disrespected because of their rural backgrounds and the jobs they do. This social exclusion is thought to be the main reason for the environmental injustice experienced by the bottom level peasant labourers in China (S. M. Wang, 2007).

Their less powerful position— as a result of the combination of *huji zhidu* and local-migrant relationships— constrains migrant workers' ability to protect themselves, to resist injustice, and to seek support.

From the above discussion, we can see that the environmentally vulnerable position of migrant workers has been discussed among scholars in both science and social science fields, both in a general sense and specifically in the case of Guiyu. In my view, existing studies on the environmental vulnerability and injustice experienced by migrant workers does not dig deep enough to explain the complexities of the environmental justice issue for migrant workers. Three arguments come to mind and are outlined below.

Single Dimensional Understanding of Environmental Justice

Starting by examining the multiple meanings of "justice" and the diverse proposals of environmental justice movements (EJMs) in America, Schlosberg (2004; 2009) argues that a pluralistic understanding of environmental justice that encompasses distribution, recognition, participation, and capabilities ought to be embraced by scholars. A distributive perspective focuses more on what gets distributed in building a just society (Schlosberg, 2009, p. 27). This distributive mode of thinking emphasises the roles of economic efficiency and market forces in forging environmental maldistribution. Justice as recognition, on the other hand, is conceived of in terms of who is valued and respected. Compared with a distributive approach, recognition-based justice concerns itself with the "cultural discrimination involved in perceiving a community as inherently expendable or 'cheaper'" (Figueroa, 1999, p. 142). Most EJMs emerge not only because of the unequal distribution of environmental pollution between different communities, but also out of people's sense that they are being discriminated against, marginalised, and disempowered. For some communities, such as many indigenous groups, struggling for environmental justice also means fighting to achieve recognition for their own local culture, environmental knowledge, and ways of life (T. Y. Wang, 2015).

Participation-defined justice regards participation as a key political right that ensures the achievement of justice from a procedural perspective. Scholars argue that democratic decision-making procedures are a pre-condition for achieving distributional justice (Torres, 1993; Schlosberg, 2009). G. Walker (2012) lists several key procedural elements to achieving environmental justice, including environmental information disclosure by the government, meaningful involvement in the processes of decision-making and policy-making, valid channels to express disagreement towards unfair

environmental treatments, and inclusion in the process of local environmental governance. The capability approach proposes that we emphasise how the maldistribution of environmental benefits and risks affect our well-being and capacities to function (Schlosberg, 2009, pp. 25-49). More and more scholars have started examining environmental justice in terms of capabilities (e.g. Ballet & Pelenc, 2013; Edwards, Reid, & Hunter, 2016).

In addition, these four dimensions are interlinked and thus overlap with one another (Schlosberg, 2004, p. 521). While distributive and participation-based understandings of justice are based on a more traditional and liberal approach, the incorporation of recognition comes directly from criticism of this traditional approach. Based on Fraser's (1996) bivalent conception of "participatory parity" as the bridging criterion, Figueroa (1999) argues a bivalent solution to environmental injustice in which the redistribution and recognition paradigms are understood together, instead of being opposed to each other. He believes that, "the bivalent coupling of the two paradigms can be constructed such that it brings about better solutions than the more common alternative that produces an oppositional configuration between the paradigms" (p. 165). The capability approach could be seen as a connection between the other three conceptions of justice (Schlosberg, 2009, p. 25).

Based on this pluralistic understanding of environmental justice, G. Walker (2012) lists the three elements of what he calls "environmental justice claim-making". This includes (a) the notions of justice—normative judgments about how things should be; (b) evidence—descriptive judgments about how things are; and (c) process—explanatory judgments about how things turn to be the way they are (p. 75). The last two elements correspond to the normative notions of justice, whereby proving the existence of environmental injustice and analysing the process of injustice production is closely related to how the concept of justice is understood. Normatively speaking, contemporary studies on environmental injustices perpetrated against migrant workers build on the common view in Chinese academia that the issue of fair distribution of environmental benefits and risks—both in terms of geography and environmental rights and obligations— is always the core tenant of environmental justice (J. X. Cui & Zhang, 2016).

On the one hand, many studies have sought their evidence from statistical and quantitative analyses of the geographical distribution of environmental risks. In doing so, they aim to find correlations between the distribution of environmental pollution and multiple social categories. Such analyses have provided direct proof of the existence of

environmental injustice. On the other hand, most qualitative analyses are based on understanding environmental injustice as the unequal distribution of environmental rights and obligations between the advantaged and disadvantaged.²³ Such an analysis argues that the primary reason for environmental injustice is that rich people are not willing to take on the environmental obligations that should automatically come with receiving more environmental benefits (Hong, 2001). Both ways of approaching the discussion adhere to a distributive understanding of justice and thus risk neglecting or overlooking the multiple potential meanings of justice.²⁴ This has the potential to create two problems, which are detailed below.

Firstly, while seeking evidence of the status of migrant workers is important, only doing so from a distributive perspective risks ignoring the complex process that produces the environmental injustice impacting migrant workers. Even though distributive justice is key to environmental justice (Wenz, 1988, p. 4), if we want to understand everything that constitutes and produces environmental injustice, it is important that we incorporate different concepts of justice (Schlosberg, 2004, p. 529). A lot of environmental justice scholars have already shifted from a liberal distributive model to a more critical conceptualising of environmental justice. Some argue that the liberal distributive conceptualisation of environmental justice is engaged with a pre-given and therefore depoliticised space. In this space, the politics of difference has been limited to issues of rights and distribution, which fails to acknowledge exclusion and racism as structural and cultural (Pulido, 2000; Teelucksingh, 2007; A. Stanley, 2009).

A pluralistic understanding of justice allows us to go beyond the liberal distributive conceptualisation and examine the production of environmental injustice as a result of multiple systems of oppression and the power relations behind them. Returning to the case of Guiyu and its migrant workers, even though the maldistribution of environmental pollution has been proved geographically, other key factors that contribute to environmental injustice, such as the system of accumulation, relationship between production and consumption, labour process, and multiple power relations, have not been fully examined. Only through examining these complex power relations can we begin to fully understand why there is a transferring of environmental risks and environmental

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²³ There are some exceptions; see for example S. M. Wang (2007) and Zhu and Long (2012).

²⁴ The multiple meanings of environmental justice have also been discussed by Chinese scholars (e.g. Zhu & Long, 2012; T. Y. Wang, 2015). However, the application of this theoretical analysis to discussions of practical problems— such as migrant workers' problems— is still relatively weak.

obligations from the advantaged to the disadvantaged, and avoid any simplifications that attribute it solely to economic efficiency and market forces.

Secondly, a plural understanding of environmental justice includes "the diversity of stories of injustice, the multiple forms it takes, and the variety of solutions it calls for" (Schlosberg, 2004, p. 535). In this sense, it allows us to notice the "hidden" environmentally vulnerable groups that have been ignored by the basic distributive mode of analysis. One problem with the prevailing statistical approach is that social categories no longer represent concrete groups of people, but rather function as mere variables that influence the outcome of quantitative data analysis. Therefore, the different systems of hierarchy and multiple forms of power relations embedded in the social categories that enhance environmental injustice are ignored. For example, as common a variable as gender is in quantitative analysis, it is often proved to be irrelevant with respect to environmental injustice in existing literature (e.g. Nie, 2006). Contrary to what has been stated in the literature, imbalanced gender relations and patriarchal systems often make (migrant) women more environmentally vulnerable, as we have seen in the case of Guiyu. Therefore, without considering the multiple meanings of environmental justice, certain groups of people and their diverse experiences of environmental injustice might be marginalised and excluded from the mainstream discussion.

Lack of Intersectional Analysis

Another problem with the quantitative approach is that (once social categories come to be regarded as mere variables instead of concrete groups of people) different variables are regarded as independent from each other and thus without overlaps and correlations. This ignores the fact that one individual belongs to multiple social categories at the same time and thus is situated in multiple, intersected systems of oppression. This is what feminist intersectionality emphasises, which argues that domination within one social category of difference (for example gender) is not seen as functioning individually. On the contrary, different power relations intersect and co-constitute the entangled systems of oppression. Therefore, it is crucial to examine "how multiple social categories of difference are entangled in the production of environmental injustice, from race, gender, sexuality, ability, and class to species" (Pellow, 2016, p. 223).

From this intersectional perspective, migrant workers are usually treated as an integral whole in environmental justice studies, without consideration of their internal differences. This leads to two main issues. Firstly, scholars pay attention to their migrant

status, but tend to ignore their other status categories. As we have seen, although the institutional obstacle of *huji zhidu* and the migrant-local relationship— both of which are based on the migrant status— have been broadly regarded as the source of social and environmental injustice against migrant workers, other social categories such as class (status as a worker) and gender and the power relations embedded within them have not been fully evaluated or discussed in this context. This risks neglecting the marginalised within the marginalised, the most dominated within the dominated, and further injustice within injustice. Status markers such as gender, age, and marital status might contribute heavily to a migrant's experience of environmental injustice. As shown in the above discussion, in a general sense, married, older, and women workers as well as migrant children are usually closer to environmental pollution. Additionally, although there are some studies that indicate the environmental vulnerability of women and children from a medical perspective, there are few studies talking about it from a social and political perspective.

Secondly, ignoring other social categories results in overlooking the particularity of migrant workers' problems, which lies in the fact that the environmental injustice experienced by them is a result of the intersection of multiple systems of oppression. It is not only their migrant status but also their positions as workers within local, national, and global economic systems that matter. Their own involvement in the e-waste industry as workers—contributing to the production of environmental pollution—also makes the answer to relieving the environmental injustice they are subjected to more complex.

Lack of Discussion on Agency

The third problem is that in contemporary studies, migrant workers are regarded purely as victims of environmental pollution. The first issue with this is that it again ignores the contradictory situation faced by migrant workers: they partially participate in the production of environmental pollution. Some scholars' analogies between Chinese migrant workers and American racial groups (e.g. Schoolman & Ma, 2012) represent their ignorance of this point. Unlike American racial groups, migrant workers mostly do not participate in local environmental protests if there are any. Migrant workers' dual position as both the victims of and participants in the creation of environmental pollution makes their subjection to environmental injustice more complex. It raises the question of whether they still deserve justice if they "wilfully" choose to do such work and remain acquiescent. One might argue that it is because migrant workers choose to do this work that the

injustice is inevitable. As W. X. Liu (2017) argues, "The existence of this situation is a result of people's voluntary choice instead of coercion and discrimination... The so-called environmental injustice is the inevitable result of free market instead of discrimination" (p. 64). This over-simplified explanation ignores the complex power relations that drive them to "choose" such jobs and further contribute to the environmental injustice perpetrated against them. It leads us into the narrow understanding that simply attributes the formation of environmental injustice to the functioning of class-based market dynamics.

Secondly, regarding migrant workers purely as environmental victims also denies their agency. In existing reports and research, the attitude of migrant workers towards environmental pollution and injustice they endure is either ignored or depicted as wilful silence on their part. Most of the above-mentioned literature that discusses environmental injustice faced by migrant workers both qualitatively and quantitatively focuses on seeking evidence of environmental injustice or analysing the reasons for environmental injustice without exploring migrant workers' own attitudes, insights, and consciousness. In these cases, migrants' perspectives are largely ignored (Orlins & Guan, 2016). On the other hand, in research on environmental resistance that have sought these perspectives, migrant workers are usually absent from the discussion because they have shown less interest in taking part in environmental protests against local pollution. As Lora-Wainwright, Zhang, Wu and Van Rooij (2012) argue, "Migrant workers have very different stakes and interests in industry, and therefore require separate analysis ... [they] have no vested interest in taking part in (environmental) protests, and none of those interviewed did so" (p. 121).

In this regard, there are two problems that need to be explored further. Firstly, even though on the surface it might look like migrant workers keep acquiescent to pollution and injustice concerns, we need to understand the reasons for their quiescence and inaction. Their individual "willingness" must not be isolated from the macro social and political environments that significantly influence their choices. Therefore, it is crucial to examine the factors that lead to their silence. Secondly, it is one thing to say that their different interests do not motivate them to attend environmental protests against pollution, but quite another thing to say they are not aware of the injustices they experience— socially or environmentally. Action and consciousness do not always synchronise with each other. It is normal for there to be both people who protest without a clear consciousness of injustice and people who have a strong sense of injustice but do not protest. On the other hand, it is also problematic to suppose that migrant workers should have a unified sense of consciousness or agency when the consciousness and agency of one single person could

have multiple layers based on their place in different social categories. In other words, emphasising migrant workers' silence in the face of environmental pollution denies them future political agency and ignores their willingness and capacity to seek changes. It naturalises the vulnerability and victimhood and leads to ignorance of agentic beings (Larkins, 2017, p. 61). From an intersectional perspective, it is reasonable to ask the question of whether migrant workers' unawareness and inaction in this sphere might mean that they are also unaware of all the kinds of social injustice that are closely connected with environmental injustice. This question should be carefully examined if we agree that environmental justice and social justice are closely related and intersect.

To further examine the production of the social and environmental injustice faced by migrant workers, one needs to excavate the multiple underlying power relations that co-constitute the entangled systems of oppression that make them socially and environmentally vulnerable in the first place. These overlapping systems of oppression also work together to further marginalise certain groups of people, such as migrant women workers. Contemporary studies have failed to fully explore many factors that participate in the production of the environmental injustice perpetrated against migrant workers, as well as the complexities of consciousness and agency. This research aims to address these gaps.

Research Questions and Chapter Outline

The above analysis demonstrates that the social and environmental injustice experienced by migrant workers calls for a more comprehensive understanding of environmental justice, an intersectional analysis, and an examination of the agency formation of migrant workers at the same time. It is thus necessary to deconstruct the power relations within both the production of environmental injustice and the formation of political agency of (women) migrant workers from the perspective of intersectionality. In addition, both are closely related with another issue of how to make political and environmental transformations. Therefore, this project aims to examine three questions: how do multiple power relations and systems of oppression intersect and work together to contribute to the social and environmental injustice experienced by migrant women workers? How do intersectional power relations facilitate or restrict the formation of agency for migrant women workers to work towards social and environmental change? How intersectionality might illuminate and open up possibilities for political changes? These questions shall be

discussed against the backdrop of both environmental pollution and governance in Guiyu in recent years.

However, before moving forward with these three questions, it is also important to deal with theoretical and methodological considerations. How am I going to define intersectionality and employ it to analyse environmental justice? How and to what extent could environmental justice and intersectionality work together? What adaptations are needed when employing environmental justice and intersectionality—both as imported theories—in the context of China? What methodological implications might come out of these theoretical discussions? The following chapter outline aims to frame, analyse, and develop all the above questions.

Chapter One, "Environmental Justice, Power, and Intersectionality," turns from the specific case of migrant workers in Guiyu to the theoretical discussions on environmental justice, intersectionality, and their interactions. It tries to answer the question of how "intersectionality"— whether this term has been used directly or not— is understood and used by environmental justice scholars. I argue that although the existing literature demonstrates diverse ways of applying intersectionality to environmental justice (in examining the three main themes of environmental injustice experience, the formation of agency, and intersectional politics), most works employ intersectionality in a more general sense instead of a solid and textured way. Without considering its complexity and details, it is easy for these works to ignore the multiple dimensions and layers of intersectionality that are important for us to understand the complicated power relations in all the three themes of environmental justice studies. I propose that an inclusive way of understanding intersectionality and a textured way of employing it will be particularly helpful in attempting to understand the environmental justice issue of migrant women workers in Guiyu. This chapter thus lays a theoretical foundation for the following chapters.

Chapter Two, "The Problem of Contextualisation," examines how both theories of environmental justice and intersectionality (as imported theories) can be employed in China. I argue that contextualising these two concepts requires the "critical consciousness" that Edward Said has emphasised in his discussion on "traveling theory". This requires situating both theories in a particular historical, social, political, and economic context that might influence the various ways in which environmental justice and intersectionality are manifested, interpreted, and examined. I further argue that paying attention to the political, economic, and cultural transformations, the state-society relationship, and the different

meanings of social differences could make the concepts of environmental justice and intersectionality more meaningful in the case of Guiyu.

Chapter Three, "The Methodological Landscape," examines the methodological concerns posed by intersectionality and the plural sense of environmental justice, both normatively and pragmatically. Our various ways of conducting inquiries and fieldwork encompass different epistemological assumptions that further influence research outcomes and the type of knowledge we are going to produce. Therefore, selecting methodologies must involve evaluating epistemological concerns. I argue that intersectionality and environmental justice are the best approach for this project because it embraces diverse epistemologies and forms of knowledge. Critical ethnography shall be fully examined to show why it is important for the intersectional analysis of environmental justice. I argue that there is always a discrepancy between the normative requirements of critical ethnography and the reality of particularity, messiness, and complexity of the field. This further urges me to keep reflecting on ways to negotiate and work around this discrepancy. A detailed illustration of my experience doing fieldwork in Guiyu shall follow to show the real situations and encounters I had on the ground. It shall show the whole process of the fieldwork, with a particular focus on the critical and reflexive negotiations and mediations that I have undertaken with respect to discrepancy and complexities on the ground.

Chapter Four, "Environmental Injustice Against Migrant Women Workers," gives an analysis of the production of both the environmental injustice against migrant women workers and the public's ignorance towards it. It deconstructs the ways in which multiple faces of power based on gender, class, migrant status, age, etc. intersect to put the migrant women workers in a vulnerable position both socially and environmentally. Deconstructing the complex power relations allows us to clearly see the production of social and environmental injustice faced by migrant women workers. It also allows us to see how the multiple faces of power based on different social categories intersect with each other to produce and maintain a "wilful ignorance" from the dominant society that place the (women) migrant worker in a status of "unknowability", i.e. a status that cannot not be fully detected and understood. From an intersectional perspective, I further list three types of "wilful ignorance" among different organisations and groups of people in Guiyu.

Chapter Five, "The Intersectional Agency of Migrant Women Workers," analyses the agentic orientation of migrant women workers from an intersectional perspective. It aims to answer the question of how intersectional power relations might facilitate or restrict the formation of the agency among migrant women workers in the context of both

social and environmental changes. Based on the fieldwork materials, I shall give a fine-grained analysis of the complex agentic orientation of migrant women workers towards the intersected power relations based on each social category, mainly of class, migrant status, gender, and age. I propose a more complex picture of consciousness and resistance, which may challenge our understanding of the wholeness of the agency as "migrant women workers"

Chapter Six, "Political Dynamics and The Possibility of Intersectional Politics," focuses on examining the existing transnational, national, and local political dynamics in order to explore the possibilities and obstacles to achieve intersectional politics in Guiyu. Intersectional politics reminds us that in order to resolve the problem of environmental injustice experienced by migrant women workers, an integrated approach of empowerment that encompasses issues of child education, gender equality, labour, migrant-local relations, poverty, etc. needs to be undertaken. However, given that migrant women workers in Guiyu are in a situation of being wilfully ignored (at various degrees and for varying reasons) by the local government, local people, certain NGOs, the media, and even themselves, to what extent can intersectional politics be achieved? How can intersectionality illuminate and open possibilities for political change under such circumstances? This chapter shall try to explore these questions.

The Conclusion shall discuss the concerns raised in previous chapters and reflect further on the contribution of this research, its implications, and limitations fit for further studies.

Chapter One: Environmental Justice, Power, and Intersectionality

Introduction

The concept of intersectionality, coined by notable civil rights advocate, feminist, and lawyer, Kimberlé Crenshaw in 1989, has been regarded by some as the "most important contribution that women's studies has made so far" (McCall, 2005, p. 1771). It has also become a "buzzword" and travelled beyond feminist scholarship to other areas, such as the humanities, political science, and sociology. As argued in the Introduction, explaining environmental injustice experienced by migrant women workers requires an intersectional perspective. In fact, some scholars have already advocated for incorporating intersectionality into environmental justice studies (Buckingham & Kulcur, 2010; Mann, 2011; Pellow, 2016; Malin & Ryder, 2018), which has received various responses from scholars (e.g. Lakins, 2017; 2018; Clark, Auerbach, & Xuan Zhang, 2018; McKane, Satcher, Houston, & Hess, 2018; Vickery, 2018). However, the term intersectionality itself is complicated, full of confusion and controversies with respect to how to understand and use it (Prins, 2006; Hancock, 2007a; 2007b; Davis, 2008). When employing intersectionality, scholars have to think carefully about questions such as what social categories should be selected as analysis units, which should be the object of intersectional analysis (i.e. identity or systematic oppressions), and what methodologies ought to be employed. There are also different classifications of analytical approaches to applying intersectionality (e.g. McCall, 2005; Choo & Ferree, 2010).

Our ways of comprehending and employing intersectionality are particularly critical to enriching our understanding about environmental justice. It is thus important to evaluate how to use intersectionality in a productive way when the concept itself is complex. In this chapter, I shall investigate both the implications and limitations embedded in the historical and contemporary engagement between environmental justice and intersectionality. I begin by introducing the development of environmental justice studies—the centre of which is about power—and pointing out three main themes that correspond to three distinctive but related concepts of *power over*, *power to*, and *power with*. I shall then examine the interactions between environmental justice and intersectionality, with a reflection on how intersectionality shall be used in this project.

Environmental Justice and Power

Environmental justice concerns the unequal distribution of environmental resources and pollution among different groups of people based on social categories of race, class, gender, nationality, etc. The concept initially emerged in the 1980s to encompass two overlapping aspects of American subaltern environmentalism: resisting environmental pollution (especially toxic waste) and the anti-racism movement. It reflects the fact that racial minorities and poor people suffer disproportionately from environmental pollution and have a higher chance of exposure to toxic waste. The EJMs thus could be regarded as an amalgamation of issues concerning race, class, and gender (alongside others) with environmentalism. It criticises mainstream environmental movements for not considering the alleviation of poverty and racism to be tied to environmental issues (Egan, 2002, p. 22).

Compared with other terms such as environmental racism,¹ environmental equality,² and subaltern environmentalism,³ environmental justice has been argued to have developed into an inclusive "paradigm" (D. E. Taylor, 2000), a "frame" (G. Walker, 2012), "a rallying cry, a motivator, and a powerful idea" (Agyeman, Schlosberg, Craven, & Matthews, 2016), and is best able to encompass the concerns of other terms connoting similar but not entirely inclusive concepts (D. E. Taylor, 2000, p. 537). Environmental justice studies now engages in multi-levelled (considering different concepts of justice), multi-scalar (from everyday life to global issues), and multi-methodological (from quantitative to qualitative methods) analysis that weaves together social, political,

¹ Environmental racism refers to racial discrimination towards people of colour with respect to the unequal distribution of environmental pollution, the production and enforcement of environmental policy-making, and other unjust environmental affairs (such as exclusion from mainstream environmental movements) (Holifield, 2001). It is focused more on linking the problem of racism with environmental problems and represents one of the most important leading powers in the development of the EJM in its early stage.

² Environmental equality has weakened the weight previously given to racism. With geographic distribution of environmental risk as its central focus, environmental equality emphasises the authority of "scientific risk analysis" (Environmental Equity Workgroup, 1992; Holifield, 2001; Mohai, 2007). In this sense, people who use this term tend to be neutral in measuring whether environmental inequality exists or not, through either doubting/denying the causal relationship between racial discrimination and environmental outcomes or methodologically sticking to scientific analysis and precluding other research methods.

³ Some scholars also use the term subaltern environmentalism to emphasise its historical relationship with environmentalism (e.g. Pulido, 1996; Egan, 2002). The subaltern refers to grassroots environmental activists who are socially and environmentally marginalised, subordinated, or oppressed by race, class, or gender, such as peasants, workers, etc. Through valuing the grassroots activists' experiences, subaltern environmentalism emphasises the historical significance of subaltern activism in a positive sense rather than the environmental marginalisation and oppression in a negative sense (Egan, 2002, p. 35).

economic, spatial, environmental and/or ecological processes (Schlosberg, 2004; 2009; Sze & London, 2008; G. Walker, 2012; Agyeman et al., 2016). Theoretically speaking, as discussed, the multiple meanings of "justice" in terms of distribution, recognition, participation, and capability have been widely examined by scholars. This theoretical development has enriched and diversified environmental justice studies in the face of a contemporary worldwide environmental crisis. It also covers much of the same ground as geographic studies of environmental justice. Scholars emphasise a relational conception of space instead of a fixed and depoliticised one to facilitate our understanding of environmental justice by engaging with space as a medium of power (Pulido, 2000; Teelucksingh, 2007; A. Stanley, 2009; G. Walker, 2009b; Holifield, 2012).

Methodologically speaking, besides statistical and quantitative analysis, qualitative and experiential forms of evidence such as personal narratives, interviews, and everyday experiences that are based on other concepts of justice (such as recognition and participation) have also been widely employed, in order "to think about justice and evidence in broad terms" (G. Walker, 2012, p. 55). Politically speaking, contemporary EJMs are covering more and more environmental topics, involving diverse vulnerable groups of people and bringing together social, political, cultural, and ecological issues. Scholars argue that environmental justice as an intersectional framework brings together injustice issues from different areas, such as women's reproductive rights, state violence, human health, ecological integrity, etc. (Hoover, 2018). It is thus important for EJMs to form "alliances with other initiatives for sustainable security and democratic transformation" (Nixon, 2011, p. 139).

The development of environmental justice reveals that the discussion consistently centres on power. We can see the complicated functioning of power in environmental justice struggles: the political and economic power of the advantaged group to avoid pollution and enjoy resources; the ideological and discursive power that renders certain people misrecognised and silenced; the power of excluding vulnerable groups in the decision-making process; the power and capacity of the subaltern groups to voice and fight against justice; and so on. Though having developed in a diversified way, there are mainly three related themes in discussions concerning environmental justice that include the various experiences of environmental injustice, the formation of agency in environmental justice struggles, and building solidarity and alliance with other social movements. These three themes, as I will argue next, mirror another three distinctive but related concepts of power, that include: *power over*; *power to*; and *power with*.

Power as Power Over

The concept of power is particularly complex, controversial, and difficult to give a systematic and unanimous definition (Göhler, 2009, p. 27). Among social and political theories, there are mainly two distinct concepts of power—power over and power to. Power over as "domination" functions when one's power prevails over others. The most traditional analysis of power over is Lukes's (2005) three faces of power, which is an extended discussion of Dahl's (1957) first face of power and Bachrach and Baratz's (1962) second face power. These discussions on power were developed originally in American political science and focused on power in the process of achieving democracy. However, this discussion on power has gone far beyond this original background. The first face of power is described with the following scenario: "A has power over B to the extent that he can get B to do something that B would not otherwise have done" (Dahl, 1957, p. 202-203). People who exert power over others can achieve compliance from the latter who have to behave in prescribed ways. The first face of power, which is also named as decision-making power in democratic processes, is more open and direct. The second face of power is described as "B is prevented, for all practical purposes, from bringing to the fore any issues that might in their resolution be seriously detrimental to A's set of preferences" (Bachrach & Baratz, 1962, p. 948). It is a non-decision-making power that refers to the power of excluding certain people in the decision-making process. Lukes further argues that there is a third face of power, which is the ideological power that allows A to influence B's thoughts and beliefs (the "false consciousness" in Karl Marx's term or "hegemony" in Antonio Gramsci's term) so that B shall pursue things that are opposed to their "true interests." The third face of power thus involves preference-shaping and can influence how people act and think in ways that they are unaware. It emphasises the beliefs and tacit knowledges that people use to sustain power and domination.

This third face of power has a close relationship with Foucault's work on power and knowledge, which is argued by scholars either as a way to better understand the third face of power (Akram, Emerson, & Marsh, 2015) or a fourth face of power (e.g. Digeser, 1992; Haugaard, 2002; 2012). For Foucault, the exercise of power is realised through the constitutive relationship between knowledge and practice. Power is closely related with the production of "truth" that is intrinsically tied up with our ways of ordering the world. However, for Foucault, power does not only mean repression and control in a negative sense but also has a productive nature in a "positive" sense—though this positive nature

should also be critically reflected upon. As Foucault (1995) argues, "(P)ower produces; it produces reality; it produces domains of objects and rituals of truth" (p. 194). Compared with the above three faces of power that are concrete power in relation to others, Foucault's notion of power does not belong to anyone but functions through constituting the social life (S. Mills, 2007, p. 49). Power operates like "blood capillary" that can penetrate everywhere in society. In addition, Foucault also emphasises the process of subjectification, which refers to the social actors' own internalisation of the judgemental normality and beliefs. This process is coupled with a whole set of disciplines that are featured as enforced routinisation through the micro-penalty of "abnormalities" such as inattention, disobedience, "incorrect" attitudes and so on. Power constitutes the subjectivities discursively and disciplinarily.

In addition, there is another face of power that I would like to emphasise: wilful ignorance. The third and/or fourth faces of power have been argued to be closely involved in the organisation of denial and ignorance.⁴ Notions of what to pay attention to, think, talk about, and remember are constituted through socially and politically shaped norms of perception, attention, emotion, interaction, and thought patterns (Cohen, 2001; Zerubavel, 2006; Norgaard, 2006, 2011). Moreover, ignorance—particularly with respect to injustice— is often produced, managed, and maintained by the dominant to sustain privilege and suppression. It is thus often accompanied with various degrees of "wilfulness," which means that ignorance (of the dominant groups) happens not passively but rather is cultivated or constructed actively and consciously/subconsciously. This is particularly obvious in the situation when "we don't know and we don't want to know or don't care to know" (Tuana, 2006; Spelman, 2007; Gilson, 2011; Pohlhaus, 2012).

Epistemology of ignorance, which is emphasised by some antiracist and feminist philosophers to examine how different types of ignorance are constructed and maintained

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⁴ It is necessary to distinguish between ignorance and denial here. Ignorance occurs when there is a lack of knowledge, a distorted sense of reality, or when one is unable to detect and make sense of certain wrongs. In contrast, denial happens when one has the knowledge, but either rejects it as truth (literal denial), or gives it a different interpretation (interpretative denial), or minimises the political or moral implications that follow (implicatory denial) (Cohen, 2001). The environmental injustice experienced by migrant women workers is more an issue of ignorance than denial, because the dominant society often cannot detect such injustice instead of denying its existence. However, these two terms are also interconnected in discussing environmental issues. A denial of environmental crisis and suffering, as examined by many scholars (P. J. Jacques & Knox 2016; Norgaard 2011; Belser 2014), is closely related with the ignorance of environmental injustice. Once the environmental pollution and suffering is denied or their political and moral implications are minimised, it would be difficult to detect and make sense of the environmental injustice perpetuated against vulnerable groups.

in our knowledge practices (C. W. Mills, 1997; Tuana, 2004, 2006; Sullivan & Tuana, 2007), can offer us insight. Scholars argue that ignorance is often not a simple short of knowledge about a certain thing that can be remedied once we notice. Like knowledge, there is also a close relationship between ignorance and power. Ignorance should be explained as a "substantive epistemic practice in itself" instead of "a neglectful epistemic practice" (Alcoff, 2007, emphasis in original).

C. W. Mills (1997; 2007) argues that the privileged whites not only ignore the lives and histories of the racial black but also are unable to perceive the persistent discrimination and oppression towards them. Such ignorance operates through a dysfunctional process of cognition that can result in distorted and faulty senses of reality. Perceptions, memories, and (a lack of) motivational group interests are all involved in shaping the "perceptual attentiveness" and belief-forming practices that inculcate and perpetuate ignorance. Ignorance, which is a critical component of racism, is an active result of "many acts and many negligences" (Frye, 1983, p. 119). Feminist intersectional scholars are concerned with the ignorance towards black women in both traditional white feminism and mendominated antiracist struggles because of overlapping discrimination specific to black women (hooks, 1981; Crenshaw, 1989). The intersection of white ignorance and male ignorance contributes to a paradoxical status of black females to be hyper-visible and invisible simultaneously— a status of "material presence and substantive absence" (Crenshaw, 2011, p. 1428). Dotson (2017) argues that within "white supremacy" and "male supremacy," American black women and girls are in a status of "unknowability" that is constituted through a set of "assumptions, stereotypes, customs, and arrangements" as different from simply "not knowing." It is an "epistemic form of disappearing" that limits our ability to know and make sense of the complex phenomena of our world, and to further perceive such inability.

The production and maintenance of ignorance is thus structurally and culturally rooted and produced through the constitutive power in the production of "truth" and judgmental normality that shape our ways of thinking and doing in ordering the world. It is alongside the production of knowledge, as it is through the universalisation and normalisation of the dominant meanings that certain groups and questions are made invisible and disappear. This is illustrated by Young (2011) as "cultural imperialism" that

involves the paradox of experiencing oneself as invisible at the same time that one is marked out as different. The invisibility comes about when dominant groups fail to recognise the perspective embodied in their cultural expressions

as a perspective. These dominant cultural expressions often simply have little place for the experience of other groups, at most only mentioning or referring to them in stereotyped or marginalised ways. (p. 60)

The production and maintenance of ignorance are thus closely related with the third and fourth faces of power, but still different from them. Wilful ignorance shows that the third and fourth faces of power shape not only the thought of the dominated to achieve their consent but also that of the dominant, which further generates a more profound sense of power as wilful ignorance. Wilful ignorance thus urges us to look not only on the experience of environmental vulnerable groups but also that of privileged groups. In addition, its achievement often cannot be separated from the operation of the first two faces of power, such as through the dominant reshaping ideologies and memories in cohesive ways or excluding people with different opinions.

As Bryant (2011) has acknowledged, the environmental crisis we are faced with today is more of a crisis of epistemology of what we know, how we know, and what we choose to do with what we know. Environmental justice scholars also have long been concerned with the pervasive ignorance of environmental injustice towards vulnerable groups by the dominant society (Arquette et al., 2002; Figueroa & Waitt, 2008; 2010; MacGregor, 2009; Belser, 2014; Moosa & Tuana, 2014; Elliott, 2015). For example, Dotson and Whyte (2013) have argued that, certain groups' environmental injustice is unknowable as a result of the failure of the dominant society to detect certain wrongs and make sense of different forms of injustice.

Power as Power to and Power with

In a general sense, *power to* was raised by scholars to refer to people's capacity to do or achieve an end or a set of ends, in contrast with *power over* that is based on social hierarchical power relations. From a political perspective, *power to* refers to one's capacity to challenge domination and make subversive changes, which is emancipating, empowering, and productive. This is especially stressed by feminist scholars who assert women's capacities that originate from the practices of care, motherhood, and maintaining relationships to empower themselves, transform others, and to resist male domination (e.g. Held, 1993; 2006; Allen, 1998a).

At a structural and collective level, *power to* rises as a result of a joint pursuit of common goals, as opposed to "violence" that is a lack of power. Power is not a zero-sum game as the increase of one's interests is not based on the sacrifice of others'. Power thus

could be productive for all participants based on reciprocal interaction and communication. From a political perspective, it refers to people's capacity to act "in concert" from the bottom-up as opposed to top-down domination and violence (Arendt, 1958). Allen (1998a) uses *power with* to refers to the type of power that is generated through building solidarity either within one social movement or among different social movements, which is key to intersectional politics. As a collective empowerment, it is "the ability of a collectivity to act together for the attainment of a common or shared end or series of ends" (Allen, 1998a, p. 35).

There is thus a blurred line between *power to* and *power with*. For some scholars, what *power with* refers to is also part of *power to*. However, accepting Allen's politically relevant account of power, I use *power to* to refer to the individual's political agentic power of acting against the power that subordinates an individual, and *power with* to refer to solidarity either within one social movement or among different social movements to make political changes. While *power to* emphasises the vertical dimension of power relations between the dominant and the dominated, *power with* emphasises the horizontal, relational dimension of power that connects people together. However, *power to* and *power with* are still closely connected. *Power with*, which could be seen as a collective form of *power to* in terms of resisting domination, also has the vertical dimension. Individuals' *power to* as agentic power can be derivative from *power with* as well. For Arendt, power is based on the communicative action and emerges when people act together in concert, which makes possible the public space and in turn serves as a condition for the achievement of individual agency.

In fact, the relationship between *power over* and *power to* (and *power with*) is also often blurred (Göhler, 2009; Haugaard, 2012; Pansardi, 2012). *Power to* and *power with* can be closely connected with *power over*. For example, to have *power over* implies that one has the capacity to achieve a goal (*power to* in a general sense). To have agentic power as *power to* and *power with* might also entail applying *power over* others. In addition, *power to* as empowerment can come directly from one's reflections upon and critiques towards the *power over* as oppression.

Political agentic power (as *power to*) can manifest very differently in relation to different faces of power as *power over*. When faced with coercive or violent forms of *power over*, the suppressed might fight back against the violence and injustice with concrete actions, in forms of conflict, protest, or rebellion. *Power to* and *power with* in this situation mainly manifest as the conflictual *power over*. However, either with social

movements or other types of actual resistance, the action itself should never be regarded as identified with agency (Alexander, 1992). When it comes to the third, fourth, and fifth faces of power, agentic power would manifest as a capacity to resist the "false consciousness" or a sense of critical reflexivity towards social norms and discourses that subjugate people and cause the wilful ignorance of the dominant.⁵ As B. Davies (1991) argues, "Agency is never freedom from discursive constitution of self but the capacity to recognise that constitution and to resist, subvert, and change the discourses themselves through which one is being constituted" (p. 51).

Therefore, political agentic power could manifest diversely given the intricacy of the phenomena of power. It can manifest at levels of both concrete actions and consciousness/reflexivity, both individually and collectively. There could be actions of various forms with or without critical reflexivity at different degrees, and vice versa. As different faces of power are also intertwined with each other, one's agentic manifestation could be more varied than what can be observed in social movements, grassroots activism, or other institutional political processes. It rather refers to "a variety of individual and collective, official and mundane, rational and affective, and human and non-human ways of acting, affecting, and impacting politically" (Häkli & Kallio, 2014, p. 181).

For example, some scholars have emphasised the affective dimension of power and agency. Hynes (2013) argues that affect is not only involved in macropolitical collective resistance and micropolitical everyday resistance, but also "operates beneath and between both individual and collective struggles— a more-than-reactive, barely recognizable, less-than-conscious mobilisation of bodily potentials" (p. 573). He further emphasises the importance of the affective dimension in discovering the unperceivable forms of power and potential ways to resist them. Affective energies not only manifest in relation to concrete actions (such as anger and a sense of solidarity in protest) but also entangle in the

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⁵ Post-structuralist scholars who emphasise the constituted nature of subject have long been wrestling with the possibilities of agentic being in terms of a Foucauldian sense of power, which is also important to feminist politics (Hekman, 1991; Butler, 1997; Allen, 1998b; Kachra, 2006). For example, Butler (1993) has pointed out "the paradox of subjectivation" (*assujetissement*), which refers to the situation that the subject who is supposed to resist such norms is enabled and even produced by such norms. For Butler, the possibility of agency lies in the "citations" and "reiterations" of the hegemonic discourses and norms by the subject that are necessary for them to reproduce and maintain themselves, which in turn opens space for the subject to subvert them. We are constituted but not determined by social norms and discourses. Foucault himself also does not deny the possibility of detaching from the norms and discourses. His discussion on "critique" emphasises the process of desubjugation of the subject that allows individuals to develop the capacity to think, rethink, and act (Foucault, 1997).

process of meaning-making and perception-shaping (Wetherell, 2013). Feelings and body reactions (such as micro-expressions) often stick closely to people's conceptions and perspectives. It is thus also crucial to pay attention to the affective dimension of power and agency, which can further require a fine-grained way of engaging with research participants.

Agency also has a temporal dimension. Emirbayer and Mische (1998) argue that human agency is constituted by three elements of iteration (past), practical evaluation (present), and projectivity (future). Our agentic orientations are always shaped by our past patterns of action and thought, our hopes, aspirations, fears, anxieties towards the future, and our capacity to make judgements and negotiations based on our past experience, future imagination, and the present situation. Appadurai (2001; 2004; 2013) has argued the "capacity to aspire" as an important factor in producing durable political changes in the face of poverty, which is a navigational capacity that allows one to explore the future more realistically based on existing opportunities and experiences in connecting the concrete desires to current contexts and norms. He further argues that the capacity to aspire is unevenly developed between the richer and poorer people as the latter often lacks "the archive of experiences and stories through which wealthier communities were able to build the sinews of the imagination that underlie the capacity to aspire" (Appadurai, 2013, p. 213). Our past experiences are thus closely related with our hopes and aspirations, which further determine our capacity to act. In turn, it is also through the exercises of voicing and participating in activities that one can build the capacity to aspire and achieve hopes and desire realistically.

The picture of agentic power as *power to* and *power with* is so complex that it requires us to not only focus on institutional political participation and concrete social movements but also engagements, interactions, and negotiations in everyday life. Many research based on in-depth fieldwork across different places have shown us the various forms of actions taken in everyday life that can make political change (J. C. Scott, 1990; O'Brien & Li, 2006; K. Walker, 2008; Havel, 2009; Tria Kerkvliet, 2009; Häkli & Kallio, 2014; Schlosberg & Coles, 2016). It is thus important to keep attentive towards the temporal, spatial, and affective dimensions of agentic manifestations and capture the fragile, dispersive, and uncertain forms of agency as everyday agency (Jokinen, 2016) or small agency (Honkasalo, 2009) that are embedded in micro-level everyday practices based on relationships and interactions. The "relationship" I refer to here does not only mean interpersonal relations, but various relationships through which agentic moments can

be revealed. This might include individual's relationship with oneself through negotiating with oneself in terms of past experiences, future expectations, and present weighing, or situating oneself in relation to habitus, norms, and discourses. It can also include the relationship between the researcher and the researched. This could happen in a sense that the participants' agency can be revealed through dialogue and interaction with the researcher. Moreover, through relating to and engaging with the research and the researcher, the participants' hidden agentic moments can also be activated and come to the surface.

This framework of *power over*, *power to*, and *power with* corresponds well to the three themes mentioned above. The domination aspect of *power over* that leaves disadvantaged groups open to suppression and manipulation socially and environmentally is key to understanding the experience of environmental injustice. The concept of *power to* as empowerment is applicable to discuss the emergent agentic power that individuals have in resisting social and environmental subordination. *Power with* is suitable to discuss solidarity and the collaborating relationship between EJMs and other social movements. The interactive relationship between these three concepts of power also reflects in environmental justice studies in a sense that the three themes are often related and discussed together by scholars. Intersectionality adds a more complex dimension towards the discussion of the three themes. Through underlining the intersected relationship among power relations based on different social differences, many environmental justice scholars have incorporated intersectionality into their work.

Engagement Between Environmental Justice and Intersectionality

The idea of intersectionality appeared in environmental justice studies from the very beginning, although the term itself was not initially used. This can be seen in scholars' early criticisms of evaluating the effect of one single variable—either race or class—on the distribution of environmental pollution in 1990s. Such analyses often regard different social variables as being independent from each other, sometimes positioning them as either/or (Mohai, Pellow, & Roberts, 2009).

The "race vs. class" debate has been criticised by many scholars. Leading environmental racism campaigner and scholar Robert Bullard (1993) describes it as the "race versus class trap". He points out that "white racism is a factor in the impoverishment of black communities and has made it easier for black residential areas to become the

dumping grounds for all types of health-threatening toxins and industrial pollution" (Bullard, 1990, p. 9). Racism and impoverishment (or race and class) are thus inseparable in the way they shape environmental injustice in black communities. Pulido (1996) criticises the "race vs. class" debate for positioning racism as neatly isolated from other systems of oppression. She proposes that we should instead strive to understand racism in a textured way and acknowledge the "fragmented and multifaceted nature of racism." Both acknowledge the interactive relationship between race and class in shaping experiences of environmental injustice.

While some intersectional awareness is demonstrated in the above criticism, other analyses in early environmental justice studies have an even clearer sense of intersectionality (although they still do not use this term). For example, Pulido and Peña (1998) use the term "positionality" to indicate one's location within the social formation that factored in class, racial position, gender, and sexuality, etc. Positionality is seen as affecting both the experience of environmental injustice and the ways in which people respond to it. Krauss (1993) examines the ways in which different working-class women activists (including white working class, African American, and Native American women activists) engage with environmental resistance and the concept of environmental justice. She argues that women protesters' intentions in their resistance towards toxic waste are never solely related to concerns over environmental risks, but rather are always mediated by other issues related to class, race, and the sovereignty of indigenous people.

Without referring to the concept of intersectionality directly, these early works are indeed concerned with people's multiple social identities and how they interact in shaping both environmental injustice and people's responses towards it. In recent years the development of environmental justice studies has been accompanied by more and more voices, provoking a deep intersectional analysis of environmental justice among scholars. For example, Buckingham and Kulcur (2010) consider feminist intersectionality as a way of widening consideration of environmental injustice. Mann (2011) regards intersectionality as a feminist framework that "best complement the environmental justice movement" (p. 4). Going beyond this special focus on gender, in his illustration of Critical Environmental Justice (CEJ) studies Pellow (2016) lists intersectionality as the first pillar of CEJ studies. Intersectionality speaks to the ways in which various social differences work together to place particular (both human and non-human) bodies at risk of exclusion and marginalisation in terms of both intra-human injustice and human-nonhuman oppression. Developing deeply intersectional environmental justice scholarship is also

proposed by Malin and Ryder (2018) in a specific column on environmental justice and intersectionality in the journal *Environmental Sociology*, to "capture how issues of racial/ethnic marginalisation, poverty, gendered discrimination, disablement, ageism, rural/urban divides, and many other dynamics help shape experiences of environmental injustice" (p. 2).

If we say that earlier scholars were not employing intersectionality intentionally, these recent explicit calls encourage us to explore the ways in which feminist intersectionality could deepen our understanding of environmental justice and enrich our analysis. In my view, this would largely depend on our understanding of intersectionality and ways of applying it. In this sense, it is necessary for us to examine how existing research has understood and employed intersectionality in environmental justice studies. In the next section, I shall illustrate and reflect upon their engagement within the three themes that I have listed above: the environmental injustice experience; the formation of subjectivity and agency; and the possibilities of intersectional politics.

The Environmental Injustice Experience

The importance of intersectionality lies in the fact that it argues for an inseparability and interdependence of multiple social differences. It thus goes beyond the additive model, which presumes that different social categories are independent from and summable with each other. Conversely, different social categories should not only be discussed *alongside* one another, but they should be explored in terms of how different systems of oppression *create, shape, and reproduce* each other in shaping the unique experience. ⁶

Quantitative environmental justice studies that incorporate intersectionality aim to break away from this additive model and focus on exploring the ways in which multiple social categories interact to contribute to unjust environmental risk distribution (Crowder & Downey, 2010; Rivers, Arvai, & Slovic, 2010; Sicotte, 2013; Liévanos, 2015; McKane

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⁶ Garry (2011) distinguished between two types of intersectionality: the intersectionality of "interlocked" oppressions and that of mutually constituted and fused oppressions. The difference between these two is that while the first "does not change the nature of what is interlocked," the second emphasises the "inseparability of oppressions." In other words, in the latter process, there is no single system of oppression. On the contrary, those different oppressions are mutually intermeshed, constituted, and fused within the process of production and development. Different identities and systems of oppression could not be split or fragmented in the process of production at all. My own view of intersectionality falls in-between, much like Garry's perspective (2011): "intersecting oppressions change each other, but are not necessarily fused" (p. 838). I admit that different systems of oppression are intersected and function together to shape people's experience of injustice, but I also think we can still talk about them separately. This is because even though they depend on, influence, and change each other, they are still different from each other.

et al., 2018). Scholars have acknowledged that current quantitative analyses of environmental justice, which focus on testifying to the (positive or negative) correlation between environmental risk distribution and different social variables (mainly race and class), have contributed little to our understanding of the intersectionality of different social categories in shaping environmental injustice experiences (T. W. Collins, Grineski, Chakraborty, & McDonald, 2011). Attempts to incorporate intersectionality and go beyond single variable analyses towards comparative intra-/inter-categorical analysis have thus far been made.⁷

Though different types of regression models are used,⁸ these works mostly use census tract groups (with different racial, class, and gender characteristics) as the unit of analysis. Their intersectional analysis is generally achieved through combining different variables to observe changes to environmental risk patterns. For example, McKane et al.'s (2018) analysis proves that census tracts with a below-average percentage of racial minority population are remoter from bus depots (thus facing less environmental risk) than those with an above-average percentage of racial population in all three of the boroughs examined. When the variable of percentage of population in poverty is introduced, the results vary differently in each borough. In Brooklyn, among census tracts with an above-average percent of racial population, those with a low percentage of people in poverty are remoter from bus depots than those with a high percentage. However, there was no difference based on poverty among census tracts with an above-average percentage of racial population in Bronx. Therefore, the combination of certain social categories (e.g. race and class) might generate different outcomes in different places.

However, although intersectionality has been introduced into quantitative analysis, the problems mentioned in the Introduction cannot be fully solved. The first problem is related to the variability and reliability of quantitative research results. How can we explain the varied results that imply different interactions between social categories in different places? Does the possibility of ignoring or misrepresenting certain groups of

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⁷ McCall (2005) has identified three types of intersectional analysis. The first, the anti-categorical approach, is based on methodologies that deconstruct social categories. The second, the intercategorical approach, comparatively examines relationships of inequality among already constituted groups. The third, the intra-categorical approach, focuses on examining the intersection of different social categories within a single group of people (e.g. black women). In fact, among the quantitative intersectional analyses examined here, only T. W. Collins et al. (2011) clearly claims to employ an approach (the intra-categorical) based on McCall's division. In my view, other quantitative intersectional studies could be regarded as falling between the last two approaches.

⁸ For further discussion on the different types of regression models for intersectional application, see Bauer (2014).

people's experiences still exist within an intersectional quantitative analysis? Does McKane et al.'s (2018) results in the Bronx mean that those who are poor and racialised have the same experience in their everyday lives as the rich minority people in the same area? The second, more urgent problem is that, even though interactions between two or more categories could be proved to exist statistically, this does not explain the concrete ways in which the multiple faces of power embedded in systems of oppression come together to shape the unique experience.

Addressing the first problem involves looking at the methodological problems of sample selection, reliability of data, analysis strategy, regression model selection, etc. in quantitative analysis, however this is not my primary concern here. What I want to emphasise is that both problems should be discussed in the context of how quantitative analysis relies on social categories or positions as variables without thoroughly considering individuals' real experiences and the macro systems those social processes exist within. In fact, intersectionality is concerned with social divisions at both the macro- (social and structural power) and micro- (actual concrete people) levels, and therefore embraces everyday, subjective, intersubjective, experiential, organisational, structural, and representational levels of differentiation (Yuval-Davis, 2006; Dhamoon, 2011; Winker & Degele, 2011). Some quantitative analyses are inadequate because they ignore both the feelings and experiences of individuals and macro social processes and institutional oppressions, through which the multiple faces of power over environmental vulnerable groups could be fully revealed and discussed. These gaps could lead to inconclusive results that ignore or misrepresent certain people's experiences and/or an incomplete data analysis that cannot fully interpret the production of environmental injustice.

Despite these issues, I do not intend to deny the importance of an intersectional quantitative analysis. My point is simply that in order to explain the production and variability of environmental injustice experiences more thoroughly, we need a multi-dimensional employment of intersectionality that is attentive to the ways in which multiple faces of power intersect with one another. This means scholars need to keep critically evaluating their intersectional quantitative research methods and analysing their research findings in consideration with both the macro social, political, and historical contexts and individual-level variables that go beyond the data itself, such as personal biographies and experiences (McCall, 2005; Bowleg, 2008; Bauer, 2014).

There are also qualitative studies that employ intersectionality to examine the experience of environmental injustice. Using methodologies that encompass ethnography,

oral history, and interviews, such analyses are usually based on individuals' lived experiences instead of geographic and demographic data. Some studies have questioned the homogeneity of environmental injustice experiences among vulnerable groups. For example, Vickery's (2018) research focuses on social categories and examines the heterogeneity of flood experiences within homeless communities during disasters, exploring the related intersectional identities of mental illness, gender, physical disability, and immigration status. Other works highlight the environmental injustice experience of a certain group of people as a result of the intersected systems of oppression. For example, Clark et al.'s (2018) analysis examines a case of Chinese coolies in the Peruvian Guano trade in 1800s to reveal how a range of intersectional powers (particularly the racialised and gendered international division of labour) that are dependent on particular social, historical, and geographical contexts contributed to their social and environmental injustice. Both cases reveal that intersectionality can help us better understand the complex process that produces environmental injustice.

However, in my view, the multi-dimensional perspective is still missing in some qualitative intersectional analyses. For example, in her paper, Vickery (2018) examines the intersecting identities (including mental illness, gender, physical disability, and immigration status) of the homeless people in sequence to examine the heterogeneity of the experiences of homeless people in Boulder County, Colorado. This analysis focuses on explaining "how these characteristics became salient during disaster and how one's identity as 'homeless' overlaps with other traits in an interactive fashion" (p. 141). Therefore, Vickery's intersectional analysis is restricted to individual forms of identity and fails to consider the systematic and representative levels of each identity. For example, when talking about immigration status, she attributes the illegal immigrants' more marginalised position to their inability to "access resources as a result of fear, limited English-language comprehension and/or knowledge of service availability," without discussing the possible institutional barriers and power relations they face at systematic and representative levels.

However, I do not intend to overplay or generalise my critique to all the existing intersectional studies of environmental justice experiences (quantitative or qualitative).⁹

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⁹ It would be unfair to say that these scholars use intersectionality in a totally dogmatic way, intentionally or unintentionally. I acknowledge that some quantitative scholars are critical of the methods they use and have embraced synergistic research to better understand environmental

What I want to emphasise is that the existing literature shows that it is still possible that the complexity of intersectionality might not be considered in certain discussions. The point is that intersectionality should be employed to reveal how multiple faces of power based on different social categories intersect to produce and maintain environmental injustice. This means, first, to attend to all the possible faces of power from an intersectional perspective. For example, even though wilful ignorance has been emphasised by some EJ scholars as mentioned above, how people are being wilfully ignorant at different degrees as a result of their intersectional positionalities could be concerned more. Second, it also means to explore any possible ways of intersection among multiple power relations that make people socially and environmentally vulnerable. As Pulido (2017) shows, only through putting environmental racism in the framework of racial capitalism, which encompasses the racialised production of differential value, devaluation of non-whites and various types of state-sanctioned violence, shall we explain why environmental racism is so persistent and difficult to overcome. Emphasising environmental racism as constituent of racial capitalism means to concern more than the intersection of race and class differentiations, but the multiple faces of power (domination, exclusion, devaluation and ignorance) within racial capitalism that sustain environmental racism. Such a way of discussion can be extended to more social differences such as gender, age, migrant status, and indigenous status. Intersectionality thus not only encourages EJ scholars to engage more with critical race theories, feminist studies, decolonial studies, etc., but also explore the various interactions among the power dynamics that these research areas focus. For example, it is worth to explore whether there is an intersected (more than additive) racialised, gendered and aged devaluation of labour or wilful ignorance in the production and maintenance of environmental injustice.

The Formation of Subjectivity and Agency

The emergence of consciousness of environmental injustice among activists has always been an important topic (Szasz, 1994; L. W. Cole & Foster, 2001; Schlosberg, 2009). Many scholars have explored the agentic power (as *power to*) of environmentally

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justice in an intersectional way (e.g. McKane et al., 2018, p. 83). A lot of quantitative scholars also emphasise the importance of systemic analysis to explain quantitative results. On the other hand, all researchers make certain tradeoffs in their discussions due to, among other things, their specific focus, limitations of resource collection, limited space of a paper, etc. For example, it might be difficult for studies on a historical group of people (e.g. Clark et al., 2018) to encompass individuals' feelings and experiences due to material limitations.

vulnerable groups in an intersectional way (Krauss, 1993; Pulido & Peña, 1998; Ducre, 2018; Larkins, 2017; 2018; Nygren & Wayessa, 2018). They make identity their focus and examine the ways in which intersectional identities inform different notions of justice, awareness of inequality, and aspirations for empowerment among environmental justice activists. These works thus highlight the importance of the activists' intersectional experiences of marginalisation based on the different identities shaping their agency. Among them, some scholars (e.g. Krauss, 1993; Larkins, 2017) explore the heterogeneity of subjective notions of agency among environmental justice activists. Others (e.g. Ducre, 2018) emphasise the agency of the "intersectional activist," which refers to people who "self-identify with various races, ethnicities, sexualities, and genders as they attempt to put the principles of intersectionality into practice" (Doetsch-Kidder, 2012, p. xiii).

Though they examine different cases, what these works have in common is that all focus on the ways in which striving for environmental justice is modulated by the multiple identities of activists. They emphasise how their positionalities and experiences (of being disadvantaged as a woman, racial minority, or immigrant) shape their consciousness and claims for environmental justice. However, I want to argue that this way of employing intersectionality within existing analyses of agency is relatively unitary and not diverse enough. Instead, we should employ intersectionality in a way that allows us to have a more complicated picture of agency in environmental justice studies.

Firstly, existing analyses presuppose a positive correlation between experiences of marginalisation and subjectivity formation. For example, in Krauss's (1995) analysis, the experience of being a woman of colour leads one to generate environmental justice claims that are directly related to race and women issues. However, this process does not necessarily happen within all environmentally vulnerable groups, as there is not always a one-way relationship between systems of oppression and agency formation (between *power over* and *power to*). Systems of oppression and power relations can shape agency by

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¹⁰ Nygren and Wayessa's (2018) work is a little different here. Firstly, they argue that the institutional governance on displacements in the face of environmental risks and disasters not only produces multiple marginalisations based on gender, social position, and political power that shape the experience of environmental injustice, but also that it constrains the capacity of the displaced for political engagement. In this sense, instead of focusing on multiple social identities that could motivate and shape the formation of individual agency, they emphasise the macro political processes of institutional intervention and absence in controlling people's ways of resistance through intersectional oppression. Secondly, in addition to analysing existing social mobilisations and campaigns, they also acknowledge the everyday forms of resistance, the fragmented struggles, and the heterogeneity of justice claims among environmental vulnerable groups. As we shall see later, these two points can create more space for a discussion of agency formation.

both enabling and limiting people's ways of acting and thinking in response to their oppression (Boogaard & Roggeband, 2010). In other words, it is possible that they could be agentic beings that are reflexive about their plight and act on it to challenge and change the structures of injustice. It is also possible for them to internalise power as domination, possess a "false consciousness," and end up helping produce and reproduce the systems of oppression. *Power over* as domination and suppression does not always lead to the generation of *power to* as acting against the constraining *power over*. This way of interpreting agency thus overlooks the ways in which multiple faces of power can shape the formation of agency and thus simplifies the dynamic relationship between *power over* and *power to*.

Secondly, existing analyses mostly explore the intersectional environmental justice claims and consciousness of activists who are involved in resistance and pay little attention to the complexities of the agentic manifestation of environmental vulnerable groups who are not actively involved in open resistance. As we have seen in the previous section, people's agency refers to one's capacity to negotiate with power that puts one in an oppressed and marginalised position. It has temporal, spatial, and affective dimensions and can manifest in various forms (social movements, collective actions, everyday resistances, compromises, negotiations, aspirations, etc.) with differing motivations (intentionally or unintentionally, consciously or unconsciously, etc.). One's agency should thus be regarded as fluctuating, multi-dimensional, and contesting, rather than as a fixed and unified whole. The various forms of agentic power should be given more attention.

Thirdly, it is also important to reconsider what we mean when discussing the "agency" of vulnerable groups in terms of environmental injustice. In fact, there is a distinction between one's "environmentalist agency" and "environmental justice agency." The former has an environmentalist core and refers to one's awareness of the responsibility and ethics towards the nature, and worry of the harm to human being's health brought by environmental pollution. Thus, environmentalist agency manifests mainly as a capacity to act against environmental pollution and degradation, through everyday environmentalist behaviour or collective protests against the power (from, for example, companies or governments) that contributes to pollution. The latter, however, focuses more on negotiating with the power relations that put certain groups of people in a more environmentally vulnerable status. In this sense, the power relations that these two concepts of agency aim at are somewhat different. However, they are also closely connected with each other. Environmental justice agency could be regarded as developed

upon environmentalist agency (of various forms), as pursing environmental justice is often accompanied with an awareness of the importance of environment, a wish for better working and living environments, and a reflection on environmental pollution and protection.

There is also a difference between being reflexive towards the multiple power relations and being reflexive towards how power relations make people environmentally vulnerable. The former does not necessarily lead to the latter. One may be critical towards the environmental pollution and the patriarchal values and practices at the same time, but this does not necessarily lead to the awareness that such values and practices can make women environmentally vulnerable. In other words, the various forms of agentic manifestation of resisting power relations that subordinate people might not be accompanied with an environmental concern, even though shaking the power relations that underlie the production of their social and environmental injustice is fundamental to making political changes.

Incorporating intersectionality makes the above three points more complicated. The ontological basis of each social division prioritises different spheres of social relations, and different social structures also have different internal organisational logic. 11 Therefore, even though different systems of oppression are intersected and mutually influence each other, they might still shape the formation of agentic power in different ways. One may be more critical towards power relations based on migrant status rather than gender. On the other hand, multiple and intersected systems of oppression do not necessarily lead to "multiple consciousness" (King, 1988). On the contrary, one's identity as migrant and worker might generate adverse effects towards the formation of feminist consciousness (Chow, 1987). It is thus important to be critical towards the various ways in which multiple systems of oppression intersect to shape consciousness and agency. This is not to deny the existence of "multiple consciousness", but to emphasise the possibility of various forms of "intersectional agency." As Huijg (2012) argues, "It is important to comprehend *intersectional agency* as a location that is simultaneously informed by different

¹¹ One basic premise underlying the intersectional approach is that categories and systems of domination cannot be reducible to each other, and the ontological basis of each social division prioritises different spheres of social relations (Yuval-Davis, 2006; Phoenix, 2006; Bailey, 2009). For example, while class division is related to economic processes, gender division can be regarded as being related with discourse about sexual/biological differences (Yuval-Davis, 2006). One social category can manifest and function in different ways in different political and cultural environments.

manifestations of axes and, therefore, positions in power relations that generate agency as action and...inaction" (p. 8, emphasis in original). In addition, when incorporating the environmentalist element, we need to be concerned with people's agentic manifestation towards various power relations along with how these power relations are related to being vulnerable to environmental hazards. For example, a women worker may be aware of the environmental injustice caused by her working environment based on her class identity, but may not be aware of environmental injustice related to her gender identity in working and daily life.

In other words, intersectionality could help us go beyond subordination vs. resistance dualism. As Pun (2005b) argues, "A matrix of domination relations could hardly be reduced to a single dominant oppositional logic" (p. 193). What we are faced with is complex power relations situated within different social categories that both encourage and limit the formation of agency. It thus becomes difficult to suppose a unified agency and oppositional position that a person/group of people can possess. Bilge (2010) argues that,

The study of subject-formation can thereby be related to systemic and relational concerns with interlocking power structures, examining their enabling and disabling effects on individuals, and their context-dependent compound configurations, without reducing the many contradictory and intersecting ways in which human life is experienced. (p. 24)

Therefore, environmental justice studies should pay more attention to examining the diverse ways in which complex power relations based on different identities intersect to shape the agency of vulnerable groups. A more complicated picture of agency is needed to reflect reality than that of a dualism of resistance vs. subordination. This is particularly true for migrant workers, who are usually portrayed as being acquiescent towards their environmental vulnerability.

Intersectional Politics/Politics of Intersectionality

Through offering a framework for contesting multiple power relations, intersectional politics emphasises the interaction among different resistant movements (Crenshaw, 1991; Hancock, 2011). Intersectional politics is about how intersectionality can be practiced on the ground among activists, organisations, and movements in terms of making political changes. Intersectionality is often regarded as a social movement strategy for an organisation or a certain group of vulnerable people to reflect on power relations and multiple states of subordination (e.g. Strolovitch, 2007; Chun, Lipsitz, & Shin, 2013), or

for multiple organisations to build alliances and coalitions (e.g. Tormos, 2017). In terms of environmental issues, intersectionality is often regarded as a nodal point that connects EJMs and other social movements (Jampel, 2018). A widely discussed example is women's reproductive rights, which have been regarded as deeply intersected with environmental justice issues (Di Chiro, 2008; de Onís, 2012; Zavella, 2016; Hoover, 2018).

Another example lies in scholars' efforts in combining intra-human and humannonhuman injustices (Sandler & Pezzullo, 2007; Sowards, 2012). The concept of "just
sustainability" is a major thread within environmental justice scholarship, the goal of
which is "to ensure a better quality of life for all, now, and into the future, in a just and
equitable manner, while living within the limits of supporting ecosystems" (Agyeman,
Bullard, & Evans, 2002, p. 81). Instead of separating the movements of environmental
justice and environmentalism, these works underline the intersection of these two
movements (as well as other social movements) (Hankivsky et al., 2014; De Kleyn, 2017).
For example, Nixon (2011) proposes an intersectional environmentalism that integrates the
causes of environmentalism, women's issues, and human rights and thus improvises
coalitions among initiatives for "sustainable security and democratic transformation" (p.
138). Ducre (2018) examines the "black feminist spatial imagination" that incorporates
issues of race, gender, and ecology.

Analysing the formation of environmental injustice reminds us that addressing it should reduce other forms of inequality at the same time. Existing analyses on the intersectional politics between EJMs and other social justice movements have shown that it is important for activists and organisations to acknowledge and attach importance to such intersections and formulate coalitions to achieve collective liberation. Various cases (e.g. Di Chiro, 2008; Beamish & Luebbers, 2009; Nixon, 2011) have also revealed that in different situations such coalitions can generate more liberating power together rather than separately. While these have shown us some of the possibilities for building intersectional politics, greater discussion concerning the obstacles that might impede its formation is needed. It is critically important to avoid portraying intersectional politics and solidarities among different activists and movements as an inevitable and automatic outcome of the intersected systems of oppression. This is particularly true given the complex phenomena and various forms of environmental injustice in our world.

Acknowledging that there could be different obstacles under different situations, I shall mainly list three possible means of resistance. The first resistance might come from

intersectionality itself. Different framings of a certain issue from different organisations (i.e. learning how to understand and respond to certain topics) might prohibit alliances among different organisations or movements (Cooper, 2004; Verloo, 2013). In other words, positional differences based on gender, class, and migrant status might generate different attitudes, interests, and expectations, which in turn may impede the formation of coalitions (Pulido & Peña 1998; Beamish & Luebbers, 2009). Migrant people, for example, might not attend environmental protests held by local people, because their positionality as "outsiders" means that they feel less responsible to protect the local environment. In other words, in some cases, intersecting power might impede other than facilitate achieving solidarities and coalitions across positional differences. The key problem, moreover, is learning how to establish and maintain solidarity while acknowledging difference. In addition, constructing a collective identity or forming a common political agenda to maintain solidarity among different groups of people and organisations or within a broader social movement sometimes might reproduce the existing power hierarchies. To maintain solidarity, the issues faced by more disadvantaged subgroups in coalitions or movements are often ignored for the sake of issues that affect the majority of people (Strolovitch, 2006; E. R. Cole, 2008; Laperrière & Lépinard, 2016; Adam, 2017). To deal with this paradox, some scholars (e.g. E. R. Cole, 2008) propose that it is more important to build alliances based on shared interests— a shared vision of the subordinate position to power—instead of shared identities. As Allen (1999) argues, this is key to Arendt's work on power: "collective political movements are held together not by a shared identity, but by the shared commitment of distinct individuals to work together for the attainment of a common goal" (p. 112).

The second resistance might come from the complicated relationship between *power over* and *power to* discussed in the previous section. An intersectional examination of power and agency is necessary to provide opportunities for environmental and political changes. However, at the same time, the complicated nature of intersectional agency might pose an obstacle to generating spontaneous collaborations. For example, Kim (1999) has analysed the process of "relative valorisation" through which Whites valorise Asian Americans relative to Blacks on cultural and/or racial grounds to subordinate both groups. This process sometimes can generate conflicting resistance strategies among different subordinated racial groups, which deflect attention away from White racial power. In terms of a certain intersectional marginalised group, it is also important to consider the uneven and fragmented development of consciousness and agency based on different identities

towards environmental injustice. For example, if gender is not widely accepted as an important factor shaping environmental injustice among migrant women workers, a coalition would be difficult to build at the very beginning. It is thus important to ask how *power to* can turn into *power with* when the agentic power is fragmented and dispersed.

The third resistance might come from the external social and political environments. In its ideal form, intersectional environmental justice politics means ongoing reciprocal cooperation among different organisations and communities that involves environmental NGOs (ENGOs), women's organisations, labour organisations, universities and scholars, local community members, etc. Coles's (2017) proposal that we "catalyse transformative ecologies of community partnerships" that could "generate symbiotic relationships and synergies among several different organisations around multiple issues simultaneously" (p. 152) offers us a picture of how this could be in reality. Transformative ecologies of community partnership help to advance the power of democratic citizens and civic capacities to cope with multiple intersecting inequalities. Building such ecologies relies on ongoing dialogical negotiation and cooperation between different organisations and participants. However, as his analysis is based in America (within which there is massive variation), it is worth asking to what extent this can be translated into other social and political contexts. It is thus important to consider the specific social and political environments in which intersectional politics is supposed to happen. The tolerance level of a given political environment to coalitions, the development level of local NGOs, the uneven development of various organisations (women's, labour, etc.), restrictions on academic research, and levels of awareness in the local community might all become obstacles to formulating such partnerships. It is thus highly context-dependent and requires long-term efforts with specific strategies and tactics and "enthusiastic visioning."

It is impossible to list all the possible barriers here, but it is clear that we should take more time to consider the obstacles that might prohibit the formation of coalitions and partnerships in environmental justice studies. It is also important to rethink what intersectionality really means for building coalitions, as even intersectionality itself can become an obstacle at certain contexts. However, this also means that our imaginations should not restrict intersectional politics to one form. On the contrary, there could be diverse possibilities when it comes to creating coalitions that can generate democratic power and challenge multiple inequalities. Intersectionality itself should be used strategically "to take inventory of differences, to identify potential contradictions and conflicts, and to recognize split and conflicting identities not as obstacles to solidarity but

as valuable evidence about problems unsolved and as new coalitions that need to be formed" (Chun et al., 2013, p. 923). Therefore, examining the possibilities for and obstacles to generating intersectional politics in the case of Guiyu is a key aim of this paper.

Conclusion

Environmental justice and intersectionality actually "take a parallel and complementary stand" (De Kleyn, 2017). Theoretically speaking, both concern the problems of injustice and inequality (in terms of recognition, distribution, participation, and capability) experienced by disadvantaged and marginalised groups of people. As we have seen, environmental justice studies have long been involved with intersectional analysis (without engaging this term directly at the beginning). Its current complex theoretical, methodological, and political developments have formally brought intersectionality into the centre of environmental justice analysis. Existing environmental justice studies have shown a flexible way of understanding and employing intersectionality: from quantitative to qualitative studies; from identity analysis to systems of oppression; from race and class to other social differences such as gender and immigrant status.

However, a more solid way of applying intersectionality should be embraced in environmental justice studies. When it comes to discussing experiences of environmental injustice, multiple dimensions of intersectionality ought to be given more consideration in order to incorporate the multiple faces of power into our analysis. For discussion on agency formation and intersectional politics, it is necessary to avoid taking the formation of intersectional subjectivity and politics for granted and regarding them as an autonomous outcome of intersected systems of oppression. Intersectionality should be used to capture the complex power relations that shape the environmental injustice experience, the formation of agency, and the intersectional politics. What I want to propose is a more flexible and textured way of practicing intersectionality, regarding it as "a tool for critical thinking" that can "provide a set of questions that may serve as sensitisers for intersectional analyses" (Kaijser & Kronsell, 2014, p. 417). It also requires us to be particularly attentive to the complex ways in which power operates as *power over*, *power* to, and power with. This is important for us to animate intersectionality in a way that allows us to understand a complicated world more fully and continually open up more possibilities to change the world.

Chapter Two: The Problem of Contextualisation

Introduction

As we have seen from the above chapters, both the concepts of environmental justice and intersectionality originate from Western—particularly American—contexts. Both concepts have evolved and developed enormously with their meaning traveling globally far beyond their birthplace. With respect to China, the concept of environmental justice was first introduced by Chinese scholars around 2000. In the last two decades, the discussion around environmental justice in Chinese academia has evolved from first introducing this concept to later incorporating it into explaining environmental phenomena in China. In contrast, the concept of intersectionality has been only recently introduced to China (Su, 2016), though I will argue that before this formal introduction, there have been studies that can be regarded as intersectional analysis.

Compared with China, America has a more mature civil society and democratic public sphere, more closely academic involvement and interaction with the activism, as well as a long and intense tradition of democratic struggle. These contexts shall have great implications upon the various ways in which environmental justice and intersectionality are manifested, articulated, and interpreted. The normative meanings of justice, the power relations embedded in the production of injustice, as well as different systems of oppression and their ways of intersection may all vary in different contexts. This further raises a fundamental question of how viable and useful one theory that emerges from and develops in a specific time and space could be when being used in another place where the social, political and cultural conditions are significantly different. To be specific, the traveling theory could help illuminate the phenomena in a new destination in some ways but also generate misunderstandings and misinterpretations if used without considering the specific contexts of the new destination.

Using Western concepts and theories to explain Chinese phenomena has long been criticised by scholars who argue that we should try to explain China "on its own terms" (K. H. Chen, 2010; Gu, 2012; Y. N. Zheng, 2016). On the one hand, social science studies must proceed with Chinese experiences, material, and cases, putting research objectives in a Chinese context. On the other hand, it is important to create or recreate concepts,

¹ This is based on information retrieved from the China National Knowledge Infrastructure (CNKI) database.

theories, and knowledge systems that are based on China's own experiences to explain its uniqueness (Cao, 2012; X. D. Wang, 2017; P. Zhou, 2017; Y. N. Zheng, 2018). Scholars warn that dogmatically borrowing and using Western concepts and theories may lead to misunderstanding instead of fully interpreting China.

With this warning in mind, this chapter mainly aims to answer two questions. Firstly, in what sense can we use environmental justice and intersectionality in Chinese contexts? And secondly what should be concerned if we use them in Chinese context and in the case of Guiyu? I shall argue that the inclusive understanding of environmental justice and intersectionality can allow us to go beyond "borrowing" and use them in a contextualised way. Through examining Edward Said's concept of "traveling theory," I shall articulate that scholars should have "critical consciousness" towards the "imported" theories, which requires one to keep attentive to the specific contexts to which the theories travel. This in turn can shed light on the innovation of theories. I shall then examine how environmental justice has been articulated both officially and academically regarding the domestic top-down environmental governance and bottom-up environmental struggles in China, and how intersectionality has been employed to examine Chinese phenomena, particularly the issue of migrant women workers. Based on this, I shall further narrow down my discussion to the contextualisation that is necessary for the case of Guiyu.

Environmental Justice and Intersectionality as Traveling Theories

Said firstly articulates the concept of "traveling theory" in an essay of that title in *The World, the Text and the Critic* (1991), in which he aims to explore the question of what would happen if one theory moves from one space and time to another. Using Lucien Goldmann's inheritance of Georg Lukacs's theory of reification as an example, Said shows how Goldmann's theory of *theory* and consciousness is different from Lukacs's as a result of the different situations they were located in. While *theory* for Lukacs is what the proletariat's class consciousness has produced as a revolutionary will that is represented as a theoretical antithesis to capitalist reification; for Goldmann who puts Lukacs's theories into practical scholarly use, *theory* becomes the area of expertise in which class consciousness is changed to the world vision (a collective consciousness) of highly gifted writers as an expression of and a response to their political, social, and economic circumstances. Therefore, Goldmann's adaptation of Lukacs's theory has removed the

insurrectionary role of *theory*, making the original theory tame, degraded, domesticated, and losing its original power.

Through comparing Lukacs as a participant in the struggle in Hungary and Goldmann as an expatriate historian in post-World War II Paris, Said (1991) further argues that theory is "a response to a specific social and historical situation of which an intellectual occasion is a part" (p. 237). Besides avoiding the dogmatic reduction of a theory, Said also reminds us to avoid the overstatement or over-totalisation of a theory through illustrating Raymond Williams's reflection upon Lukacs' theory of reification, and rethinking Foucault's theory of knowledge and power. He argues that "there is no theory capable of covering, closing off, predicting all the situations in which it might be useful" (Said, 1991, p. 241).

Said has revisited this concept in another essay named *Traveling Theory* Reconsidered several years later to respond to the common "bias" towards his first paper, which is that theory will lose some original power and rebelliousness after traveling to another time and space. In this essay, Said negotiates with this "bias" through discussing the works of Theodor Adorno and Frantz Fanon, who are presented as "not simply coming after Lukacs, using him at a belated second degree...but rather as pulling him from one sphere or region into another" (Said, 2001, p. 451). According to Said, both authors critically draw on Lukacs's theory of reification and his reconciliatory resolution between the subject and object split caused by capitalist reification. However, their discussions not only have different objects at different locales but also represent two totally different ways of intense critique. In his *Philosophy of New Music*, Adorno makes a more animated and subtle critique towards the subject-object split as a permanent dissonance when discussing the "new music" of Arnold Schoenberg. For Adorno, the premise of Schoenberg's twelvetone theory is a rejection towards the illusion of reconciliation between the aesthetic and the commercial, which implies the impossibility of subject-object compromise enacted by Lukacs. In this sense, Adorno carries the theoretical critique towards subject-object split to its extreme so much so that he totally refuses Lukacs' reconciliatory solution.

Said also argues that Fanon's postcolonial analysis should not be regarded as a replication of Lukacs's reification theory through turning the latter's subject-object antinomy (based on European culture) into coloniser-colonised antinomy (in the post-colonial context). Fanon acknowledges that the coloniser-colonised relationship is a result of foreign intrusion instead of an internal issue like the subject-object antinomy. Fanon is also aware that the coloniser-colonised antinomy could not be synthesised and reconciled

solely through liberating and violent upheaval. Therefore, he also refuses Lukacs's reconciliatory denouement between subject and object, from where class consciousness of the proletariat arises. Rather, Fanon shows that the "reactive nationalism"— as a reconciliation of coloniser-colonised antinomy— could not lead to full independence and liberation of postcolonial sates but shall uphold colonialism in a new way. He further proposes to "invent souls" of the people that can take coherent and enlightened actions. In this sense, Fanon places Lukacs's theory in the postcolonial background and makes a more intensified and radical critique in a practical sense.

In both cases, Lukacs's theory presents "both as traveling theory and intransigent practice" (Said, 2001, p. 452). Therefore, it does not necessarily mean for theory to lose its original power after traveling to another place. It is also possible to actively and critically engage with theories in ways that modulate and intensify the analysis without rash universalisation or overtotalisation.

Originating from the American background, both environmental justice and intersectionality have experienced the process of traveling beyond their original borders. It has been argued that the employment of environmental justice framework has globalised in a way that its meanings and framings start emerging in new places around the world (G. Walker, 2009a). Parallel discussions on environmental justice have been found in numerous new settings, such as, South Africa (McDonald, 2002; Debbane & Keil, 2004), Mexico (Carruthers, 2008), India (Williams & Mawdsley, 2006), the United Kingdom (G. Walker, 2009a), and others. Within different political and institutional cultures, environmental justice manifests differently and has achieved local features. For example, Williams and Mawdsley (2006) list three key aspects of difference between the West and India that can influence our understanding on the nature of environmental justice, including the (anthropocentric) urgency towards the environmental justice debate due to the environmental influence towards people's life, the "ambitious yet incomplete" government-sponsored environmental programs caused by India's post-colonial patterns of governance, as well as the fact that environmental struggles in India are dominated by the educated middle class as a result of the unequal public sphere. They emphasise how the post-colonial conditions that are different from Western society have shaped the ends and means of environmental justice struggles in India.

Even within Western societies, environmental justice has been argued to entail different manifestations. For example, G. Walker (2009a) argues that the adoption of environmental justice in the UK has been stripped of the "radical and distinctive qualities"

entailed by the US version. This is because it is dominated by the elites, governmental officials, and environmental agencies without enough involvement of the grassroots mobilisations from the bottom. Echoing with Said's discussion, scholars emphasise that environmental justice should be locally grounded and contextualised into specific historical, political, social, and cultural situations. For example, Debbane and Keil (2004) argue against a universalising employment of environmental justice, "Historical, social, cultural and political differences have created different arrays of state policies, civic organisation, ideological hegemonies and legal realities in which the notion of environmental justice is embedded in each national context" (p. 212). Therefore, the notions of and struggles for justice are locally embedded and modulated.

Intersectionality has also experienced a transnational journey (Choo, 2012; Salem, 2018). Feminists from different countries have accepted intersectionality as an important tool for analysing their own domestic problems. This being said, feminists are also curious to know to what degree can intersectionality be used to analyse women in other countries (Yuval-Davis, 2006, p. 200). On the one hand, scholars are concerned with the risk of using intersectionality dogmatically in other contexts. For example, Erel, Haritaworn, Rodríguez, and Klesse (2010) argue that the transnational experiences of intersectionality in both Britain and Germany have revealed the diminishment of intersectionality's potential for critique and resistance. This is particularly true in Germany where intersectionality has been reduced to a fashionable term in academia and has lost its radical roots in anti-racist struggles through silencing the contributions of "women of colour" and "migrant women workers." On the other hand, the "coloniality of intersectionality" has been criticised by scholars. For example, Roth (2013) argues that recent theorising of intersectionality is mainly regarded as a phenomenon of the Global North, thus there is a need to fight against "the backdrop of continuing asymmetrical circulations of knowledge" (p. 11). There are mainly two points with respect to this critique. Firstly, the model of raceclass-gender is too dominant in contemporary intersectional analysis, which ignores that social categories could manifest and function variously under different contexts (Knapp, 2005; Patil, 2013). Secondly, intersectionality has been regarded as a Western ready-made theory, which ignores the fact that there have been analyses that could be regarded as intersectional in Third or Fourth World for a long time. The second point corresponds to some environmental justice scholars' proposal of the anti-monopoly of Western or American environmental justice framework (Kalan & Peek, 2005, p. 255).

Environmental justice and intersectionality have also been borrowed—at different levels—by scholars to explain Chinese phenomena. This reminds us of the long-existing epistemological concern that is related with critically using Western concepts, theories, methodologies, and paradigms in Chinese studies. Sinology and Sinologism have been a topic among scholars for a long time. Briefly speaking, while Sinology refers to Western studies and scholarship on China, Sinologism emphasises the power- and ideology-laden processes of knowledge production and representations about China by Western and Chinese scholars.² Gu (2011; 2012) argues that Sinologism refers to the insistence on studying China in terms of Western perceptions, conceptions, methodologies, and evaluations, irrespective of whether they conform to Chinese realities or not. He criticises it as a process of colonisation in which scholars observe China from the perspective of Western epistemology and are reluctant to view China on its own terms. For example, he argues that Hegel's examination of Chinese history, language, government, law, religion, and art, are based on Western perceptions, which leads to serious misunderstandings and biases. Hegel regards Chinese language—which does not use letters and syllables—as less mature compared than Western languages. In this sense, Sinologists tend to start from Western concepts, theories, and paradigms and use Chinese experience as source materials to justify the former. Additionally, the dominance of Western ideology in epistemology exists not only in the West's approach to non-western cultures, but also in Chinese literature through a process of self-colonisation.

However, in my view, this means that we should neither abandon the frames of environmental justice and intersectionality completely nor should we regard it as a new phenomenon elsewhere. The core issues at the centre of these concepts are still common in different settings. Even though there are diverse manifestations of environmental injustice at different cultural and political settings, there are still common reference points that can allow them to be discussed under the term environmental justice (G. Walker, 2009a). Similarly, even though there may be differences in how intersectionality is manifested (such as the ways of intersection and expressions of social differences), its essential concern with diverse identities and how oppression operates makes it relevant to a variety of settings.

² For a more detailed discussion on the difference between Sinology, Sinologism, and Orientalism, see Hodge and Louie (1998) and N. Zhou (2004).

I think an inclusive understanding of environmental justice and intersectionality can be helpful. The inclusive understanding of environmental justice itself brings together diverse experiences and shared understandings of injustice (Agyeman, Bullard, & Evans, 2002, p. 84). It also encourages us to develop our own perspectives and analyse specific environmental justice concerns at particular sites. After all, the reason for environmental injustice depends on a specific time, place, people, as well as a setting's social and political setup (Sze & London, 2008). Similarly, if we treat intersectionality as an open-ended, inclusive framework instead of a grand and ready-made theory, the problem of whether we could or should use the concept is no longer important. It thus can help break the pattern of rigidly using Western theories and concepts. Mehrotra (2010) has proposed a "continuum of different theorisations of intersectionality," which accommodates multiple epistemological bases and can be applied strategically according to the specific contexts and aims of the project. Such an inclusive way allows us to employ these two concepts flexibly and critically in other settings.

All these lead us to Said's proposition to have "critical consciousness" when employing theories in other places. Critical consciousness refers to the intellectual's ability to locate theory and provide "resistances to theory" to "open it up toward historical reality, toward society, toward human needs and interests" (Said, 1991, p. 242). The above traveling experiences of both environmental justice and intersectionality have revealed the risks of both dogmatically using these two concepts with their radical power being tamed and silenced and overstating them as being capable to explain every case in the same way. This issue should be read at two levels. Firstly, it should be admitted that concepts and theories are indeed locally modulated and embedded in response to different situations. For instance, different political situations can generate different environments for radical grassroots to emerge and expand, which shall in turn shape how environmental justice manifests and how it is interpreted by scholars. Secondly, the first point requires scholars to critically attend to these specific political, social, and economic situations to which the theories travel. It is important to explore how these new situations can reveal the limitations of the theories in explaining phenomena in new places without using them uncritically and repetitively. On the other hand, scholars should go beyond simply "borrowing" and "adapting" traveling theories to instead reignite "its fiery core" and open up more possibilities in new locales. To envisage such possibilities for this project, it could mean theoretically exploring the critical cores of environmental justice and intersectionality we are not aware of to make more intense critique (such as upon power

relations and agency) like Adorno; or practically discover the kinds of struggles and seek ways of transformation that have not been fully illustrated or explained like Fanon. Or more, it could also be possible that we move on in both ways when the situation is so complicated and uneven, which needs us to draw a more sophisticated picture with respect to *power over*, *power to*, and *power with*.

Therefore, to employ environmental justice and intersectionality, it is important to start from the complexity of Chinese conditions rather than uncritically and limitlessly using them as "grand theories." In the following sections, I shall firstly articulate the ways in which Chinese environmental struggles and intersectionality have been conceptualised in the official and intellectual traditions, in comparison to Western—particularly the American—experiences, issues, concerns, and debates. This shall lay a foundation for the further analysis on the transformation and contextualisation that are necessary to employ intersectionality and environmental justice in the case of Guiyu.

Framings in the Chinese Context

Environmental Justice

Environmental issues and environmental justice issues within China are characterised by variety and diversity. There are a lot of environmental problems that are related to justice issue at different levels (between the east and west, the urban and rural, the local and global); with respect to diverse groups of people (such as children, women, peasants, and migrant workers); and in different forms (such as grassroots activism, governmental regulations, and NGO intervention). Briefly speaking, there are mainly two approaches confronting the increasingly serious environmental crisis in China— the top-down environmental governance from the central and local governments based on the construction of EC and the bottom-up environmental struggles from the environmental vulnerable groups. Civil rights organisations such as ENGOs are located in-between these two approaches. On the one hand, ENGOs usually have to build benign relationships and even cooperation with governmental officials. On the other, they also borrow knowledge and power from protesters in revealing environmental pollution and attracting public attention.

As mentioned, EC is a top-down national policy that emphasises sustainable development and a harmonious relationship between humans and nature. However, even though people have increasingly expressed a desire for better environmental conditions,

the term environmental justice or the problem of justice is not directly referred to in the official documents of EC. Therefore, this policy should be interpreted more from the perspective of environmentalism instead of environmental justice. Some scholars argue that the problem of environmental justice should be considered in the process of building EC (J. H. He, 2013; M. Xu & Kang, 2013; H. L. Liu, 2016). According to them, the achievement of environmental justice should be listed as an important evaluation indicator of EC. Environmental justice concerns in constructing EC might include fair spatial distribution of industries among regions, an effective environmental protection supervision system, the different impacts of environmental governance on diverse groups of people, and so on.

Environmental struggle from the bottom is another force to resist environmental crisis and seek environmental justice in China. The struggles mainly come from people who seek to protect their communities against local environmental pollution and strive for environmental rights. "Environmental mass incident (*huanjing quntixing shijian*)" and "environmental resistance (*huanjing kangzheng*)" are used the most by governmental officials, media, NGOs, activists, and academic scholars to define these struggles. In academia, these struggles are distinguished by whether struggles are short or long in duration, in accordance with the law, and whether they are organised individually or collectively (S. Z. Feng, 2007). To some extent, compared with the EJM in America, these struggles are understood in a different way by governmental officials and some scholars.

Firstly, environmental struggles from the bottom are usually represented as illegal in official discourses and some academic literature. In this sense, these struggles— no

³ The term "mass incident" is not an academic concept in the strictest sense (J. R. Yu, 2009). According to *Suggestions on the Positive Prevention and Proper Disposition of Mass Incident* published by the General Office of the CPC in 2004, "mass incident" is defined as "caused by the internal contradictions among the people, led by a group of people who believe their rights have been violated and express their wishes and requests to relevant organisations, through ways of illegal gathering and containment. It also includes the activities of preparing for the incident and the process of communication and gathering during the formation period."

⁴ The discussion on environmental resistance started to appear as one branch of social resistance study in 2007 in China (T. Chen, 2014). Though this term is controversial among scholars, a broader understanding of this concept is that it is an individual or collective action caused by people who aim at protecting their environmental rights before or after the happening of environmental pollution. Compared with environmental mass incident, the term environmental resistance appears to be a more inclusive and positive concept. Like subaltern environmentalism, it recognises the positive sides of the resistance and seeks the possibility of making transformative changes through these resistances. However, there is also some overlap between environmental mass incident and environmental resistance, as some scholars often use these two terms interchangeably.

matter what forms they take— are usually regarded as "troubles" that need to be suppressed to ensure social and political stability (Y. M. Sun, 2008). This can lead to either the compromise of the local government (for example, calling off the industry siting) in a relatively better direction or the suppression of the events by force. Secondly, a lot of scholars (e.g. D. X. Zhao, 2006; Ying, 2007; S. Z. Feng, 2007; J. R. Yu, 2009) have argued that those environmental protests are more event-focused, self-interest oriented, loosely organised, less professionalised, and reactive rather than aggressive, all of which make them less powerful, radical, and productive than the EJMs in America.⁵ Thirdly, some scholars argue that, environmental injustice is generally understood differently by local protesters from its original racial and income-based meanings defined by the EJMs in America (J. J. Liu, 2011). As C. Y. Liu (2012) argues, the sense of environmental injustice of the local protesters in China comes not from the maldistribution of environmental benefits or risks among different groups, but rather the irresponsibility of the industry and government who are reluctant to take the obligation of environmental protection while achieving economic interests. In China as well as other Third World countries, environmental protests are based more on environmentalism and at the same time pursue a different sense of justice (T. Y. Wang, 2015, p. 14). There is thus a close relationship between grassroots protests for environmental conservation and the seeking of environmental justice.

There are several obstacles with respect to facilitating environmental justice in China through these two approaches. Firstly, the centralised environmental policy formulation and implementation give far more power to local authorities than to civil society and the public (Q. Du, 2009, p. 144). As a result, the local government aims first at achieving environmental targets to fulfil the requirements from the above, and gives less consideration to— or even ignores— the interests of vulnerable groups of people such as migrant workers. The command-and-control way of implementing environmental policies by local governments and village committees sometimes is accompanied with violent law

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⁵ Nonetheless, there are also some positive voices among scholars. For example, acknowledging that the rural environmental resistance is closely related with seeking social justice, Jing (2009) reveals the transformative power entailed in a rural environmental protest in north-western China. This reflects not only the awakening of the environmental consciousness of local people but also their ability to reverse the current environmental situation. J. J. Zhang (2011) points out that successful cases of environmental protest are usually ignored, with rural villagers being seen as too powerless to fight against the government and enterprise and therefore unable to make significant changes. F. Y. Shi (2005) argues that community-based social movements that aim at safeguarding rights can improve local governance and facilitate the cultivation of civil society.

enforcement and allows no flexibility (for example the brutal eviction of livestock sheds in order to ensure qualified environmental hygiene). This can further generate unfair treatments towards certain groups of people. On the other hand, this top-down environmental governance, as dominated by central and local governments, has also suppressed the space for the public to take part in environmental matters and seek justice. This mainly manifests as an exclusion of the voices from the public as a result of both the suppression of petitions and the imperfect participating mechanism. The legitimate channels within the existing political institution such as the litigation system, the official petition system (*xinfang zhidu*),⁶ and the hearing system are not mature enough to incorporate the public's opinions and voices.

Secondly, civil society organisations are relatively weak in speaking for the environmental vulnerable groups and getting involved in the implementation of environmental policies and laws— even though they in certain situations can be included in the process of policy-making as an advisory agency. This is a result of the relatively strict regulations on the autonomy of (environmental) NGOs from the state (Yao, 2013; Xin & Yang, 2014), and the necessity of taking adaptive strategies for influential ENGOs to survive in the context of China (E. T. Brooks, 2012). Additionally, ENGOs in China focus more on environmental protection and conservation than justice issue. While incorporating the voices of vulnerable groups, these organisations often avoid sensitive topics such as labour rights (Zhan & Tang, 2013). Thirdly, as articulated, "illegal" ways of protests are usually suppressed by the government, which ignores the voices of environmentally vulnerable groups and limits the growth of democratic spaces.

Overall, the issue of environmental justice in China has different manifestations. It is mainly dominated by the top-down environmental governance, which has been regarded by some scholars as "authoritarian environmentalism" characterised by a non-participatory policy process (Beeson, 2010; Gilley, 2012; Eaton & Kostka, 2014). ⁷ In support of a command-and-control model and a restriction on individual liberty, it is largely dominated by central and local governments and allows little space for social actors to play a part. Even though this mode of environmental governance might have certain benefits, for example, rapid responses towards environmental crisis, strong mobilisation, and effective

⁶ The official petition system (*xinfang zhidu*) refers to the administrative system through which individuals can reflect their requests, complaints, and opinions to the CPC and government.

⁷ Arguments about whether China's environmental governance is authoritarian or not also exist among scholars. See, for example, Lo (2015).

policy making and implementing, it can also generate adverse effects that raise serious questions about justice. This can be seen from its intolerance towards grassroots activism, exclusion of social actors in policy-making, and unfair treatments towards vulnerable groups in policy implementation.

Intersectionality

While the term intersectionality has been uncommon throughout the literature in China (Y. X. Wang, 2015; Su, 2016), recent academic work has provided the field with insight as to how the concept can be applied judiciously throughout the country (e.g. Lee, 1998; F. Xu, 2000; Jacka, 2015). Without referring to the term directly, some research on migrant women workers can be regarded as intersectional analysis. The most influential and representative work is Ngai Pun's book *Made in China: Women Factory Workers in a Global Workplace* (2005b). Pun has analysed how migrant women workers have been shaped as a social category that is discriminated by political structures, exploited by the capital, dominated by men, and excluded by the urban local people at the same time. Although Pun does not use the term "intersectionality" directly, she reveals that the formation of their subjectivity is a result of the intersectional co-constitution of class, gender, and migrant status under the combined action of state, capital, and social cultures. Following Pun, an increasing number of scholars have analysed the vulnerable status of migrant women workers under intersectional power structures (e.g. X. S. He, Xu, & Sun, 2008; B. L. Chen, 2009; Tao, 2011).

There are also works drawing on the concept of intersectionality directly in recent years. For example, Ngan-ling Chow and Zou (2011) examine how the intersectionality of class, gender, marital status, age and generation, regional differences, and so on, results in diverse experiences of inequalities under the contemporary economic crisis in China. Using a process-centred intersectional approach, Y. X. Wang's (2015) work on migrant women workers has shown the interactions between gender and migrant status in shaping their employment opportunities. Other works have also employed intersectionality directly

⁸ The "process-centred intersectional approach" comes from Choo and Ferree's (2010) work, in which they categorise three types of intersectional analysis, including group-centred, process-centred, and system-centred. To quote from them directly, "the first, emphasises placing multiply-marginalized groups and their perspectives at the centre of the research. The second, intersectionality as a process, highlights power as relational, seeing the interactions among variables as multiplying oppressions at various points of intersection, and drawing attention to unmarked groups. Finally, seeing intersectionality as shaping the entire social system pushes analysis away from associating specific inequalities with unique institutions, instead looking for processes that are fully interactive, historically co-determining, and complex" (p. 129).

to explore issues that are related with rural women in urban China (e.g. C. Y. Zhang, 2013).

Nearly all the works are focused on migrant women workers' living and working experiences in urban cities, exploring their vulnerable status in the face of multiple inequalities. Either in the name of intersectionality or not, intersectional analyses in the context of China have shown three characteristics that can shed light on our analysis in this project.

Firstly, these analyses have been put into specific political, social, and cultural backgrounds in China, including the influence of global capitalism, the transition from a socialist to post-socialist/marketised society, the authoritarian government, the socioeconomic and cultural upheavals, the rural-to-urban migration and recent returning tide, and the rise of consumerist culture. It helps to not only lay out the background information but also inform how intersectionality might manifest differently in specific settings, in terms of what social categories matter and how systems of oppression intersect. For instance, G. H. Zheng (2007) argues that global capitalism, the existing social and political system, and patriarchy do not necessarily cooperate with and reinforce each other in China. It is also possible that they conflict with or weaken each other, which might bring opportunities for changing the current situation of migrant women workers. On the one hand, global capitalism provides more opportunities for women to leave rural areas and get rid of the shackles of traditional patriarchy. Their migration to urban areas not only breaks the original division of labour and patriarchal norms in their families of origin but also allows them to achieve more independence and autonomy towards their own life (C. H. Ma, 2003; Tan, 2004). This further contributes to arousing and motivating the reconstruction of their subjectivity. On the other hand, as we have seen, migrant women workers have also encountered new forms of gender discrimination in urban areas, and have been subject to new gendered divisions of labour, consumerism, and remnant traditional gender discourses. In this sense, the relationship between migration, marketisation, global capitalism, and patriarchy is quite complicated and deserves more careful examination in the analysis of Guiyu.

Secondly, existing intersectional analyses are not restricted to the race-class-gender triplet. Even though gender, class, and rural-to-urban migrant status are still the main concerns for most of the research, other social categories such as age, marital status, sexuality, and regional difference have also been considered in these analyses. For example, M. J. He (2009) has analysed the working experiences of migrant women

workers in urban service industries. She mainly discusses the management strategies that result in the division of migrant women workers between "older sisters" (dajie) and "younger sisters" (xiaomei). She argues that such a split is the result of a gendered construction of age and its evident consequences on a women's family roles and social responsibilities. Hanser (2005; 2008) examines the ways in which sexuality and gender entangled with age and urban/rural divisions— communicate with class distinction in service work with China's transition from a socialist planned economy to a marketised society. She argues that this transition "infuses youthful, feminine, urban bodies with value while simultaneously devaluing middle-aged and rural women" (Hanser, 2005, p. 581). In addition, the social categories *per se* have also been contextualised. For example, the different manifestations of class/social stratification (F. Xu, 2000) and gender/patriarchy (Lui, 2018) in Chinese contexts have been reconsidered. Both class and gender have been argued to be locally featured in response to different political environments, economic situations, and cultural traditions. Examining these social categories in a contextualised way shall be an important premise of intersectional analysis. I shall lay out this point in the next section.

Thirdly, existing research also echoes with intersectionality's historical relationship with political activism and struggles by women of colour in America. As Salem (2018) argues, the radical roots of intersectionality should not be ignored when traveling to other places. From this perspective, some scholars also aim at seeking the voices from the bottom and discussing the agency of subaltern women in China. In contrast with black women's movements in America, research has shown that resistance and voices from migrant women workers in China are individual rather than collective, dispersive rather than aggregated, and based on daily life and working environments rather than in public political spheres. For example, Lui's (2018) study on rural wives of urban men reveals that migration policies, society, and their urban family reinforce each other to undermine rural wives' power in the family. Even though they espouse the existing patriarchy through improving themselves as appropriate "urban" wives, they also use micro-strategies to resist patriarchal practices (for example the in-laws' dominance in family) and migration policies through, for example, the online community where rural migrant wives can find support with one another. Lui also argues that in the context of an authoritarian government, it is difficult to mobilise collective action against patriarchal and migration policies openly. It is clear from Lui's analysis that the problem of agency and resistance is not only complex but also context-dependent from an intersectional perspective.

Contextualisation in the Case of Guiyu

As argued, contextualising environmental justice and intersectionality requires not to find new terms to replace them, but to understand how the specific contexts might shape and reshape our ways of analysing them. Until now, I have articulated how environmental justice and intersectionality have manifested in response to Chinese contexts in a general sense. In this section, I will narrow down my argument to analyse the contextualisation that is necessary for discussing the issue of migrant workers in Guiyu. Only through laying out this contextualisation shall we critically employ environmental justice and intersectionality in a way that can contribute to the theories themselves, as illuminated by Said in his discussion on traveling theory.

Guiyu at the Crossroads

The case of Guiyu can be characterised in two ways. Firstly, the uprising of e-waste industry in Guiyu has witnessed the synergy of the global development of capitalism and the domestic transformation from a socialist to post-socialist/neo-liberal society. Global capitalism, characterised by an international stage for production and consumption, labour employment, financial operation, and transnational governance, entails unbalanced power relations between developed and developing countries in the system of production and consumption. This further contributes to the unequal movement of labour, resources, and pollution. The feminisation of labour in the global capitalism draws a lot of women labour in developing countries into the "global assembly line," which in turn subjects them to capitalist exploitation (Ong, 1991; Moghadam, 1999; Caraway, 2005; 2007; Islam & Hossain, 2015, pp. 37-52). The feminisation of labour also features Chinese manufacturing industries, which is made possible by both the economic reforms that are characterised by assimilating China into the world economy and political reforms that help facilitate ruralto-urban migration after the reform and opening up. This interaction between international capitalism and national economic and political reforms has finally led to the situation of (women) migrant workers in Guiyu.

Secondly, the decline of the e-waste industry in Guiyu in recent years has witnessed the growing conflict between the developing economy and protecting China's environment, which has further led to severe environmental governance with an authoritarian character from the central government. With this in mind, Guiyu has already experienced (and is still experiencing) serious environmental governance as mentioned in

the Introduction. In recent years, moreover, because of the development needs of new industrialisation, ⁹ agricultural modernisation and rural revitalisation, migrant workers are encouraged by the government to go back to their home provinces to run business (General Office of the State Council, 2015). A lot of labour-exporting provinces such as Henan, Anhui, Hubei, and Hunan have started to release preferential policies to encourage migrant workers to return home. This mainly aims to mitigate the migrant labour redundancy in urban areas caused by the industry transforming and upgrading, and revitalise the countryside that is faced with rural desolation following the migration tide. ¹⁰ Another related national scheme is the new urbanisation plan (xinxing chengzhenhua guihua), which aims to facilitate the urbanisation of people instead of urbanisation of land and achieve the citizenisation of migrant workers in urban areas. This means to break the binary social structure of rural and urban areas caused by huji zhidu to facilitate the incorporation of migrant workers and their families into the urban society, allowing them to enjoy the basic local public services on education, employment, medical treatment, endowment insurance, and housing (General Office of the State Council, 2014). They are particularly encouraged to settle in county-level cities in both their hometown and migrant provinces through transferring their huji to the new place. In contrast, higher level cities (including municipalities and prefecture cities) that have a larger population and better public services often run a stricter regulation on attaining huji. Citizenisation of migrant workers in county-level cities thus aims to help alleviate the labour redundancy in big cities and promote the urban-rural integration. Whether these policies are beneficial to migrant workers at Guiyu— a township— and how they would be influenced by and react to the motivation of these policies are important to observe.

Furthermore, recent reports have also shown officials' and scholars' intention to encourage women to stop working and return to their families.¹¹ This echoes with the

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⁹ In the Sixteenth National Congress of the CPC, Z. M. Jiang (2002) has explained the concept of new industrialisation: "It is, therefore, necessary to persist in using IT to propel industrialisation, which will, in turn, stimulate IT application, blazing a new trail to industrialization featuring high scientific and technological content, good economic returns, low resources consumption, little environmental pollution and a full display of advantages in human resources."

¹⁰ Accompanied with the fast development of urban areas is the fading of rural areas, particularly in labour-exporting provinces. With middle-aged people (as the main labour force) migrating to urban areas to earn money, only older people and children are left in rural areas.

¹¹ In recent years, central leaders have emphasised women's responsibilities in the family unit at different occasions. For example, Z. Wang and Shen (2013), H. Li and Li (2015).

"universal two children policy" (*quanmian erhai zhengce*)¹² that encourages couples to have more than one child (which shall put more pressure on women to give birth and take care of children) to alleviate the aging of population. This policy has aimed to help balance the employment gap in the market and build "harmonious families." All these policy guidelines may have implications towards (women) migrant workers' current and future situations. It is thus important to see how these changes may reshape their experiences of environmental injustice, their agency formation, as well as local political dynamics.

The State-Society Relationship

From the above analysis, we can see that there remains an authoritarian characteristic of the Party-State to control and regulate the state and society in economic, political, ideological, and environmental areas. Historically speaking, China has a long history of integrating state and society with the state attaching importance to the society and people's livelihood (M. Yang, 2011). The state is regarded as an organic part of society, functioning like a parent or the head of a family (M. Jacques, 2012, p. 199). The moral persuasion and obligation to "take care of" its people is the base of the state's (and Party's) legitimacy. In a post-Mao era, China's economic reform has weakened the state's influence on society in a way that the state has reduced its control on local governments through decentralisation, ¹³ and on collective economic activities through encouraging privateoriented market activities (Liou, 2000). However, the Chinese political order is still authoritarian in a sense that the mode of "strong state-weak society" remains unchanged. It has been argued that the Party-State apparatus has even been strengthened in a post-Mao era, because it is the Party that redefines the roles of state and society in facilitating the construction of modernisation (S. J. Guo, 2012, p. 19). In this sense, it is very critical to keep in mind the mighty Party-State power in, for example, facilitating environmental governance, creating and shaping social categorisations and identities (Y. H. Jin, 2006;

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¹² The "universal two children policy" was released to replace the "one child policy" in the Fifth Plenary Session of the Eighteenth Central Committee of the CPC in 2015.

¹³ The decentralisation process has been argued to be weakened since the 1994 fiscal reform of a "tax sharing system", which has increased the central share in revenue and facilitated the recentralisation of fiscal power compared with the "fiscal contracting system" during 1978 to 1993 (G. CS. Lin & Yi, 2011). However, the extent of decentralisation (e.g. at higher-level and lower-level governments, and upon expenditure and revenue collection) is still controversial among scholars (J. Jin, Shen, Wang, & Zou, 2012; Niu, 2013; F. Zhou & Tan, 2017). Nonetheless, compared with the command economy before reform and opening up, in the market-oriented economy the local government plays a more active role in facilitating local economic growth, building local infrastructure, and promoting investments (C. He, Zhou, & Huang, 2016).

Alpermann, 2013), regulating the development of NGOs (Yao, 2013), and changing contemporary social inequality (Su, 2016).

On the other hand, one important factor that needs to be concerned in contextualising environmental justice and intersectionality is the development of civil society. In fact, scholars have also argued the adaptations and transformations with respect to using "civil society"— which is also an imported Western concept— in a Chinese context. Deng and Jing (2011) argues that, "Civil society is not a natural and unchangeable entity, but a historical phenomenon. Neither is it a universally homogenous model, but a social phenomenon contextualised in local particularities" (p. 31). Among mainland Chinese scholars, there are three particularities with respect to the Chinese civil society. ¹⁴ Firstly, many associations and organisations that serve public interests have the official background, such as the Red Cross Society of China, semi-governmental organisations like Women's Federation and Federation of Trade Unions, Government-organised NGOs, and academic groups. These organisations are classified as non-governmental organisations or mass organisations by the official. Even though they operate and exercise their functions independently from the governmental system and have a certain autonomy, they are either led directly by the Party or under close supervision of the government.

Secondly, there are a lot of associations that are built based on blood and interpersonal relationships in rural areas, such as the peasant associations, clan system, temple fair associations, townsmen associations, and so on. Some of them are closely related with local cultural customs and traditions, others are formulated based on economic or interpersonal relations. Scholars use the term *minjian shehui* (folk society) to represent a more dynamic and fluid space where cultural traditions (such as local religious practices), informal economy, *guanxi* (personal relationships) entangle in people's struggle for life.

¹⁴ In mainland China, the translations for civil society mainly include city-people's society (*shimin shehui*), folk society (*minjian shehui*), civilised society (*wenming shehui*), and citizen's society (*gongmin shehui*). These different translations reflect the controversy among scholars in defining "civil society" in the context of China. The inner connection of *shimin shehui* is the rational contractual relationship based on market economy. The main agents of *shimin shehui* are social elites including, for example, the entrepreneurs and intellectuals (Deng & Jing, 2011). *Minjian shehui* emphasises organisations and associations based on blood or interpersonal relationship in rural areas, such as the clan system and other peasant organisations. This translation is used more by Taiwan scholars to emphasise the bottom-up resistance towards the official to achieve democracy. Therefore, the relationship between state and society—the official (*guan*) and citizen (*min*)—is antagonistic. *Wenming shehui* emphasises the non-violent forms of struggles (B. G. He, 2011). Nowadays, *Gongmin shehui* is argued to be a more inclusive translation that can incorporate different types of groups and associations and reflect the particularities of Chinese civil society (B. Z. Gao, 2012).

This space is also important in a sense that it implies a bottom-up political democratic space that is produced by subaltern people who have to struggle and negotiate with life. In contrast with elite social organisations (such as NGOs), they have different motivations for resistance, modes of operation, and ways of making claims that entail the bottom people's wisdom and power. For example, rural environmental protests that are based on the values, rules, and norms of *minjian shehui* are totally different from activities taken by ENGOs—although sometimes there is mutual support between them. ¹⁵

Thirdly, scholars acknowledge a positive interaction/cooperation between the state and civil society. Not only are associations with official backgrounds connected to the state, but so too are independent social organisations such as international NGOs and foundations. The space of *minjian shehui* by no means is closed and excludes the involvement of the state and elite civil society groups. P. C. Huang (1993) argues for "a third realm," a third space in which both state and society participate, to understand Chinese phenomena. This means avoiding treating state and society as opposite with and independent from each other, particularly when the Party-State apparatus is still strong in contemporary China.

It is important to consider all these factors in the case of Guiyu where state and multiple agents of civil society are involved together in complicated ways. In particular, Guiyu is quite representative in terms of *minjian shehui* where the local clan system and personal relationship weigh a lot in local life. Even though the intervention from the state and the development of modernisation have made the nationwide clan power weaker, its influence should not be underestimated in Guiyu. It would be difficult to illustrate the full

¹⁵ In fact, some scholars refuse to incorporate *minjian shehui* into the construction of Chinese civil society. Deng and Jing (2011) list two reasons. Firstly, *minjian shehui* is based on interpersonal relationships instead of rational contractual norms. Therefore, folk society cannot escape from tradition and history and do not have the "independent and autonomous spirit borne of market economy" (p. 35). Secondly, they argue that folk society supposes a "civil rebellion against government" that might impede the positive interaction between state and society. Other scholars who agree to incorporate folk society into Chinese civil society also try to weaken its "rebellion" character and the antagonistic official-citizen relationship, which is different from Taiwan scholars who also claim the antagonistic official-citizen relationship but emphasise the transformative and democratic power of civil society (e.g. K. H. Chen, 2003; 2010). In my view, on the one hand, folk society should not be regarded as totally independent from and thus against the official, they are also mutually immerged into each other in different ways. On the other hand, the bottom power from the folk society should not be ignored as backward traditional legacies. Holding such views may in turn ignore the realistic facts of Chinese society and further fall into the trap of dogmatically using Western concepts of civil society.

picture of the local clan system here, so instead, I shall emphasise three points that are important for the contextualisation.

Firstly, based on the policy of rural basic-level community self-governance (nongcun jiceng zizhi), 16 the clan system is deeply entangled with the power structure of the village. Besides the town-level government, ¹⁷ the clan power is all pervasive to the villages, dominating the village committee, local economy, and the education system. The leader and other core members of the clan council—comprised of several elder people in the clan—enjoy high prestige and authority in dealing with the local political, social, and cultural affairs. As the leaders of the village committee are also from the clan, they have to listen to the suggestions from the clan council. In some cases where the village committee loses credibility among the local people, the clan council even replaces the village committee to function substantively. Secondly, people in the same clan have a strong tendency to help insiders and unite to fight against outsiders. For example, as mentioned, the whole production and organisation of the e-waste industry is based on the clan system. The clan system also contributes to the exclusion of migrant people as they are regarded as an intrusion to the local people's social and cultural life. Thirdly, in the contemporary era, the clan system is highly sustained through maintaining traditional customs and values, particularly ancestral worship¹⁸ and the continuation of the family line (*chuanzong jiedai*). As a historical legacy, the clan system is closely entangled with the patriarchal system. Either in the family or the clan, the male has the decision power and the female is supposed to be in a subordinate position (W. J. Liu & Lin, 2014). The conception of "the more sons, the more blessings" is also accompanied with the devaluation of the female both adult and children—in this area.

On the other side, migrant people are also not isolated from each other. They have built their own circles based on the place of origin. Most migrant people came to the area with the introduction of their fellow villagers (*laoxiang*) at the very beginning through personal relationships. People who come from the same province usually live in the same area and form their own communities. This is particularly important for migrant people to

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¹⁶ According to the policy of basic-level community self-governance (*nongcun jiceng zizhi*), residents (villagers) elect members to form the resident (village) committee, which implements a system of self-education, self-service, self-management, and self-monitoring.

¹⁷ The town mayor and secretary of the Party Committee should be taken up by people outside of the town.

¹⁸ In Guiyu, ancestral temples can be seen everywhere. There are fixed times every year for holding ancestral worship activities conducted by the clan council in every village.

support each other and unite to fight against the unfair treatments from locals and the government. Therefore, just like the clan system, this special social, political, and cultural space produced by migrant workers is also an important part of *minjian shehui* that shall have great implications towards our understanding of the local political dynamics.

Manifestation of Social differences

As informed by existing intersectional analyses on migrant women workers in China, it is also crucial to examine how multiple social categories and systems of oppression might manifest differently in Guiyu. Under different political and cultural backgrounds, there may be different understandings of a given social difference. Systems of oppression may also operate in different ways. For example, China has been argued to have a different conception of race compared to Western countries. China has fifty ethnic minorities (*shaoshu minzu*) classified by the central government after the establishment of the New China, which only occupy 8% of the whole population. Moreover, racial tension is less of a problem in China than in America (Quan, 2001) and much less of an issue for environmental inequality (C. B. Ma & Schoolman, n.d.). Other social categories, particularly class and gender, are also rooted in local contexts and are manifested differently.

Gender/Patriarchy

Post-structural feminists have argued for the discursive nature of identities. They emphasise the importance of understanding gendered subjectivities as socially and relationally constructions, subject to challenge and change over time and space (Connell, 2002). As Fraser and Nicholson (1988) argue, "post-modern feminist theory would be nonuniversalist. When its focus became cross-cultural or transepochal, its mode of attention would be comparativist rather than universalist, attuned to changes and contrasts instead of 'covering laws'" (p. 101). The term "patriarchy" has also been argued to be understood in a more culturally and temporally grounded way instead of a universalist and abstract way (Kandiyoti, 1988). Therefore, in different political, social, and cultural contexts, gender identity, gender relations, and the patriarchal structure all manifest differently. In this regard, there are at least three points that need to be emphasised in the case of Guiyu.

Firstly, as mentioned, the power from the Party-State in shaping identities should not be ignored. With respect to gender, it is crucial to ask, for example, how the central and local governments have shifted their discourse on women's position from guiding them to go out of family and participate in production after economic reform, to encouraging them to go back to their families in recent years. It is equally as critical to note how women themselves respond to such changes in terms of the formation of subjectivity.

Secondly, either in a pre-socialist, socialist, or contemporary post-socialist China, it is necessary to consider the dimensions of gender and seniority at the same time, given that filial piety and responsibilities weigh a lot on China's patriarchal system (Zuo, 2009; Y. Shen, 2011). Patriarchy should be regarded as the interweaving of the longitudinal "father power" and horizontal "husband power." The "father power" determines that the father as the head of the family has absolute authority over his son and the son's wife, who should show filial piety to the parents. The "husband power" determines that man has authority over the woman in the family. Therefore, the gender status of a woman in the family rests in the complex relations based on these two dimensions, including not only the relationship between man and woman (husband and wife, brothers and sisters), but also between daughter-in-law and mother-in-law, sister-in-law and daughter-in-law, the grandparents and the grandchildren, and so on. For example, in a traditional patriarchal family, the mother-in-law, who is often regarded as an accomplice of the patriarchy, has high authority over the daughter-in-law. Even though such authority has been highly alleviated nowadays, the relationship between daughter-in-law and mother-in-law still weighs a lot in contemporary Chinese family. One example is that the daughter-in-law usually faces the pressure of giving birth to boys from her parents-in-law. Boys often have higher status than girls in the family because only the son can continue the family line. Daughters are regarded as belonging to her husband's family after getting married. However, it should also be noticed that such relationships are subject to change with different groups of people across different geographies in the country.

Thirdly, as intersectionality requires, gender relations and patriarchal structures must be understood in connection with power relations based on other social differences. For example, we have mentioned how the patriarchal system is entangled with the local clan system and intergenerational relationships. It would also be meaningful to ask how the process of migration will reshape gender relations among migrants. As McDowell (1999) argues, migration is always accompanied with a "renegotiation of gender divisions" (p. 2). For example, scholars have argued that the rural-to-urban migration has already changed

the traditional "father power" and "husband power" system (Y. H. Jin, 2010; C. Zhang & Gao, 2014; X. J. Gao, 2017). On the one hand, because of the distance produced by migration, both the direct power over the son from the father in controlling finance and marriage and the conflict between the mother-in-law and daughter-in-law have been alleviated. On the other hand, the mode of "breadwinning men and homemaking women" dominant in rural areas has also been challenged when both the husband and wife go to work and earn money in new places.

Class/Social Stratification

Class should also be understood in concrete situations theoretically and politically. Thompson (1966) has criticised the economic determinism and structural reductionism embedded in the traditional Marxist understanding of class, arguing that the formation of the working class is a complex historical process that cannot be solely regarded as the derivative of economic relations. Like gender and race, class identities are also politically and socially constructed, and are intervened by specific historical, social, cultural, and political processes.

Class politics, either in Mao's era or contemporary China, appears to have particular characteristics, one of which is the state's power in shaping class formation (F. Chen, 2009). The process of proletarianisation in Mao's era was largely determined by politics rather than the economy/capitalism. Class was then shaped and used more as an ideological and political tool to achieve political goals. Since the economic reform, the discourse of class struggle in Mao's era has been abolished and replaced by the discourse of modernisation and civility. This modernisation and civility discourse encourages people to participate in the market economy— which is portrayed as being open and equal to everyone— to achieve prosperity (*zhifu*). It attributes class inequalities to individual ability and personal quality (*suzhi*)²⁰ instead of structural antagonisms. The erasure of class

based politics have been abolished.

¹⁹ In the Third Plenum of the Eleventh Central Committee in December 1978, the major contradiction of the society was changed from the class contradiction to "the contradiction between the ever-growing material and cultural needs of the people and the backwardness of social production." Therefore, the major task is to improve the social production under the introduction of a socialist market economy. In this sense, both the class label of each Chinese person and class-

²⁰ Suzhi (personal quality) refers to the concrete manifestation of a person's thoughts and behaviors

differentiation is further justified by the proposal of "allowing some people to get rich first and the rich helps the poor to achieve all rich." Therefore, the reform-era Party-State has impeded the emergence of class-for-itself— the collective agency based on class contradictions— more than in Mao's era (Xu, 2000, p. 67). This is particularly true for migrant workers when the invitation of global capital needs the rural-to-urban migrant labour, but at the same time the state prohibits the class formation to ensure the development of a socialist economic market. Pun (2005a; 2005b) argues that under the dual suppression of state and capital, the migrant/peasant status has restricted the process of proletarianisation among migrant workers.

The antagonism between the exploited classes (peasants and workers) and the exploiting classes (bourgeoisie and petty bourgeoisie) has been weakened. Instead, more social and occupational stratifications have emerged as "equal" participants in China's economic development, including state-owned enterprise managers, governmental and party officials, urban and countryside private entrepreneurs, white-collar and blue-collar workers, migrant workers, and so on. In this sense, a Marxist class-based analysis has been widely regarded as outdated and insufficient to understand the complexity of a Chinese post-socialist society. Instead, Max Weber's theory on social stratification has been employed more often among scholars— even though there is still a Marxist class theory vs. Marx Weber's social stratification theory debate (X. Y. Lu, 2005; L. Z. Xie, 2016).

According to this classification, in the case of Guiyu, the social and occupational stratifications mainly include governmental official and staff, e-waste workshops and other individual business owners (*laoban*),²¹ local and migrant workers, peasants, and freelancers.²² I agree that the traditional Marxist analysis on class would not completely fit with the situation of post-socialist Chinese society, but it is still important to bring class back into the analysis as some scholars have already suggested (Y. Shen, 2006). For example, the relationship between *laoban* (the owner of the means of production) and workers (wage-earners who sell their labour) remains a major concern in the local social

in social life. It involves a set of attributes including education level, morality, physiology, thinking and acting ability, occupational skills, etc. Developing comprehensive quality (*zonghe suzhi*) is an important part of modernisation in a post-Mao era.

²¹ The term "*laoban*"— which means "boss" in English—is used to describe people who occupy superior positions in economic sectors ranging from state-owned and big enterprises to individual-owned small businesses.

²² This distinction of social stratification is fluid instead of fixed. People can be located in several stratifications at the same time. For example, village committee members can also become industry owners.

and economic order. Therefore, it is not that distinctions among classes have disappeared, but that through portraying the neoliberal economic market as open and equal to everyone, the class discourse is excluded as a political strategy by people who hold on to power to keep their class status and social privilege (Pun, 2005a, p. 100). Bringing class into the discussion can allow us to better understand the power relationships in the production and reproduction of Guiyu's workforce, labour relations, and class consciousness.

Age/Ageism

Culturally speaking, age is highly entangled with the patriarchal system and closely related with power and hierarchy in the family. Besides this, there are other dimensions that we should consider in terms of age. Firstly, age can reflect the power relations at certain specific historical periods that shape people's values, perceptions, choices, and behaviours. For example, compared with the younger generation, the older generation usually has a stronger sense of responsibility to serving parents while they are living and giving proper burials after their death (*yanglao songzhong*), as well as supporting children until they get married and have a career (*chengjia liye*). This is especially true in rural areas. To a large extent, it is because of these responsibilities that migrant people leave their hometown and earn money. Compared with the younger generation, the older generation often regard themselves as being more capable of suffering hardships both physically and mentally (*chiku*).

Secondly, while age is related to power and hierarchy in the family and clan, it is also related with vulnerability and powerlessness. For instance, children are both socially and environmentally more vulnerable in terms of child labour and pollution susceptibility. Older generation are also faced with discrimination in the labour market. In Guiyu, the majority of dirty and poisonous work is done by older women who are less valued and respected compared to younger women.

Migrant Status

Immigration— either transnational or internal— is a worldwide problem and has historical and localised particularities. Several scholars have applied critical racial theories to explain the internal migration in China (D. Han, 2010; C. B. Ma & Schoolman, n.d.). I do not deny

the feasibility and meaningfulness of using critical racial theories in such an analysis, but I will also bear in mind the particularity of the issue of migrant workers in Guiyu. For example, migrant people are often not united as a whole entity. Migrant people in Guiyu come from several different provinces and have formed different communities. Conflicts among province-based communities also happen in both working and living areas, which further contribute to the complicated political and social culture among migrant people.

All in all, discussions based on multiple social categories shall be meaningful when putting these social categories in the specific contexts and regarding them as socially, politically, and culturally constructed. The discussion of one category cannot leave aside other social categories. We can also see the ways in which power relations in Guiyu manifest and operate differently. In fact, the above-mentioned social and political theories of power are based essentially on Western traditions of theory and philosophy (Haugaard, 1999). This is particularly obvious in the origin of the three faces of power, which was set in the discussion of American democracy in the 1950s. There also exist different conceptualisations of power in Eastern philosophy that are shaped by different systems of traditions, ideas, cultures, and languages (see Barbalet & Qi, 2013). This would require that the employment of the power framework as illustrated in the previous chapter should also consider the empirical and local specialities. The aim is to start from the complexity of the reality, being attentive to the specific contexts that may complicate our understanding of power. For example, the specific state-society relationship reminds us of the mutual constraint between the local government and the clan system. Decision-making and nondecision-making powers are often not achieved completely through democratic processes but rather through the strong influence of clan system. Another example would be the importance of *guanxi* in the everyday power functioning. *Guanxi* can work as a resource for people in power so as to achieve the benefits of power and suppress others. It can also become an important factor in facilitating solidarities and making resistances as power to or *power with*. It is thus particularly important for us to attend to these specific elements when deconstructing the power in the following chapters.

Conclusion

Both environmental justice and intersectionality have evolved to be inclusive enough to examine power structures across the globe. However, to employ them in other places, the specific contexts should be examined in a critical way. In China, there are various

experiences and practices that have shown different visions of environmental justice in terms of distribution, recognition, participation, and capabilities. Intersectional discussions on the phenomena of migrant women workers have also shown the particularities of social differences and their different ways of intersection in the Chinese context. Based on this, I further argue that taking into consideration the political, economic and cultural transformations, the state-society relationship, as well as the different meanings of social differences can make the concepts of environmental justice, power, intersectionality more meaningful when being employed in the case of Guiyu. Attending to the specific contexts is critically important for us to not only unfold our analysis, but also to reignite the "fiery core" of the theory and see how our discussions can open up more possibilities and contribute to the theories *per se* as we have envisioned.

Even though we have articulated the contextualisation that is needed for our analysis, what should also be emphasised is that it is only through observing people's perspectives and practices in everyday life that we can capture how the broad social and political backgrounds influence migrant workers and how multiple power relations operate and intersect. For example, we know that migration and the patriarchal system might reshape each other, but such interactions are also subject to change at different places and can only be understood through engaging closely with those being researched. The requirement for contextualisation not only helps inform what kind of methodology should be used in this project but also the ways of conducting fieldwork in Chinese villages. In the following chapter, I shall trace out the methodological landscape for this project.

Chapter Three: The Methodological Landscape

Introduction

Both intersectional and environmental justice scholars have been concerned with the issue of what research methods should be employed to make our analysis more credible. Along with the development of both theories is the gradual inclusion of multiple methodologies. As we can see from the above chapters, the methodologies used by intersectional environmental justice research are diverse and the selection of methodology lies in the specific research topics. Methodological choice is important because it affects directly what we see and do not see. It is always related with epistemological concerns of who could be a knower, what could be known, and how to achieve knowledge (Cook & Fonow, 1986; L. Stanley & Wise, 1993; R. Campbell & Wasco, 2000). In other words, our ways of conducting inquiries and fieldworks can imply different epistemological assumptions, which shall further influence the research outcomes and types of knowledge that we are going to produce.

In this regard, this chapter shall depict the methodological landscape of this project. I shall first argue that both intersectionality and the plural understanding of environmental justice are open to multiple methodologies and epistemologies, thus resulting in a mixed-method approach for this project with critical ethnography as the main methodology. The normative-theoretical requirements of critical ethnography that are important to conducting my fieldwork shall be examined further. I argue that the "reflexivity" entailed in critical ethnography requires us to dive into the messiness and place ourselves in the complexity of the field to identify the possible epistemological and ethical tensions that can morph into crisis if not addressed. Only through this way can we negotiate with the discrepancy between the normative-theoretical requirements of critical ethnography and the reality of particularity, messiness, and complexity in the field. A detailed illustration of my experience of doing fieldwork in Guiyu shall follow.

A Mixed-Method Approach

Intersectionality aims to disentangle the complicated, dynamic, messy, multi-layered, and intersected power relations that affect individuals. It thus requires one to pay attention to everyday, subjective, intersubjective, experiential, organisational, structural, and representational levels of differentiation. This complexity determines that intersectionality

itself should never be regarded as being related with only one kind of methodology, but rather with broad ranging approaches and epistemologies (McCall, 2005; Phoenix, 2006; Prins, 2006). Therefore, as we have discussed in Chapter One, to take into consideration the multiple dimensions of intersectionality, manifold sources of data based on different research methodologies are indispensable.

As mentioned, the plural sense of environmental justice has broadened our understanding about the "evidence" of environmental injustice. Understanding environmental justice in terms of procedure, recognition, and capabilities moves us from quantitative evidence (based mainly on the distributive sense of justice) towards qualitative and experiential evidence that relies more on an individual's experiences, everyday life, and narratives of vulnerable groups of people. The latter approach relies on employing qualitative research methods such as participant observation, structured and unstructured interviews, and participatory activist research. Compared with a quantitative analysis that puts more weight on objectivity and expertise, qualitative and experiential analysis highlights the subjective experience and knowledge of environmentally subordinated groups (see for example Krauss, 1993; Tschakert, 2009; Hope Alkon, 2011). In fact, as G. Walker (2012) has argued, there is always a politics of evidence in environmental justice studies. Which evidence is more powerful and whose knowledge is more authoritative in the political processes, academia, and media can determine whose voice can be heard and whose interests will be represented. However, this does not mean that quantitative and qualitative methodologies and their corresponding epistemologies are in conflict with one another. On the contrary, they can cooperate with each other to make stronger claims about environmental injustice faced by vulnerable groups (Irwin, Simmons, & Walker, 1999). For example, environmental scientists can work closely with community members and grassroots organisers in community-based participatory research, which allows voices from the community to be included in scientific research and in policy-making (Shepard, 2002; Minkler, Vásquez, Tajik, & Petersen, 2008).

Therefore, both intersectionality and the plural sense of environmental justice require us to be open to different methodologies and epistemologies. In this project, I shall avoid putting different methodologies into conflict or preferring one over the other, but rather be open to different epistemologies and forms of knowledge. I shall mainly employ critical ethnography, accompanied with other data-collection methods including searching related academic literature (from both science and social science areas) and looking up online resources (e.g. newspaper articles, NGO reports, stories, and online discussions of

local and migrant people, etc.). I also have used Geographic Information Systems (GIS) applications to visualise the achieved qualitative data.

In general, as a culture centred methodology, the main aim of ethnographic research is to understand and represent the symbolic forms, cultural patterns, and perspectives of participants in their natural settings, as a "disciplined and deliberate witness-cum-recording of human events" (Willis & Trondaman, 2000, p. 5). Critical ethnography is a reflexivity-based approach of doing ethnography. Besides adhering to the core tenets of conventional ethnographic methods, such as participant observation, dialogues and interactions, as well as field notes on a daily basis, critical ethnographers also keep attentive towards the research itself as a power-laden practice that can generate social and political effects. Critical ethnography is important for examining environmental injustice experienced by migrant women workers at three levels.

Firstly, critical ethnography can contribute to the multi-dimensional intersectional analysis because it allows us to explore both the macro political, social, cultural, and ideological structures, and the micro subjective and intersubjective experiences of everyday life. It requires treating everyday life as an important observation site, which can be seen as "a condensation of social processes, interactions, and positions where intersecting categories are inextricably linked" (Christensen & Jensen, 2012, p. 117). It is through the observation of the everyday experience that intersected power relations can be revealed in a concrete way. Secondly, critical ethnography allows us to be fully attentive to the contextual variability and dynamism in terms of the situated manifestations of intersectionality and environmental justice. Only through immersing into the field and engaging closely with the everyday life can we capture the local features and make interpretations. Thirdly, as we shall see in the next section, the "reflexivity" required by critical ethnography allows us to carefully negotiate with the complexities of Guiyu that is

¹ To have a better understanding about the historical and ongoing changes in Guiyu, it is necessary to seek online resources. A lot of historical moments can only be seen from previous investigations, news, and reports by mainstream media and other private media such as WeChat subscription accounts (*weixin dingyuehao*) (for example, Guiyu suliao, Jinri guiyu, Guiyu shequ, etc.). Additionally, personal online storytelling, discussions, and comments in online communities (such as Guiyu tieba and Tianya shequ) are also important places to hear more diverse voices. Even though sometimes the online stories, discussions, and comments are dispersive, discontinuous, and subject to be proved in terms of authenticity, online community still provides a space of anonymity where people are relatively freer and less burdened to present important information and express their feelings that are difficult to observe in real life. For example, people are more likely to talk about sensitive topics such as local environmental pollution, environmental governance, and local-migrant relationships online. The interactions and debates between the local and migrant people on these sensitive topics can rarely be seen in public life.

full of power relations and tensions in the process of knowledge production. I shall now turn to illustrate in detail the normative and theoretical requirements of critical ethnography that are important to conducting my fieldwork in Guiyu.

Critical Ethnography

The Reflexive Turn

Along with the development of anthropology, ethnography has experienced three stages, from amateur (pre-modern) ethnography to scientific (modern) ethnography and now to critical/reflexive (post-modern) ethnography (B. Z. Gao, 2006; L. H. Zhang, 2013). While the first "scientific turn" marks the transition from spontaneous, random, and amateur towards professionalised, systematic, and scientific ethnography, the second "reflexive turn" shows ethnographers' reflection upon and further break away from this pure scientific and positivist way of representing culture. Within this postmodern turn, Geertz conceptualises "culture" as the webs of significance that humans spin and suspend in. "The analysis of it (culture)," he further argues, should "be therefore not an experimental science in search of law but an interpretive one in search of meaning" (Geertz, 1973, p. 5).

Therefore, the goal of ethnography is to make thick descriptions of certain culture instead of to generalise culture across cases. It aims at revealing the "stratified hierarchy of meaningful structures" (p. 7) of the given culture.

Furthermore, for critical ethnographers who aim to expose exploitations and inequalities experienced by vulnerable groups, culture does not exist *sui generis* whereby the interpretation of culture should not be the only aim of ethnographic research. Cultures must be explored in relation to specific historical, economic, and political contexts (Keesing et al., 1987). An ethnographer ought to notice that there are always power relations in the creation, definition, and interpretation of cultural meanings. In other words, cultural norms and forms, rules of games, shared beliefs, and behaviour patterns are all embedded with power relations that would be related with the production and maintenance of domination and injustice, as well as the emergence and development of different forms of resistance. The social could not be disconnected with the cultural in a sense that no social relation or process could be comprehended without the mediations of culture (Willis & Trondaman, 2000). To understand and explain social, political, and power relations is indispensable from the interpretation of culture. Therefore, instead of simply describing "what is" in the researched area, critical ethnographers also explore the tacit power

relations and the perceived inequalities and injustice that are imbedded in the cultural phenomena (Thomas, 1993).

This project mainly aims to explore the environmental injustice experiences of women migrant workers, their reactions and perspectives, and the local social and political dynamics. What we are faced with is not the pure culture created by the local people (e.g. the clan system) and migrant people (e.g. the migrant community culture), but complex tensions and intersected power relations among different subjects (between migrants and locals, women and men, workshop owners/*laoban* and workers, villagers and officials, NGOs and local residents, etc.) that shape the experiences, agencies/subjectivities, and local political dynamics. Only through observing the everyday practices, behavioural patterns, rules of games, cultural norms, ways of thinking, forms of interactions in multiple spaces (family, clan, workshop, official and public place, etc.) can we understand how these power relations operate.

This political and critical dimension reflects critical ethnographers' attention towards both the power within the contexts that contribute to injustice and the power dynamics between the researcher and the researched. Critical ethnographers emphasise that the purely detached and scientifically objective position in doing ethnographic research is impossible. On the contrary, they underline the importance of attaching political and ethical commitments towards the participants. As Costas (2014) argues, "In a situation of conflict, objectivity tends to become the best disguise for ideological partisanship" (p. 12). Therefore, when faced with injustice, a neutral position indeed helps the stronger side in power relations. It is thus important for researchers to recognise that they are part of the social world they study, and further have their own political alignment in their research (Hammersley & Paul, 2007; Coles, 2016). A practical, value-laden science that has transformative power should be created to challenge the *status quo* and foster a more democratic society and critical citizenry, instead of a value-free, universalising, and objective knowledge that is impossible to achieve in itself.

Secondly, critical ethnographers also emphasise the research itself as a power-laden (power in the sense of both *power over* and *power to*) social practice and political activity of knowledge production. On the one hand, researcher's presence in the field generates a state of intrusion— a state that shall inevitably present influences and power relations in the process of knowledge production. This would require researchers to have a sense of "reflexivity"— a "turning back to oneself, a process of self-reference" (C. A. Davies, 2002, p. 4), which needs them to rethink their own positionality, power, and privilege in

doing ethnographic investigation, representation, and interpretation (Foley, 2002; Guillemin & Gillam, 2004; Fawcett & Hearn, 2004; Madison, 2005). It is a critical reflection on the power dynamics embedded in doing research, which shall further influence "how problems are defined, which knowers are identified and are given credibility, how interactions are interpreted, and how ethnographic narratives are constructed" (Naples & Sachs, 2000, p. 195). On the other hand, the relationship between the researcher and the researched can also allow the researched to express and even develop agentic power. With this in mind, the participant enters the research not as an object but a subject. Through telling stories, expressing emotions and opinions, and getting involved in the research, the visions and aspirations of the participants that are important agentic elements can be revealed in relation to the researcher.

Once entering the field, ethnographic researchers will be involved in the network of relationships, including academic (epistemic), political, ethical, and interpersonal relationships. All these relationships— implicated with power relations— intervene together and require that researchers reflect upon themselves during the research. This would mean to, firstly, break the binary dominator-dominated relationship between the researcher and researched through building dialogical relationships; secondly, recognise and respect the experience and knowledge of the researched; and thirdly, rethink the influence of their own positionalities and identities towards both the research itself and the participants.

The Dialogical Relationship

The emergence of critical ethnography is entangled with the critique of colonialism, imperialism, and Euro-centralism. The colonial nature of traditional anthropological scholarship has been widely questioned (Lewis, 1973; Asad, 1998; L. T. Smith, 1999; Uddin, 2011). Lia Haro argues that to decolonise "ethnography," we must go beyond "ethno-graphy" to "etho-graphy" (personal communication, March 17, 2016). The former has colonial implications in a sense that "ethno"— according to its Greek origin— refers to the form of society and group of people who differ in character/origin/politics (thus being regarded as uncivilised), compared with "polis" that constitutes the other pole in the hierarchisation of societies. In contrast, the "etho" refers to the different non-normalising and de-normalising ways of life that are particular to specific people and culture. It thus emphasises difference without a common denominator. Therefore, "ethno-graphy" refers to writing the "other (outside)" people who are different (in an uncivilised way), which

implies a colonial dominator-dominated relationship between the researcher and the researched. The "other" culture and people are something waiting to be discovered, represented, and interpreted by researchers.

Instead of the dominator-dominated relationship, a dialogical, two-directional and communicative relationship with the researched people is important to open more perspectives and possibilities. Dialogue could be regarded as a way to go beyond the self as a researcher and put ourselves in relation with the "other." It further brings together the "self (researcher)" and the "other (researched)" to discuss, question, and even challenge one another (Conquergood, 1983). In other words, there should be no hierarchy of knowledge between different dialogue subjects, but rather open and ongoing communication, negotiation, and discussion that allows biases to be critically questioned and discussed. Researchers thus should break a series of dichotomies between "us" (outsider) and "them" (insider), science and common sense, objective and subjective, rational and intuitive, etc., seeking a more dialogical and dialectical relationship between the "self" and the "cultural other" (Babcock, 1980).

While "dialogical" means the ongoing and open interactions with the researched, "dialectical" refers to the fact that the researcher-researched relationship should always be manifold and dynamic instead unified and fixed. The dialogues are by no means without disagreements and conflicts. It is a normal situation that the researcher's worldviews and beliefs are radically different from participants. However, dialogue should not be a means of convincing each other so as to achieve a "timeless resolve", but rather an ongoing process of giving and receiving, which could open both sides to knowing one another more fully. As Madison (2005) argues, "Dialogue is both difference and unity, both agreement and disagreement, both a separation and a coming together" (p. 9). It is only through the dialogue of cooperation that different meanings and perspectives can be fully expressed and interpreted. Real communication and dialogue can only happen when mutual trust has been built between the researcher and participant, which is based on the various ties established through closely engaging with researched people. Otherwise, conversations may become superficial instead of meaningful.

Dialogue can happen in the form of everyday conversation, or more formal semistructured/unstructured interviews. The dialogical nature of critical ethnographic research does not only lie between the researcher and the researched. Dialogue can also happen among participants and even within one participant. Through engaging with the diverse dialogues of everyday life, researchers ought to be attentive to various layers of experiences and narratives among different groups of people, noticing that norms and discourses influence people unevenly and in different ways. It is thus important to pay attention to the discrepancies between different narratives made by different people, such as local officials and migrant workers.

As a way of including the researched as a crucial part of the knowledge production, such a dialogical relationship should be based on researchers' recognition and respect towards the knowledge of participants. Incorporating the opinions of the researched who are more familiar with the local conditions, power relations, and customs is indispensable for scholars to design and unfold their research approaches, as well as to understand the experience of the oppressed and complex power relations.

Experience, Narrative, and Knowledge

Feminist standpoint theory has emphasised the epistemic advantage of marginalised and subordinated groups of people in recognising and understanding how the world works from an insider-outsider position (Harding, 1987; D. E. Smith, 1987; Collins, 1990). They argue that compared with people who are in privileged and dominated positions, marginalised groups of people have to negotiate with the world through understanding not only the power dynamics and tacit knowledges embedded in the dominant world view but also the living rules determined by intersected marginal statuses. Du Bois (2015) famously pointed out the problem of "double consciousness" entailed by the American Negro, which refers to the "sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt" (p. 8). Feminist intersectional scholars further emphasise the identity of gender in influencing people's intersected consciousness. The social knowledge from the subjective experiences of the marginalised is thus critical in "grasping the partiality of a dominant way of thinking, bringing a new angle of vision to bear on old questions and raising new questions for empirical investigation" (Wylie, 2003, p. 40). Standpoint theory thus proposes to value the subjective experiences and narratives of the researched as an important source of knowledge. This is critical to interpret the researched from their own instead of the observer's perspective; to provide alternative perspectives to the dominant and hegemonic construction of the social society; and to make the marginalised experiences visible and suppressed voices heard (Bruner, 1986). In this sense, their experiences and narratives are the place from where ethnographers' explanation should start.

If we (the ethnographers) set experiences and narratives of the researched as a starting point for knowledge production, there are two questions that need to be addressed. First, to what extent are personal experiences true enough to serve as an original point of explanation and source of knowledge? Similarly, to what extent can one narrate, speak for, or give an account of himself/herself? These two questions are both related with the concern of epistemic reliability, that is the problem of "how realistically reliable first-person knowledge can be given the insurmountable problems with our *self*-knowledge" (Alcoff, 2018, p. 207, emphasis in original), especially when power is so pervasive and strong in shaping our perspectives.

On the one hand, scholars emphasise the constructed nature of experience to question its validity as the origin of explanation and knowledge. For example, J. W. Scott (1992) argues that, if we take personal experience as self-evidently true, then "questions about the constructed nature of experience, about how subjects are constituted as different in the first place, about how one's vision is structured— about language (or discourse) and history— are left aside" (p. 25). Therefore, "it is not individuals who have experience, but subjects who are constituted through experience" (p. 6). As an important concept in Foucault's intellectual work (particularly in *The History of Sexuality*), "experience" is understood as the "correlation between fields of knowledge, types of normativity, and forms of subjectivity in a particular culture" (Foucault, 1990, p. 4). He argues that to articulate how the experience of sexuality becomes constituted, it is important to analyse the formation of sciences (savior) and development of discourses and knowledges, the systems of power (systems of normativity) that regulate the practices, as well as the forms of relation to self through which individuals recognise themselves as subjects of sexuality.

On the other hand, narrating is also argued to be restricted by the self and constructed by relations, discourses, and norms. As Butler (2005) argues, "There is no 'I' that can fully stand apart from the social conditions of its emergence, no 'I' that is not implicated in a set of conditioning moral norms" (p. 7). Butler presupposes a pure and abstract "self" that goes beyond norms and which proves not to exist. For her, the subject can never escape relationality and sociality, thus "the narrative authority of the 'I' must give way to the perspectives and temporality of a set of norms that contest the singularity of my story" (p. 37). In this sense, Butler has quite a negative attitude towards the accountability and authority of the narrative subject, even though she also admits that the ethical agency is neither completely determined by nor radically free from norms.

However, if we regard experience and narrative as discursively constructed through practices and habitus, the epistemic contribution of these marginalised people will not be priori privileged. In fact, both experience and narrative have a subjective nature that allows us to examine the ways in which subjects themselves internalise, interpret, negotiate, reflect, and make resistance among different sets of norms and discourses. Experience is not simply about events that transpire when people encounter the world. It always includes "perceptual sensations, affective responses, and cognitive attitudes," which goes beyond "a solipsism of the individual and encompasses a relationality between ourselves and events specific to a time and place" (Alcoff, 2018, p. 57).

A narrative also inevitably involves the narrator's own sensations, evaluations, judgements, and interpretations towards the norms and habitus. Therefore, it is because of this subjective nature that we can attain the perspectives and knowledges from marginalised and subordinated groups of people. For Foucault, his notion of "critique" has been argued to be closely connected with his reading about the experience (Lemke, 2011). "Critique will be the art of voluntary insubordination, that of reflected intractability. Critique would essentially insure the desubjugation of the subject in the context of what we could call, in a work, the politics of truth" (Foucault, 1997, p. 47). In other words, the subjective nature of experience offers space for individuals to develop the capability to critique, to think things differently, and further make transformations. In this sense, one might ask, examine, or interrogate himself/herself to follow, question, or resist certain knowledges and norms. Foucault's examination on the history of the experience of sexuality aims to explore the ways that can help us detach from the discourses, knowledges, and normativities that constitute our experiences.

Therefore, instead of pursuing an abstract "self" that is totally free from the constrains of norms, it is more practical to start from the fact of relationality and sociality that is a constitutive condition of personal experience, self-understanding, and self-narrating (S. Campbell, 2003; Alcoff, 2018, p. 225). This would mean that in doing ethnographic research, researchers should pay attention to the historical processes of how knowledges/discourses, power relations, and normativities contribute to the construction of participants' experience and their subjective understandings and visions. At the same time, the subjective nature of experience and narrative reminds us to be attentive to how the researched themselves understand their own experiences and interpret different sets of norms and discourses, which in turn can help us comprehend the historical processes of

power relations. These two aspects cannot be separated in the open and ongoing dialogues and negotiations with the researched.

Other Contradictions and Dilemmas

Scholars should also consider the effects of themselves on the data collection and rethink how their own identities/positionalities influence the whole process of doing research. For example, the "professional" status of the researcher in fieldwork might influence the ways in which participants respond to researchers. Some might be afraid of "saying the wrong words" in front of the researcher who is regarded as having more knowledge than them. Another example is how the researcher's own gender identity might influence the research process and outcome when the ways and contents of interaction could be influenced in a culture where the "sisterhood—brotherhood dichotomy" weighs a lot (Uddin, 2011).

Ethnographic research is always accompanied with ethical issues, especially in terms of what kind of potential risks participants face. Considering the dialogical nature of critical ethnography, researchers should be reflexive and attentive towards potential ethical issues during interactions with participants based on interpersonal relationships, engagement, and attachment. One problem would be the possible asymmetrical exploitation of "friendship" and "intimacy" used by researchers as a method to engage with participants, regarded by some as inherent and inevitable for fieldworkers (Hatfield, 1973; Driessen, 1998; Tillmann-Healy, 2003). Intimacy could generate advantages for researchers to gather broader and deeper data but may also create different types of tensions that need to be negotiated by the researcher (J. Taylor, 2011). Stacey (1991) has argued that it is just the close interaction and intimacy that places the participants at graver risks of being manipulated and betrayed by the ethnographer (though unintentionally, most of the time) than positivist ethnography. She also gives several examples of her own experiences to show the inevitable conflicts of interest and emotion generated by her dual position as both an authentic, intimate "friend" and an exploitative researcher. For example, she reflects on the ethical risk when turning personal loves and tragedies (such as the death of one of her key informants) shared by participants into the ethnographic data from which she benefits as a researcher.

However, ethnographers should accept and get to the messiness of the field—messiness in terms of not only the complexities of everyday life but also the inevitable contradictions and dilemmas. It is also because of this messiness that "ethnographic truths are inherently partial" (Clifford, 1986, p. 7). Researchers shall always find that there is a

discrepancy between the normative-theoretical requirements of critical ethnography and the particularity, messiness, and complexity of the field. On the one hand, we have these normative guidelines about what should be followed when conducting critical ethnography— keeping dialogical relationships, respecting the knowledge of the researched, attending to the power relations between the researcher and the researched and other ethical risks, and so on. On the other hand, the relationships and positionalities in which researchers are located on the ground are always more complicated than what we can imagine in advance. There will always be various tensions and problems without fixed answers and solutions.

It is the specificities of the project itself and different social and cultural circumstances in which the researcher is located in that determine what kind of contradictions and paradoxes might be encountered and how to cope with them. Therefore, only through getting to the field, diving into the tensions, and placing ourselves in the complexity shall we identify the epistemological and ethical tensions and ways of negotiating with them. This shall in turn makes a difference towards researcher's understanding about the researched. Through admitting the partiality of ethnographic research and addressing the existence of contradictions instead of avoiding them, researchers should always keep rigorously self-aware, humble, and reflexive towards the potential ethnographic tensions and ethical pitfalls that might arise out of their positionalities. In the next section, I shall lay out my own experiences of doing fieldwork in Guiyu that express my reflections and negotiations on the ground.

Encountering the Field

The ethnographic fieldwork was taken from March to August 2018, during which the local environmental governance was quite serious. The research is basically comprised of participant observation, informal communication with local and migrant people, as well as semi-structured/unstructured interviews with local officials, school headmasters, village committee members, and related scholars and NGO members. Fieldnotes were written in Mandarin on a daily basis to record the events and interactions with the participants. Besides some random communication with certain participants, no follow-up visits to Guiyu have been made after August 2018.

Doing Fieldwork in China

Doing fieldwork in China has long been both an attraction and obsession for foreign scholars, as a result of the particular political, social, and cultural environments that scholars have to face in both urban and rural China. At different periods after the founding of the New China in 1949 (including Mao's era, Deng's era, and post-Deng era), the Chinese central government has varied attitudes towards foreign scholars doing fieldwork in China. Over time, there has been an abundance of fieldwork research in China that reflects ethnographers' experiences, problems encountered on the ground, and corresponding coping strategies (Thurston & Pasternak, 1983; Pieke, 2000; Heimer & Thøgersen, 2006; B. Liang & Lu, 2006; J. N. Smith, 2006). The difficulty of conducting fieldwork in China not only comes from state politics and restrictions that pose obstacles for foreign scholars to access the research sites, engage with participants, and decide research topics, but also other social, cultural, and interpersonal factors that can make it difficult to unfold the research particularly in rural China.

In fact, Chinese scholars are also faced with these problems at various levels. This would require taking techniques and strategies to cope with difficulties and problems encountered in the fieldwork. The key difference is that Chinese scholars are usually in a better position, linguistically, interpersonally, geographically, and culturally, when entering the field and encountering various ethnographic difficulties. They are more familiar with the "safe zone" of selecting research topics, which sometimes means making necessary compromises. Many field trips are built upon existing *guanxi* (personal relationships) with relatives, local government officials, and researchers who have previously completed fieldwork at a specific site. This is particularly true in rural China where local cultures are more influential and relationships weigh a lot (G. Gao, 1996).

In the case of Guiyu, the local government is quite sensitive towards foreign researchers because of the historically "negative" representations from international scholars and organisations. There are a lot of stories about foreign scholars and journalists being hurt or prohibited from visiting the Industrial Park among local and migrant people. In comparison, the local government is more tolerant towards domestic scholars, particularly those with whom they have built a collaboration in undertaking pollution control programs. With respect to my own situation, despite studying in a foreign university, my Chinese citizenship and cooperation with a professor from a local university (who provided an introduction letter to me) helped me gain access to the town-level

government. This further allowed me to achieve their recognition and support to engage with workers in Guiyu.

Entering the Field, Achieving Trust, and Network Building

During my fieldwork, I have unfolded in-depth participant observation and unstructured conversations. This trip was basically comprised of two phases: entering the field, building connections, and immersing myself into the local everyday life in the first phase; and doing participant observation and unstructured conversations in the second phase. My initial contact with Guiyu was totally new in a sense that I didn't have any key informants or any relationships at the very beginning. As Cao (2000) has argued, it would be difficult for the researcher who is totally a stranger to the local village to enter the research site where relationship weighs a lot, especially in rural China. Before heading to the field, I have done some preparations including searching recent online news, reading other research experiences in this area, as well as discussing with NGOs and scholars who have built relationships with local officials, school masters, and other informants in previous and current investigations. However, although information and suggestions from these resources are valuable for me to get a fuller understanding about this area in advance, there was still no direct relationship (besides an approval letter from the town-level government) that I could make use of. As adventurous as it was, this experience also made me curious to explore Guiyu as a stranger.

My first move was to initially visit each village in Guiyu. This initial visit allowed me to have a general sense of the geography of different villages, the geographic distribution of environmental pollution, and the distribution of local and migrant communities. I also had the chance to build some initial relationships and connections through chitchatting with local and migrant people. After this initial visit, my research mainly focused on four kinds of space, including the *laozhai* (old traditional houses rented out by local people at a very low price), public areas such as small parks and roadsides where migrant workers usually gather, the official space (including the village committees, the town-level government, and school offices), as well as working spaces (including Industrial Park and other family workshops with granted approval).

During the whole process, I had encountered a lot of local and migrant people who happily spoke with me and shared their experiences and views. With every person, I spoke frankly and sincerely about myself and my research aims without any cover. At the same time, I always bore in mind the ethical requirements such as achieving consent and keeping

confidentiality. In fact, my status as a student made people less cautious towards my approach in communicating with them. Some locals and migrants were also very generous with me by providing their contact details, introducing me to others, inviting me to visit their living places, and allowing me to participate in their daily activities. Over time, I built a close relationship and mutual trust with some participants (at multiple communities), which is very important for me as an ethnographer keen to immerse myself in their daily lives.

Besides listening to the bottom-up voices, I also had some interactions with the town-level governmental officials and several village committee members (from different villages). Conversations with governmental officials and local committee members are important in a sense that through comparing their answers and attitudes with that of the local and migrant people we can see more clearly the conflicts and how power relations operate. As mentioned, because of the historical disrepute, local officials are quite sensitive towards both international and domestic scholars. Therefore, some of them were careful and conservative during the conversation, avoiding revealing any negative information. However, small actions, such as the expressions in people's eyes, or avoidance of certain topics, and even official attitudes and answers revealed a lot of information. In contrast, there were also village committee members who were more open, sincere, welcome, and happy to offer their support. Building relationships with village leaders at first is a common practice among Chinese ethnographers. As key informants, village leaders know more about the village and can further introduce potential participants to the researcher. However, the role of key informants has also been criticised as an important aspect of colonial anthropology and can reveal nefarious power relations with some voices being heard over others. With this in mind, I did not regard them as key informants even though they were capable of introducing me to more prospective participants. Additionally, as argued, this research project was also carried out in a way that allowed vulnerable groups of people to participate in the knowledge production, which has weakened the role and power of the key informant.

Dialogical Relationship with the Participants

The participants during my fieldwork were quite diverse in terms of what social categories they belong to (women/men, local/migrant, worker/boss) and their previous/current occupations (Appendix 1). Their occupations include working in e-waste workshops (both inside and outside the Industrial Park), hotel securities and cleaners who used to work in e-

waste workshops, housewives with odd jobs at home, local family workshop owners, school masters, town-level governmental officials, village committee members, and NGO members. Figure 4 shows the home provinces of each local and migrant participant. Instead of formal interviews, all interactions and conversations occurred informally in everyday life. There are cultural elements that make formal interviews unachievable. According to reactions and feedback from those being researched, people felt more cautious and less willing to accept the request to be "interviewed." Instead, they were more likely to chat in a relaxed atmosphere. Deep and productive conversations usually occurred when participants were aware of my respect for their voices, stories, and experiences. In this sense, chitchat is much more effective when communication is bidirectional. Instead of listening to their stories and seeking information from them, I also shared my own experiences and perspectives. Important and unexpected information often came from the relaxed conversations among migrant people. This is important to make sense of how they conduct their life and understand the world, to include them as an important part of knowledge production, and to respect their own knowledge.



Figure 4 Home provinces of the local and migrant participants.²

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Most of the conversation happened in local and migrant people's daily activities. Based on the relationships I had built over time, I was often invited to visit migrant workers' home to observe and engage in their everyday life. During the visiting, I participated in their daily work at home, including helping them complete odd jobs such as e-waste dismantling and sorting. Additionally, there are also a lot of interactions among migrant workers in the same *laozhai*. It was common to see other migrants drop in and join the working and talking when I was in one's home. This not only allowed me to get in touch with more people but also observe their naturally occurring dialogue that entailed "hidden transcripts" and "tacit knowledges." Information from these conversations were more scattered, trivial, and repetitive compared with formal interviews. However, it is in these activities and conversations that I was able to more fully understand their lifestyles, living environments, experiences, stories, and perspectives. Observations and dialogue also happened in other public areas where local and migrant people gathered frequently, such as community parks, washing sites along the river, or other public areas in *laozhai*.

Even though (women) migrant workers are my main research targets, I also tried to incorporate local people into my research during the fieldwork. An intersectional analysis requires us to incorporate both privilege and penalty into consideration. It is worth bearing in mind that locals are also divided by different social categories and are both privileged and unprivileged. In fact, compared with migrant people, local people are usually unwilling to talk with researchers, particularly those who are involved in the e-waste industry. Nonetheless, there were still several local people who would like to talk with me and share their opinions. Observing the interactions between locals and migrants in daily life has also afforded me a deeper understanding of their relationships.

Reflection on My Own Positionalities and Identities

With "reflexivity" in mind, I kept reflecting on the ways in which my own positionalities and personal relationships built with participants might influence the research findings and the participants during the fieldwork. When one considers the relation-oriented culture of the Chinese, immersing deeply into the everyday life of migrant women workers requires a close relationship with participants. In this sense, my identity as a woman makes it easier

³ During the fieldwork, I talked with all the participants using Mandarin (thus all the narratives from the participants presented in this dissertation are translated from Mandarin into English by myself). Migrant people from the same province often communicated using their own dialects, which sometimes made it difficult for me to understand. In such a situation, I usually asked one participant to briefly explain the content of their dialogue.

to build "sisterhood" with migrant women workers. Most of the migrant women with whom I have built close relations called me *xiaomei* or *dajie*, which is a relatively intimate term of endearment, based on friendship and being an "insider." It has also helped me discuss more "feminine" topics such as mother-in-law and daughter-in-law relations, childcare, and other family affairs with more ease.

At the same time, I was also wary of taking advantage of such a relationship, despite benefiting positively. I understand that it is important to reflect on how this relationship may generate adverse results towards my participants in consideration to the various ethical problems. For example, I would be concerned with whether it might bring trouble to participants when they introduce their employers to me.

On the other hand, with the intellectual commitment to the research project as a researcher, I was also an "outsider." While the curiosity about my own experiences and the research project usually served as a starting point for a conversation, my professional status also made some participants feel reluctant to talk about sensitive topics such as environmental pollution. Some also responded in a more careful way according to my reactions on certain topics, such as the patriarchal practice of "favouring boys over girls" (zhongnan qingnv). At the same time, it is also because of my professional status that some participants wanted to speak with me. These conversations were often regarded as an opportunity for participants to express their feelings, voice themselves, and show the injustice they were faced with, which could also be seen as an important agentic moment. Similar with Cui's (2015) reflection, I found out that the researcher-researched relationship was quite dynamic and its influence towards the research outcomes varied among different participants, time, and places. It is context-specific and requires the researchers to reflect on their own positionalities and how they may influence research outcomes. It is equally as important to note the dialogical relationship between the researcher and researched as a site of "hidden transcript", which opens up more possibilities to observe people's hopes and aspirations as important agentic elements.

I was also careful to avoid putting myself in a privileged position in the process of knowledge production. In fact, just as the standpoint theory has shown, participants usually have more knowledge about the operating mechanism of power relations and systems of oppression. Some participants were even aware of their epistemological privilege with respect to the hardship they had experienced, the local industry, local government, environmental pollution and governance, as well as other tacit local knowledges and news. As some participants have argued, "You do not know how difficult it was at the

beginning" or "You would not know the job's 'cruelty' until you work for several months." Being a student in a foreign university, I was usually regarded as living in the "ivory tower" without knowledge about how cruel the real world is, which I admit is true. I was often surprised to see the harsh working and living conditions and hear their poignant stories and voices, which reminded me of my own ethical-political commitments to embrace my responsibility as an ethnographer towards them and generate knowledge that would be both transformative and emancipatory.

Integration of Different Methods in Data Analysis

Data in newspaper articles, NGO reports, online stories and discussions can serve as important information to help plan and adjust my fieldwork. For example, previous research by scholars and journalists have shown abundant experiences of doing fieldwork at Guiyu, from which I can draw techniques and strategies to conduct my own fieldwork. Useful online data were copied and integrated into a single document for further review. Both the fieldnotes and the secondary data document have been reviewed many times both before and during the writing of the dissertation. Only through immerging into the fieldnotes and secondary data deeply that the key themes and arguments of the dissertation can emerge. In addition, repetitive revisits of these materials are also important to help formulate and articulate my arguments during the writing. Only quoted fieldnotes and secondary materials have been translated from Mandarin to English by myself in the dissertation.

It has been argued that GIS could be used in qualitative social work research in a very productive way (Teixeira, 2018). To visualise the social and environmental injustice experienced by female migrant workers, I have also used the applications of ArcGIS Online and ArcGIS StoryMaps to spatialise the qualitative data of population census, photos, participants' information and narratives, observations in the walk-along tours, the author's field notes, etc. These GIS applications are particularly helpful in integrating data collected from different resources. As township administrative map is often not public and difficult to achieve, a combination of walk-along tours in the town and the ArcGIS Online application is important for me to have a better sense of the local geography. It can also help present the spatial pattern of, for example, the distribution mode of housing in Guiyu, as shown in Chapter Four. ArcGIS StoryMaps application, which can integrate photos, participants' narratives, observations, online information, and fieldnotes in a spatialised way, is also a powerful tool in the processes of data collection, analysis, presentation, and

dissemination (Figure 5). The combination of spatial and qualitative analysis can allow me to have a more contextual understanding of the social and environmental injustice against female migrant workers as lived experiences instead of just variables and regression models.

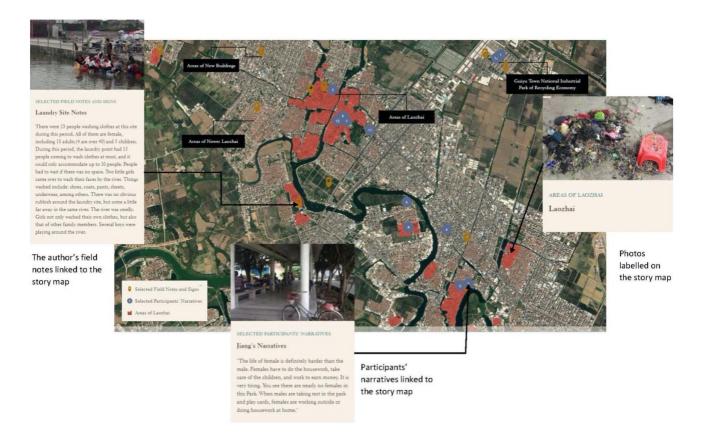


Figure 5 ArcGIS StoryMaps.4

Conclusion

No fieldwork is perfect. There will always be a variety of problems and regrets one way or another. For example, even though I have paid attention to incorporate the local people, besides local officials there are few local participants. In addition, given the ethical and safety considerations, I do not have much experience with participant observation in the e-waste industry. Even though reflexivity urges me to reflect on the ethical-political commitments towards the researched, I always have a sense of powerlessness to help the migrant women workers change their situation in the short term after witnessing their misery and hearing their stories. This encourages me to rethink the responsibilities and roles that scholars should undertake in times of crisis—environmental crisis especially.

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This project should not only help reveal the environmental injustice those in Guiyu experience, but also make their voices heard and seek possibilities and visions for making transformations. Nonetheless, this fieldwork has gone beyond merely collecting data and has been an incredible experience for myself both academically and politically.

Chapter Four: Environmental Injustice Against Migrant Women Workers

Introduction

The distinctiveness of the social and environmental injustice experienced by migrant women workers in Guiyu resides in the fact that they participate in the production of local environmental pollution. For this reason, they are often seen by the dominant society as undeserving of sympathy because their environmental suffering is based on their own "wilful choice." This perception raises two fundamental questions. The first is whether migrant workers still deserve environmental justice when they "wilfully" choose to do jobs with high environmental risks, and when they are "complicit" in producing environmental pollution. The second is whether the "willingness" of migrant workers can justify our ignorance and inaction towards their environmental suffering and injustice. The key to the first question is to examine the "willingness" itself, which is often not a result of personal preference but a product of social and political arrangements. It thus requires us to reexamine the complex power relations that contribute to the environmental injustice perpetrated against them and maintain their "willingness." The key to the second question is to reflect on the "ignorance" of dominant society, which, as discussed in Chapter One, is socially constructed and sustained. It thus requires us to examine the power relations in the production and maintenance of prevalent understandings and knowledge about migrant workers

Therefore, drawing on fieldwork materials, I shall explore how multiple faces of power relations based on different social categories intersect to not only shape the environmental injustice experienced by migrant women workers in Guiyu, but also produce and sustain the wilful ignorance from the dominant society. From an intersectional perspective, I further argue that wilful ignorance can happen at various degrees among different people. Three types of "wilful ignorance" among different organisations and groups of people in Guiyu shall be listed below.

Deconstructing the Intersectional Power

As mentioned in Chapter One, the domination aspect of *power over* that leaves disadvantaged groups open to suppression and manipulation socially and environmentally is key to understanding the production of environmental injustice. The five faces of power

(ideas borrowed from Lukes, Foucault, and wilful ignorance) can be taken as an analytical approach to analyse the intersected power relations. In this section, I shall use it to deconstruct the multiple faces of power based on each social category of class, migrant status, gender, and age with intersectionality among different social categories being present in each section.²

Class

Hu, a migrant women worker from the Hunan province, was chatting with two fellow villagers along a polluted river near a *laozhai* the day I met her. They were all doing the job of burning circuit boards at workshops in the Industry Park.³ They rested at home that day because their bosses had other things to do and closed the workshops temporarily. During the conversation, Hu explained her working conditions to me. She said, "We sit in front of the stove all through the day. The stove is over 400 degrees, and the smoke is really smelly." She then complained that she was often sick with rhinitis, laryngitis, and other inexplicable illness. She continued,

You do not know what kind of illness will come to you... My hands hurt seriously because of the work. I cannot continue working to earn money and have to pay to cure the illness all by myself. The money I earned was all used up to buy medicine... There is no guarantee of work in these workshops at all. No labour security, no medical insurance. They can also ask you to leave at any time. Like today, if they say there is no work, you have to just wait at home.

Almost all migrant workers are employed in such an informal way and do not sign any contracts with workshop owners. It is also normal that the owners do not pay the required social insurance to workers, including medical and work-related injury insurance. The prevalence of the informal employment is related with the instability and fluidity of

¹ However, it should be emphasised that I shall not apply five faces of power in a strict sense. The phenomena of power in our social world are so diverse and complex that power embedded within different systems of oppression does not function in the same way that is completely aligned with the five faces of power. For example, in a given situation, power within some systems of oppression might manifest in all five faces, while it might manifest stronger in certain faces but weaker in others within other systems of oppression.

² The selection of class, migrant status, gender, and age as key social categories depends on my observation in the fieldwork. This does not mean that other social categories (such as provincial difference or ethnic difference) are totally irrelevant. They are just not as prominent as the other four social categories in the case of Guiyu.

³ For a photo of the work of burning circuit boards, see Wangyi kanke (2016).

the jobs as a result of the inconsistent supply of e-waste resources. When one stock of e-waste is completed and there is a resource shortage, migrant workers have to rest at home and wait for further information from their boss or find other jobs. Migrant workers are usually required to work for 9-10 hours every day, with only a short break for lunch at midday. They bring food from home, use the stove to heat, and then have it in the same workplace. Workers do not have a weekly day of rest except one day off during certain traditional holidays. Hu illustrated her everyday activities to me with a sense of profound resignation,

I am so tired, so tired...I get up at 5 am in the morning, make breakfast and prepare lunch, go to work at 7 am, have lunch at midday in half an hour, and arrive home at about 6 pm. I also have to buy vegetables, cook, clean, and wash clothes in the evening. Every day is the same... every day is the same...

The working environment and style in the workshops of Industrial Park has not changed since environmental governance has been carried out. Figure 6 shows the inside of a workshop in Industrial Park. On the contrary, Industrial Park has become a "pollution centre." Many times, when I mentioned the smelly air in Guiyu, people would reply: "The Industrial Park area is more serious, it is the most toxic place in Guiyu." Hu had a deep sense of this. She said, "The Industrial Park looks good from the outside, but workers suffer more than before because of the substandard environmental protection facilities. In previous family workshops, the air was more fluid." The chimney above the stove that swept smoke up was often described as not for use but for show. The harsh working environment makes the already hard work more unbearable, which can be glimpsed from my field notes after visiting an e-waste workshop in Industrial Park:

There were "hills" of different types of computer fans waiting to be sorted by the migrant workers by hand. The workshop was filled with the strong smell of plastic and oil coming from computer fans. Several migrant women workers were busy sorting them through, sitting on small chairs in front of a "fan hill." They had to figure out over ten types of fans and sort them out. Although simple masks were supplied, they were rarely worn because the environment was too stuffy. Workers all wore long-sleeves and trousers to avoid the heavy dust. Several fans and sprinkling cans were the only measurements to ventilate the smell and dust. After staying there for about 15 minutes, my body sweat out and felt heavily uncomfortable. The unpleasant smell made my stomach upset and I almost vomited. A migrant women worker saw my discomfort and

said, "If you stay here for a longer time, you would know more about the terribleness of this place. This work is too dirty and tiring." (Field notes, May 6, 2018)



Figure 6 Inside of a workshop in the Industrial Park.⁴

From the perspective of the labour process, there is always a combination of coercion and consent organised by the owner to regulate workers and extract their labour (Burawoy, 1982; 2004). This is also true and manifests more incisively and vividly in these small family workshops. Zhong, a migrant man who has been working in an individual workshop for four years, illustrated a seemingly contradictory situation that he felt confused by. At the beginning, he said, "The wealthy local bosses are usually good to migrant workers, unlike the poor ones. They talk with me politely and even hand me cigarettes. Their children are also very kind and show care to us, particularly to the older workers." Then he continued with confusion,

My current boss treats me *very, very, very* well...But when he stares at me, I feel afraid. I don't know why. Sometimes he talks to me with smile, but when

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⁴ Source: Ye Zhang, taken on July 24, 2017.

he stares at me while I am working, I feel so afraid because I don't know whether I am doing a good job or not.

Coercive power in ways of beating, threatening, regulating, and punishing can often be seen from academic research, media reports, and migrant workers' own narratives. This functions to cultivate an atmosphere of fear and discipline to ensure the maximisation of efficiency and obedience. Security cameras are installed at every corner of the workshop and the local owner/overseer walks around to inspect workers regularly. Walking in Industrial Park, it is normal to see overseers sit at the gate of the workshop, talk with one another, and supervise workers. These measures help generate a condition like Foucault's (1995) panoptical observation that puts the workers under all-perceiving eyes for disciplinary purposes. As Zhong said,

I can see his shadow through the light and know that he stands still right behind me, sometimes even for half an hour. I don't even dare look up... Once a new worker even didn't dare to go to the toilet because the boss stood aside...Our boss requires us not to speak loudly and quarrel with each other. We need to cooperate. If you don't obey him, he will not pay you money or will let you leave.

When and how often one should go to toilet, what relationships among workers should be maintained, and even what body postures should be taken to be more efficient are all carefully calculated and supervised by the bosses to achieve obedience from workers. As Song, another migrant women worker from Sichuan, said, "The bosses know how to be productive for each type of work. For example, they will ask you to keep close to the table, or not put your elbows on your thighs when you are seated."

On the other hand, "benefit strategies" are often mentioned by migrant workers and they are important for the workshop owners to cultivate dependency and subservience that allows for migrant workers to be manipulated and exploited. The kindness of some local bosses, as indicated by Zhong, has been illustrated by many migrant workers during my fieldwork. It is easier for "kinder" bosses to maintain control over workers. The boss who pays one's salary on time, gives some help to migrant workers, or pays medical expenses for injured workers are regarded as good and kindhearted with high *suzhi* (personal quality). These qualities of "kindness" are salient in sustaining the compliance of migrant workers, despite being paid with poor salaries, enduring harsh working environment, suffering from physical bullying, and being disrespected and devalued. This way of maintaining control is particularly effective for early migrant workers who had no money

and skills when they first arrived in Guiyu. A migrant women worker named Jiang recalled her miserable and difficult life at her hometown before going to Guiyu in the 1990s and explained how the local boss gave her an opportunity to survive:

We didn't have any money when our second child was born. I could only give my children sweet potatoes to eat, though I knew I shouldn't have. We were very poor at that time, sometimes there were no meals for three days and three nights...We also owed others more than 10,000 yuan (about 1,400 US dollars today) in 1994. My child was only 3 or 4 years old when my husband and I decided to go outside to earn money. He cried outside the coach and asked me not to leave him behind... We came to Guiyu and met a very good boss... When we first came here, we were so poor and couldn't even afford to eat meat. My boss accepted me, gave me a job, and taught me how to work. The boss's wife often gave us leftovers, cookies, and candies, she also showed care to me when I was sick. At that time, it was so difficult...It was so difficult...

She then lowered her voice and told me that the boss asked her not to let other workers know her salary, so she didn't tell a Sichuan worker who had asked her. She further said, "Because I didn't tell her, she refused to teach me anymore and complained about me to the boss. The boss of course would believe me...Sichuan women are all very bad, they have a very bad reputation." This sort of "benefit strategy" thus can also be used as a technique to generate an effect of isolating workers.

Besides the coercive power and soft power to maintain the consent from the workers, conceptions about migrant workers and the working environment also help to justify exploitation. On the one hand, the harsh working environments and the difficulty of doing e-waste jobs have been widely normalised. In J. Chen, Li, and Kong's (2014) report, when asked about the dirty working environment and its influence over the workers, one workshop owner responded, "What job does not use life to exchange money?" A follow-up story happened in the workshop mentioned in my above field notes is that, later a local overseer noticed my uncomfortable reaction towards the work. He had mistakenly believed that I was on the lookout for employment, and said with a sneer, "Are you not even able to do this work? What job in the Industry Park is not dirty? There is no clean work in the Industrial Park and Guiyu."

Migrant workers are usually depicted as being willing to choose e-waste jobs and only caring about earning money. Such willingness is often used to justify the social and environmental exploitation towards migrant workers. If one cannot bear such an

environment, he/she is free to leave the job at any time. This leads to the ignorance of migrant workers' right to work in a clean and safe environment and further the misrecognition and devaluation of migrant workers. Even though they have made great contributions to the growth of local economy, migrant workers' work has never been valued and respected. Once I asked Li, who used to be an e-waste worker and worked as a hotel security guard then, whether the local bosses would accept me as a researcher who just wanted to experience the work. He answered,

Don't say you are a researcher, but a worker. What they want are only workers, no matter who you are. They don't care about how old you are or other things, they only need labour to work for them...If you are a migrant worker and want to find a job, no one will respect you.

The whole set of discourses on "high fluidity," "willingness," and "enduring hardship" is also accepted by governmental officials to excuse themselves of their responsibilities towards workers. "High fluidity" of migrant workers is often used to justify the government's "inconvenience" and "difficulty" to govern migrant workers and protect their interests. Both town-level governmental officials and village committee members imply that migrant workers change places very often and come here to Guiyu for the sole purpose of earning money. In my experience of talking with local officials, they are all very careful when talking about migrant workers, emphasising their contributions towards Guiyu and avoiding showing discrimination towards them. The capacity to endure hardship is usually praised as a good quality of migrant workers. Dong, a village committee member, said, "Migrant workers are highly fluid and difficult to govern... They come here mainly for earning money. They are all very hard-working and usually do the work that local people cannot or don't want to do." Another village committee member Bao from a different village expressed similar views, "Migrant people come here to help us earn money...The development of one place relies a lot on the migrant population...We also admire their willpower and the ability to endure hardship."

The capacity to endure the terrible environment and hardship is whitewashed as a "spirit" that is necessary to earn money, which in turn helps naturalise the hardship of the work. As a result, the local government totally leaves the problem of migrant workers to the market— if the migrant workers cannot bear the environment, they will leave to find other jobs. Migrant workers' interests are excluded in the decision-making process of environmental governance. Either in the period of serious environmental pollution or contemporary environmental governance, their environmental suffering and interests are

totally ignored. For example, none of the local government's policies in Guiyu have any instructions on the issue of migrant workers (see Chaoyang Yearbook Compilation Committee, 2018). Their suffering has never been constructed as an issue that needs to be attended to and dealt with.

Migrant Status

Migrant-local relationship is another key issue in Guiyu. As mentioned, the local clan power remains quite strong in its everyday life. Since ancient times, people in the clan have a strong tendency to help each other inside and unite to fight against the outside. The strong local clan system is one of the main factors that contribute to the discrimination towards and exclusion of migrant people. Almost all migrant participants have complained to me about the ruthlessness, inhospitality, and brutality of the local people. Physical bullying and assault occurred for no discernible reason when migrants arrived in the 1990s, not only in the working place but also in everyday life. According to online news and migrants' own illustrations, it was normal to see local people beat migrants— even to death— in earlier years. As Lin, a migrant women worker from the Hunan province, said,

It was very difficult when we first came here. The local people— even the children— bullied and beat migrants for no reason. Women did not dare to go on street alone. Now the situation is better, the younger generation has higher *suzhi* (personal quality) than the older generation.

Migrant women workers are not only more vulnerable towards violent attacks but also sexual harassment. After knowing that I was doing research in Guiyu alone, Jiang told me to be particularly careful with my own safety. She said, "If a local man asks you whether you are alone or not, you must say your husband is also here... Local people are very bad, pay special attention to them... Many of them are poor bachelors." She also told me her own experience of being harassed and followed by a local man. Later she mentioned again, "Nine out of ten local men are bad, they are very lecherous."

As migrant workers come from poorer rural areas, they are always labeled as dirty, rude, annoying with a lower *suzhi*. One report by Greenpeace and the Anthropology Department of SYSU (2003a) illustrates attitudes from the local people to the migrants with the following description:

In our interviews, there are mainly two typical attitudes of locals to migrant people: disdain and hostility. The bosses think that migrant workers are just poor farmers from other places. They came to Guiyu to earn money... In their

eyes, migrant workers are just poor people who try every means to earn money, either through working or stealing. (p. 18)

It is common knowledge among local people that migrant people have worsened the local public security. A village committee member said, "Previously notices were posted everywhere in the village: migrant people are not allowed to go out after ten o'clock in the evening...This sounds quite ridiculous now, but it was true in the past."

Nowadays, even though physical conflicts are rare, disrespect and discrimination towards the migrants still exist in everyday life. Among the local people that I have contacted, most of them are kind and hospitable except for a small proportion, who were quite vigilant and refused to talk with me. A lot of migrant people have also said that the current situation is much better than before. However, this does not mean that exclusion and discrimination do not exist anymore. They often hide in everyday life in a more tacit way. Qiang and his wife Nan are very kind and affable local people. They were running a small shop near a *laozhai*. They lived in a new building at another place instead of this *laozhai*. Qiang complained to me about the polluted river and the inaction of the local government, stating, "I do not mean to criticise, but these *laozhai* are too dirty. The local people rent them to migrants, and they don't take care of them at all. Only migrant workers live there, and the security is not good." The next time when I talked with his wife Nan, she also asked me to pay attention to safety after knowing that I was alone. She mentioned the *laozhai* behind their shop with a look of disdain, "The *laozhai* is very messy and unsafe, I do not dare to come at night alone."

With respect to migrant's living conditions, compared with most local people who live in new buildings and have an easier access to living facilities, most migrant workers live in the *laozhai*. Figure 7 shows Guiyu's housing distribution mode. This map shows 51 sites of newer *laozhai*, 51 sites of new buildings, and 50 sites of older *laozhai* in 15 villages/communities in Guiyu, showing that nearly all older *laozhai* are located closer to the polluted river than the other two residence types. A lot of affluent locals have even moved out of the town and into urban cities to evade the pollution.

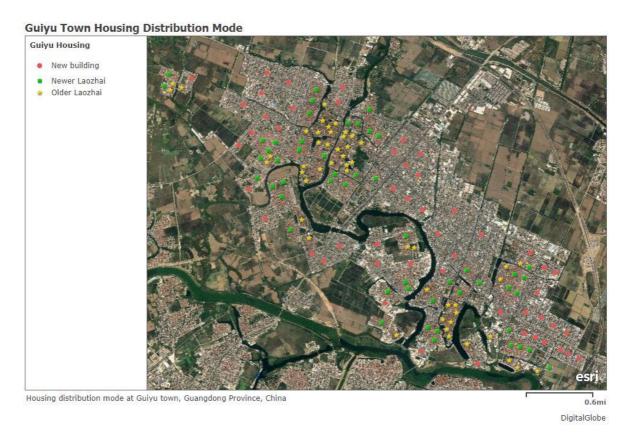


Figure 7 Guiyu's housing distribution mode.⁵

The environment in the old stockade is very poor (Figure 8). Most of the old houses are dilapidated. They were initially built around natural rivers and pools when the water was clean, however nowadays the polluted black water is covered with different kinds of rubbish, which further fills buildings with unpleasant odours. Tap water is not available in this area, and people have to buy and carry water from other places for drinking and cooking. According to my observation, even though the underground water is highly polluted, people still use it to wash vegetables, do laundry, and take baths. Some families had used self-made water filters (see Figure 9) before turning to underground water. As Liu, a migrant women worker from Anhui said, "The underground water is clean at the beginning, but after half a day, it will turn yellow and there will be a layer of oil on the suffice.

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Figure 8 Appearance of one laozhai from the inside.6



Figure 9 Self-made water filter in laozhai.7

Source: Ye Zhang, taken on March 26, 2018.
 Source: Ye Zhang, taken on May 19, 2018.

In the Chaoshan dialectic, *yaojiren* means "people on our own side," implying that Chaoshan people are united, and more wary of outsiders. What corresponds to the term *yaojiren* is *waishengzai*, which has a debased meaning and means people from other provinces. In a conversation with Li, he told me how to pronounce *waishengzai* in the local dialectic. He said, "I cannot understand all the dialect words, but I can figure out *waishengzai* in their discussion because it is often mentioned." About 10 seconds later, he said with a sense of loss, "I feel uncomfortable when hearing this term." "Why?" I asked. "I just feel uncomfortable. It sounds uncomfortable. Using Mandarin to say this word is better, it is particularly uncomfortable to say this term in their dialect... This makes me feel as though we are excluded."

Exclusion and discrimination towards migrant children are also very common. Song, whose whole family was in Guiyu, told me that her first daughter— a second-year junior high school student— was isolated by her local classmates. She said, "All her friends are from our hometown. She told me that their classmates often call them waishengzai." I asked, "How about the teachers?" She answered, "Teachers don't, but sometimes they call them waidide (those from other provinces) in Mandarin. Some teachers also use local dialect in class." One of her first daughter's close friends was going back to her hometown to continue high school. Song said, "My daughter also wants to go back to our hometown, she said no one would call her waishengzai in our hometown. It would be easier for them to integrate into the community there though they didn't go back very often before."

Exclusion happens not only in daily life but also at an institutional level. As most migrant workers' *huji* (household registration) remains in their hometown, administratively the local government in Guiyu does not have a strong sense of responsibility for or jurisdiction over migrant workers. In fact, the central government has released some policies that benefit migrant workers. For example, migrant workers can reimburse their medical insurance in the place they migrate to. Nowadays, some local committees can offer administrative help to migrants. However, there is still a loose connection between the local government and migrant people. As one local committee member Zheng said, "There isn't much we can do for migrants administratively... We don't have much interaction with them in daily life." Representatives of women's congress (*funv zhuren*) in

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⁸ The Chaoshan area includes four prefecture-level cities, including Shantou, Shanwei, Chaozhou, Jieyang. People in the Chaoshan area use similar language (Chaoshan language) and share similar cultures.

town-level governments and village-level committees are supposed to be responsible for conducting women-related work as well as representing and safeguarding the interests of women and children under the leadership of All-China Women's Federation. According to Fu, a representative of the women's congresses in Guiyu, she is mainly responsible for family planning work related to local people and usually does not have any engagement with migrant women workers.

Politically speaking, migrants do not have the right to vote or stand for election in Guiyu as they do not belong to these villages. The administrative and political absence of migrant workers means that the interests and rights of migrant workers cannot be represented in decision-making processes and are placed out of collective consideration. They are excluded in the process of local and environmental governance. For example, *laozhai* as the main living space of migrant workers is almost abandoned and always the last place village committees look to manage. According to Zhu, a village committee member, there is no systemic renovation towards *laozhai*. Its maintenance mainly depends on its inhabitants. Another village committee member Wang also said that environmental governance of their village has little to do with migrant people. Once I had a talk with an older migrant worker Chuan at a park in front of a *laozhai*, along which there is a highly polluted river (Figure 10).



Figure 10 The laozhai Chuan lived in.9

⁹ Source: Ye Zhang, taken on March 3, 2018.

Chuan had lived in this *laozhai* for several years and talked to me about its poor situation. He said,

You see the river water is so dirty, the excrement from the toilet at the entrance of the *laozhai* are discharged into the river directly. The toilet was newly renovated only two years ago. It used to be "open-air" and inconvenient. There is still no clean water in *laozhai*.

As members of the village committee also belong to the village clan, they are more concerned with local people's interests and thus stand by their side when there are conflicts. Therefore, the exclusion of migrants is not only due to the institutional barrier of the huji zhidu but also wilful ignorance towards migrants by local governments from a cultural perspective. In fact, under new urbanisation, migrant workers are able to transfer their *huji* to Guiyu, but most of them choose not to. Li said, "It is useless to transfer my huji to Guiyu, there is no benefit." For most migrants, Guiyu is not attractive not only because it is only a township, but also because of the "intended" unfair treatment from the local government and village committees. This bothers them more than the institutional and political exclusion caused by *huji*. Arbitrary charges, threats, inactions, and cover-ups towards local people's bullying have often been articulated by migrants. Arbitrary charge with threatening is the most common issue experienced by migrant workers. Liu was engaged in recycling plastic waste with her husband. She complained to me several times about the overbearing village committee members in her village. Public Security Committee (PSC) ¹⁰ members often charge migrant people at their wills. Refusing to pay the required fees may cause trouble. She illustrated two stories that happened to her fellow villagers:

Our village committee still charges the temporary residence permit (*zanzhuzheng*)¹¹ fee from the migrants even though it has been cancelled. They also charge the environmental hygiene management fee, but they don't manage the environment at all...Once a fellow villager of mine didn't pay the temporary residence permit fee, PSC members just started beating him without

communities that is responsible for safeguarding the local security.

¹¹ Local governments used to require non-local residents in urban cities to apply for temporary residence permits when they worked and lived in the city for a long period of time; migrant people without this permit would be punished or repatriated. This policy was widely regarded as discriminatory towards migrants and was canceled nationwide in 2015 and replaced by the policy of residence permit (*juzhuzheng*).

¹⁰ Public Security Committee (PSC), led by the local village committee and higher-level Public Security Bureau (PSB), is a basic level organisation in rural villages and urban residential

asking anything. It is so horrible... Another fellow villager was threatened by the PSC members to move out of the village with no reason. But after giving them some money, they didn't say that any more... There is no place to argue and appeal at all.

The next time when I visited Liu was just after a strict period of environmental governance during June 2018 (referred to as "the environmental governance storm" which is often used by the media to refer to a certain period of government's strict environmental governance). An inspection team from the higher-level government came to Guiyu and checked illegal individual workshops. Many workshops in Industrial Park were closed temporarily to avoid being checked. A lot of migrant workers had to wait at home for this storm to pass. Individual workshops outside the Industry Park were also targeted, a lot of which were banned and fined. Migrant workers were also faced with more security risks. Liu illustrated to me what happened during this period:

One fellow villager of mine who was working in a workshop was arrested recently. The boss usually has already fled away when the government arrives to check and close down the workshop. They arrest the workers and impose a fine to them instead. If they cannot afford the fee, they remain arrested and wait for their boss to pay a fine to the government. Some bosses have to pay 300,000- 500,000 yuan to redeem their workers... In previous periods the PSC members asked us to pay 500 yuan as a management fee, otherwise we had to move out. Those days they came over and over and asked for money, threatening us with bad attitudes.

"Being attracted and then excluded" accurately explains the situation of migrant people in Guiyu. Migrant people are not scared of the environmental pollution, but rather of the xenophobia from the local people and government. In addition, migrant status and class are closely related in shaping the figure of migrant workers as being willing to choose unhealthy jobs and sacrifice their health to earn money. As we have seen in the above section, migrant workers are stripped of the right to be protected from environmental pollution just because of their migrant status— they are fluid, willing to do such work, and do not belong to Guiyu culturally, administratively, and politically. "Migrant" and "workers" are bonded so closely that it becomes an infinite loop— it is because migrant people are regarded as having low *suzhi* that they are humble enough to engage in dirty ewaste jobs, and it is because they are e-waste workers that they are less respected,

recognised, and valued as migrants. My conversation with two security guards in Industrial Park, Gu (local) and Jing (migrant), shows such devaluation clearly.

Ye: Are all the workers in Industrial Park migrants?

Gu: Almost all. Because the air is so smelly, local people are not that silly.

Jing: Local people are too lazy! TMD! (dirty words in Mandarin)

Gu: The locals move outside to buy houses. Only the outsiders still come here.

The locals want to get out of the town. I will definitely leave here if I can...

Though the salary for burning circuit boards is relatively high, people will get sick after years, it's not worth it... Local people are not willing to do this kind of job.

Gender and Age

Gender is another factor that shapes the experience of social and environmental injustice, and it often functions together with age. As we can see from previous illustrations, migrant women workers and children are more vulnerable towards the bullying and violence from the local people. Zhong told me that once a woman asked for his help in an early winter morning when he was on his way to the bus station. He illustrated,

That girl walked to me and asked if she could stay with me. It was very dark, and I think she was very afraid at that moment. This place is so dangerous at night. You see I am quite strong, but I am still scared when walking outside at night.

Liu also told me that she was only over 20 years old when she first came to Guiyu.

It was my first time leaving my hometown. When I got off the train holding my child, I felt so afraid even when seeing the pedicab drivers... My brother-in-law once witnessed a migrant who stole things being beaten to death by locals. Now the situation is much better, there are cameras everywhere on the street.

Within the family, it is women who do most of the housework, which can increase their chances of coming into contact with pollution. As mentioned, even though the underground water is highly polluted, people still use it to wash vegetables, do laundry, and take baths. It is normal to see migrant women washing clothes along the polluted river. When asked why they wash clothes along the river, Lin answered, "If there is no rain, the river water is very smelly. But it is still better to wash clothes in the river as clothes washed with underground water will turn yellow when they are dried." The following are

selective field notes from my observation at a popular laundry point (Figure 11) along a polluted river.

Time: 17:07-18:07, March 23, 2018

Observation: There are 23 people washing clothes at this site during this period. All of them are women, including 18 adults (four are over 40) and 5 children. During this period, the laundry point has 15 people coming to wash clothes at most, and it can only accommodate up to 10 people. People have to wait if there is no space. Two little girls come over to wash their faces by the river. Things washed include: shoes, coats, pants, sheets, underwear, among others. There is no obvious rubbish around the laundry site, but some a little far away in the same river. The river smells. Girls not only wash their own clothes but also clothes of their family members. Several boys are playing around the river.



Figure 11 A laundry site at Guiyu. 12

While my observations took place, I rarely saw men help their wives wash clothes. This is also confirmed by the migrant women participants. Compared with migrant men, migrant women workers were burdened with working, doing housework, and taking care of

¹² Source: Ye Zhang, taken on March 4, 2018.

children. Only in very few migrant families did the husband help with housework. Jiang gave me a very affirmative answer when asked whose life was more difficult, women or men. We were in a small park near a *laozhai* when I met her. A lot of migrant workers come to this park for a rest in the summer, but most of them are men (Figure 12). Jiang said,

The life of women is definitely harder than men's. Women have to do the housework, take care of the children, and work to earn money. It is very tiring. You see there are nearly no women in this park. When men are taking rest in the park and playing cards, women are working outside or doing housework at home.



Figure 12 A public park where migrants usually rest. 13

Migrant women are more burdened with taking care of the children both in emotion and action. It is a very painful experience for many migrant women to leave their children at their hometowns. Whenever we discussed about her children, Liu felt very regretful about not raising them by herself. She said,

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¹³ Source: Ye Zhang, taken on June 4, 2018.

My daughter studies in the best high school at our hometown. She studies very hard and behaves very well at school. She started living in school since the third grade of elementary school, without our company at all. I feel very sad and sorry about this... Now she is living outside of school all by herself, with no one to talk with. I am very worried about her, but I can do nothing. When my son was little, he even had no idea of missing mum. Only after my daughter said she missed me did he follow to say that he missed me too. I often blame myself, but we have no choices. We have to earn money to raise them.

Fei, a younger migrant women worker at Guiyu, was very busy every day. After sending her children (a daughter and a son) to their kindergarten, she had to go to the industry and picked up the children at 5 o'clock in the afternoon. "Then I have to go to the market and buy vegetables. My husband is going to get off work at 6 o'clock, so I have to be quick," she said. As a young mother, Fei is particularly anxious and stressed about educating children and offering them a good environment to grow up. Song also told me that when her second daughter was very little, she had to bring her to the workplace, because there was no one to help take care of her. Hu said, "It was normal to see women bring their children to the workplace before. It is rare to see now."

Not only do younger migrant women are faced with the burden of taking care of children, older migrant women also have to take the task of raising their grandsons, which is a common practice in Chinese culture. Song complained to me about helping raise her son's two children. She said,

Taking care of children at home is more tiring than working outside. Besides cooking and taking care of babies, I still have to do some odd jobs at home. I don't have time to take a rest... I asked my daughter-in-law to stay at home and so that I could go to work, but she refused because she also thought staying at home is more tiring.

Jiang also had to help raise her two grandsons, whose parents were working in another city. She stopped working and concentrated on looking after them at Guiyu. Jiang complained, "I have already got bored with taking care of them. They are too naughty. I have lost a lot of weight since they came here...The environment at Guiyu is so bad, and they often get sick. It's nothing good here." Jiang's husband was still working at Guiyu to earn money as they had to help their son to buy a house. She continued, "We still feel a lot of pressure. My son and daughter-in-law cannot raise the children by themselves because they are busy with earning money. It costs hundreds of thousands to buy a house."

According to Jiang, the order migrant couple who lived with her in the same yard were also taking care of their grandchildren while working in industries.

The potential environmental risk to the health of migrant children is a main concern for young migrant women who have a higher consciousness about the pollution. Qing, a young migrant woman, was worried about the skin disease of her 2 years old son. He had been infected with the disease for a long time, but no exact cause could be found. Qing said, "I am not sure whether it is related with the pollution. The air quality here is too bad...I will no longer let him stay here when he grows up a little." Even though Fei had tried her best to give her children good education and living conditions, she could do nothing about the pollution. She said, "The environment is too bad, I think I will send my children to my hometown sooner or later."

In addition to the unbalanced tasks and responsibilities that are assigned to women and men in everyday life, there is also an unbalanced division of labour in terms of gender and age in the workplace, once again illustrating how different modes of power are internally constitutive of each other. The combination of gender (sexism) and age (ageism) has determined certain working patterns in the labour market. One typical characteristics of migrant women workers in e-waste workshops is that most are over the age of 40. While migrant men and young migrant women workers usually have more choices and opportunities to enter other industries with better environments and treatment, older migrant women workers and children usually cannot select works at their own will. Compared with migrant men, instead of working in the e-waste workshops, a lot of migrant men can choose jobs that need physical labour, such as transporting, building, and pedicab driving. Compared with younger women, it is more difficult for older women to find clean jobs that have a relatively better environment. Large-scale industries, such as textile mills, prefer to employ younger women. This is based on the perception that older people learn things more slowly than young people, and older people can endure more hardship and dirty work and so are willing to do e-waste dismantling work.

Lin showed me the sores on her right arm and right neck when I visited her on the morning of a traditional holiday. She had been taking medicine since last year, but the illness still had not fully recovered. As the weather turned hotter, the sores became more serious and unbearable. Lin's job was burning circuit boards. Because the temperature of the stove is quite high, workers have to wear sleeves to protect themselves. This, however, in turn can cause sores. When I asked her why she had not changed jobs, she answered, "There are very few older people entering large-scale industries. All are young people.

Because (they think) older people are too stupid. Even though you are willing to learn, they still don't employ you, they just don't." For the bosses, because younger women workers have better choices and can leave at any time, older women seem to be more "loyal" towards and dependent on the work, which makes it easier to exploit their labour through, for example, lowering salaries or making the working environment unchanged. In addition, even for the same work, women workers' salary is lower than that of men. Therefore, to earn more money, migrant women workers have to do jobs that are dirtier and unhealthier such as burning the circuit boards, the salary of which is relatively higher than that of other easier jobs. Sun was also doing the work of burning circuit boards in Industrial Park. I visited her family during the environmental governance storm when the workshop she worked in was temporarily closed. Sun's husband, Ren, was a hotel security guard as well as a part-time pedicab driver. We were discussing Sun's work:

Ye: Is the salary of women workers lower than that of men workers?

Sun: The salary of women must be lower than that of men. Physically, women are weaker than men. Even if they work for the same amount, the salary of women will be lower... Burning circuit boards is dirty and tiring, young people are not willing to do it, they cannot bear the hardship.

Ye: It is also not good for people's health.

Ren: I plan to let her stop doing this job after two years, because it is not good for her health. But now we don't have any other choices, as we have to save money for my mom and children. The salaries of easier jobs are too low.

This gender differentiation of salary can also be seen in child labour. Hiring child labour in Guiyu is very normal. Song's first daughter and her friends often engage in e-waste dismantling work during weekends and holidays. Their salary was calculated by the weight of e-waste element that they dismantled and paid every three months. Compared with other adult workers, their working time was more flexible. However, children were more likely to be cheated. As Liu illustrated, "During summer holidays, it is very common to see children go to these workshops by themselves and ask the boss whether there is work to do... They are easier to be bullied by the boss." Song's daughter often complained to Song about the strict requirements from the boss's wife, such as no talking, coming to the work early and leaving late, etc. Song said that their current employer sometimes also played tricks on them. She said,

Last year the boss said they would increase the pay for dismantling a type of ewaste element. They did, but they didn't ask my daughter to dismantle that element anymore... Because their salary is calculated by weight, they always try to ask them to dismantle the elements that are difficult to increase the weight. They are too young and timid to argue back.

The other day when I was visiting Song's home, her daughter was just back from work, she felt very angry because the new boys in their workshop had a better work with timerate wages. She complained that boys could get time-rate wage just because they are boys. Despite the fact that boys knew nothing of the work, they were paid according to time spent at working, rather than by weight.

The development of local e-waste industry has also facilitated the blossom of the local service sector, particularly the hotel and entertainment industries. According to many participants, prostitution was quite prevalent at Guiyu, and most of the prostitutes were young migrant women. They do not need to endure the harsh environment in e-waste industries, but they achieve the least respect from both the local and other migrant people. Even though I did not have direct contact with them, I could feel the discrimination towards them from other people. As Xing, a migrant woman, said to me, "Only older married women choose to do e-waste dismantling works. No young woman wants to do that. It is not good for health." She then continued with a sense of disdain, "Many local people go whoring when they become rich. Some young women come here and work as a prostitute. Now they can earn more money, but when they get married in the future, they cannot bear if their husband cannot earn good money..."

According to the United Nations Girls' Education Initiative (UNGEI), as a result of the patriarchal practices of favouring boys over girls, almost two thirds of Chinese schoolage children who are not enrolled in school are girls. Girls are also the first to quit school when there are economic pressures on the families. Less than 50 per cent of girls can continue secondary education after finishing primary school. The situation has not been alleviated by the process of migration. On the contrary, migrant girls at Guiyu have an even lesser chance to have a higher-level education.

Song's daughter and her friends did not perform well in school. The overall education level in Guiyu is not good. Culturally speaking, the local people do not attach much importance towards education, because even though children do not study well, they can still rely on the e-waste business. Nowadays, local affluent people, who can afford to give children better educational resources, start paying more attention to children's education. As Fei mentioned, "Local people who have some money all send their children to read outside... Only people who don't attach importance to education leave their

children to study here. The quality of local education is really bad." This can also be seen from the words of a local primary school headmaster Xu. He said,

We used to say that children in poor families can become independent very early, but now the children of the poor behave very badly. The poorer the parents, the worse the children. The richer parents pay more attention to education and cultivate better children... But why are you poor? Being poor itself is problematic.

According to Song, only about 10 per cent of her first daughter's class can continue to finish senior high school. I asked Song whether her daughter would take the senior high school. She said, "Her performance is too poor at school and I don't think she can make it... If we have money, then that would be different" I further asked, "What is she going to do after graduating from junior high school?" Song replied, "We will see where she can find a job." Her daughter did not care much about her own performance at school. Many of her classmates and friends quit school to earn money early, which made her eager to graduate as it would be a waste of time when continuing reading was not promising. Song's second daughter was reading in a private primary school founded by a migrant from Hubei province. Almost all the students there were migrant children. Song was trying to find ways to transfer her to a public primary school because the education of the private school was not good. However, because of the overpopulation of local and migrant children, public schools usually choose children from local and affluent families first. This would make it difficult for her daughter to go to local public schools.

Migrant girls also have to help take most of the housework at home. It is normal to see girls washing clothes along the river (Figure 13). Several times when I visited Song's home, her second daughter— a first-year primary school child— was washing dishes, using the polluted underground water directly. From Song's illustration and my own observation, I got to know that at home her second daughter was mainly responsible for washing dishes, and her first daughter was responsible for cooking. They both washed clothes along the polluted river, because it was often inconvenient to carry water to wash clothes without tap water in *laozhai*. They also have to help Song do odd jobs at home. Compared with Song's daughters who have to do housework and part-time jobs, her two grandsons (one is almost the same age as her second daughter) do not need to do any work. Song's second daughter also has to take care of her nephew when she is out of school.



Figure 13 Two girls washing clothes in a river. 14

In fact, as mentioned in Chapter Two, the process of migration has been argued to have alleviated migrant women workers' pressure from their parents-in-law in terms of being far away from the "father power" (e.g. C. H. Ma, 2003; Tan, 2004). A lot of migrant women workers in Guiyu regard migration as an important opportunity to get away from conflicts with their parents-in-law. They also become more empowered and independent in the family as they start earning money. As Song said, "My relationship with my mother-in-law was not good, so I don't go back to my hometown very often. Being outside is good, I can earn money by myself. In my hometown, I can do nothing." Min, a current hotel cleaner said, "I don't want to live with my son and daughter-in-law ... It is good to go outside to earn some money so that when I become old, I can go traveling." However, as we can see, the process of migration does not help alleviate certain patriarchal practices and perceptions. Girls still enjoy less resources and opportunities than boys. Most migrant people regard earning money for their sons as an important aim to stay and work in Guiyu. As Sun said, "We are still under great pressure, not because of our daughter but our two sons. It would take a lot of money for us to assist them in getting married and settling down."

¹⁴ Source: Ye Zhang, taken on July 1, 2018.

Being positioned at the intersection of systems of oppression based on class, migrant status, gender and age, female migrants at different ages are faced with various types of plights. For migrant girls, the migrant status, the patriarchal tradition of favouring boys, and the scarce opportunity for students to achieve a higher education all contribute to their powerlessness. The experience of migration—intersected with these patriarchal practices and perceptions—makes it worse for migrant teenagers because that they have a far lesser chance of obtaining a better education to escape from the current situation. Instead, they are more exposed and vulnerable towards the environmental pollution and will most likely be faced with greater life difficulties in the future. For older migrant women, being discriminated as an elder, a woman, and a migrant worker, they have no other choices but to work at harmful environments to earn more money. At home, they have to undertake raising grandchildren and doing housework as a result of the patriarchal perceptions and practices. Younger migrant women are often more bothered with children's education, health, and growth, being emotionally and behaviourally burdened with taking care of children and the whole family. Additionally, migrant women workers' independence and empowerment is based on the devaluation and misrecognition of their labour as migrants and women with either a younger or older age. It is more proper to say that the migration process has transformed the injustice against migrant women workers into a greater problem.

The different faces of power embedded in multiple systems of oppression are intersected as a network to produce the social and environmental injustice against migrant women workers, in terms of the maldistribution of environmental pollution, the exclusion in decision-making, the misrecognition and devaluation, and the restraint in developing their capacities. Migrant women workers are easier to be manipulated and bullied in both working and living spaces; they are excluded by the local government and village committee; the intersecting debased perceptions and knowledge about migrant women workers help normalise their environmental suffering from environmental pollution in working and living environments. What is more important, however, is that there is an ongoing ignorance towards migrant women workers and an inability of dominant society to detect, make sense of, and deal with this issue. This is a status of more than being silenced, as although there are a lot of reports about migrant workers' situation no one really aims to change their situation. Such ignorance does not simply reflect in ignoring their interests in local and environmental governance as a result of the concrete power embedded in the decision-making processes. It is even more than misrecognising and

devaluing migrant workers in terms of perceiving them as "cheaper" and expendable—though this plays an important part in making them invisible.

Wilful Ignorance and Its Spectrum

I have argued in Chapter One that there is a fifth face of power (wilful ignorance) to which we need to be attentive. Conceptions, perceptions, assumptions, and stereotypes are closely related with whether we know something and how we understand something (Dotson, 2017; C. W. Mills, 2007). Through regarding migrant workers as humble, dirty, only caring about earning money and normalising the hardship of doing e-waste dismantling work, migrant workers' environmental suffering is naturalised as a result of their personal and wilful choice. This epistemic practice supplies a belief-forming basis for creating systemic ignorance of the dominant society that supports a distorted sense of reality. It further helps "naturalise and dehistoricise both the process and product of knowing, such that no political reflexivity or sociological analysis is thought to be required or even allowable" (Alcoff, 2007, p. 56). Migrant workers are visible with stereotyped images as the inferior Other, and invisible in terms of lacking a full interpretation of their experience in the dominant cultural expressions.

There is also a "male and age ignorance" in a sense that the more vulnerable status of (either older or younger) migrant women workers is not detected and acknowledged by the public. This kind of numbness towards the factor of gender in social and environmental injustice is also produced and maintained mainly through the social and cultural conventions that imply a series of traditionally accepted ways of understanding and behaving, such as "older women are not as smart as younger women," "older women are more fitting to do dirty and tiring works," "housework should be borne by women," or "women workers are less productive than men workers." Another specific feature of "gender ignorance" is that it often happens in a more tacit way. According to Young (2011), nowadays systems of oppression are not mainly shown in the "discursive consciousness"— discourse in open and verbal form, but rather through unconscious actions and reactions. Compared with class, migrant status, and age, cultural imperialism based on gender operates more on an unconscious level. Even though "gender equality" becomes the main discourse, patriarchal thoughts and practices are still embedded in everyday life, albeit implicitly. This makes sexism more difficult to discover and acknowledge. One may verbally say that daughters are the same with sons, but still supply

more opportunities and resources to sons. For example, Ren is a migrant men worker and has two sons and a younger daughter, all of them are working in other provinces. Ren likes his daughter a lot and often praises his daughter for being considerate and filial. On the contrary, her brothers are described by Ren as too "selfish" because they refuse to go back to their hometown where Ren has prepared houses for them. Ren had used up almost all the money he had earned in Guiyu to build these houses. He complained, "They both haven't got married, I don't know what they are thinking about. They don't like the houses I built for them. All the houses are useless now. They want to stay in the big cities." He was very angry and sighed whenever he said this. Once when he said this again, I asked him, "Why not give the houses to your daughter?" He seemed a little surprised as if he didn't expect me to say that. He paused several seconds and replied, "Does she want that?"

We can see that power within the production of perceptions and assumptions based on different social categories intersect to create the stereotypes of migrant women workers that result in ignorance towards them. All these perceptions reveal a lack of epistemic resources within the "fixed public opinion" that are important for people to make sense of the experience of migrant women workers. Epidemic resources refer to the languages, conceptions, standards, etc. that are used for understanding and assessing our experiences (Pohlhaus, 2012, p. 4). In Dotson's (2017) terminology, migrant women workers occupy a "negative socio-epistemic space." The epistemic resources in such a space are mainly developed from the experienced world of the dominant society and do not allow us to see, know, and make sense of the lives of migrant women workers.

It should be emphasised that wilful ignorance can happen at different levels among different people. Firstly, wilful ignorance can be a product of one's intersectional positionalities. Intersectionality alerts us that people can be dominant and dominated at the same time. In this sense, migrant men can also be wilfully ignorant towards migrant women workers in vulnerable situations under patriarchal practices. Local workers can also be reflexive towards power relations in the workplace. As Liu said to me, "Some local people also go outside to work as 'migrants,' so they can understand your mood and treat you well when they see you come to this village." Secondly, even though being in a dominant position, different people can be influenced by dominant perceptions and stereotypes to different degrees and therefore have various levels of knowing and understanding. As a local said in a report online (H. N. He, 2004) with a sense of reflection, "The local people would not like to do dirty and heavy jobs such as burning circuit boards... The implication here is that migrant workers are humble people compared

with the local people." In other words, our ability to detect certain wrongs can vary. People might also be ignorant towards different systems of oppression at various levels. One might know that there is bullying and exploitation towards migrant workers but cannot acknowledge sexism and ageism. Thirdly, the willingness also happens at various degrees out of different reasons. According to these three points, I shall list three different types of wilful ignorance towards migrant women workers among different groups and organisations in Guiyu.

We Don't Know, and We Don't Want to Know

The most extreme form of wilful ignorance can manifest as a complete intentional denial of environmental pollution, suffering, and injustice as well as an absolute refusal to know them intentionally. In this extreme form, migrant workers are regarded as undeserving of sympathy. They are not seen as oppressed and exploited, as a result of the abovementioned stereotypes, assumptions, and conventions deeply imprinted in one's mind that lead one fail to detect the social and environmental injustice. The view that "migrant workers come here only to earn money without caring for other things" held by some local people can represent this extreme view.

Such ignorance is also closely related to the denial of existing evidence and arguments about environmental pollution and suffering that oppose one's own beliefs and interests. For example, some local people often have a strong antipathy towards the negative reports and discussions of Guiyu. In the online community of Guiyu tieba, many local people regard these negative reports on the pollution in Guiyu as hyperbolic. They argue that the serious illnesses reported by the media are just lone cases. Once I had a talk with a local official Dan about some village committee members' precaution towards foreign researchers. He said, "Because many foreigners come to investigate and make negative reports about Guiyu, people in the village are more careful with people who do investigations, especially foreigners, for fear of negative reports." He then continued, "You are here now, and you can see what it really looks like."

In Greenpeace and Anthropology Department of SYSU's (2003c) report, many local people refused to admit that their workshop would generate any environmental pollution (p. 8, 12, 15, 18, and 19), or that working procedures can damage workers' health (p. 27, 28). For example, many local people regard the pollution of underground water as a result of a geological disadvantage instead of the e-waste industry (p. 27). In the same report, when talking about treatments to migrant workers, a local boss Guo said, "I just

follow other people, I cannot break the rules. I only do e-waste dismantling, which does not generate great harm to workers except for some injuries. I will definitely pay the medicine fee for the injuries" (p. 37). Similarly, in response to an online report named *Guangdong Shantou E-waste Capital: 90% of Children Are Contaminated by Heavy Metals*, some respondents doubt the authenticity of these results. They argue that the primary school being investigated in the news is a school only attended by migrant children and therefore cannot represent the real situation of Guiyu. In this case, the local people fail to detect and acknowledge the seriousness of environmental pollution and its influence towards people's health that has already been revealed by many reports.

We Know Something, but We Refuse to Know More

This type of wilful ignorance refers to a status where people know something about the situation, but wilfully choose to avoid knowing more about it for a variety of reasons. The first example would be the performance of the local government and village committee. For the government, it is obvious that there is something wrong with the exploitation of migrant workers in the workshops, but the local government chooses to turn a blind eye on this issue and refuses to acquire more knowledge, make sense of the complexity of the migrant workers, and further take responsibility towards their situation. In some cases, local officials regard migrant workers as having better situations and higher status as a result of the benefit policies from the central governments. As Zhu said, "The central policies towards migrants are quite good, nowadays there is nearly no discrimination towards migrants. Migrant workers are 'treasures' to the local people now as there are less and less migrants here...They become the 'boss' now." In other cases, the local government simply attributes the problem of migrant workers—their coming, experience in Guiyu, and future— to the effect of market. According to another local official Guang, family workshops hire workers all by themselves and this is purely a personal contract based on mutual consent between the owner and worker. When asked about the future of migrant workers, the mayor of Guiyu (at that time) said that, "We don't have any measures to deal with the unemployment of migrants...Migrants could move to other places instead of sticking to Guiyu, this is how market-oriented economy operates" (Admin, 2012).

The wilful ignorance of local government is a result of both the political and administrative exclusion and cultural imperialism. On the one hand, there are always certain interests in maintaining ignorance (C. W. Mills, 2007, p. 24). In the period of environmental pollution, maintaining ignorance is important for the fast development of

the local economy. In the period of environmental governance, it makes it easier for the local government to complete the planned targets assigned by higher governments. The local government and village committee lack the impetus to manage the migrant workers as it is not a direct requirement for environmental governance. This is also a result of the failure to incorporate environmental justice into environmental governance. To some extent, the local government also accepts stereotypes and assumptions about migrant workers, making them further invisible. The concept of migrant workers being fluid and willing to choose such jobs that can normalise migrant workers' suffering and injustice occupy governmental officials' perspectives. Besides complimenting migrant workers' willpower of enduring hardships, their suffering and injustice have never been mentioned and legitimised via my conversations with local officials.

The second example of this type of wilful ignorance is from people who know that there is something wrong with the environmental pollution and suffering but avoid as much as one can to think and talk about it. In other words, they are not totally influenced by dominant assumptions and perceptions of migrant women workers and might show sympathy towards them. The common reaction, moreover, is just to leave the subject alone and not think about it. Through shielding this issue out of mind consciously/subconsciously, one does not need to learn of its consequences. This kind of wilful ignorance can be a result of the emotional avoidance of the feelings of guilt or fear in being a bad person, as Norgaard (2011) has examined in her theory on socially organised denial. Those who refuse to take responsibility or learn more about the situation may also lack a fuller and more reflexive picture about the problem of migrant workers. As Qiang said, "These migrant workers are poor, but it's still their own choice."

This can be seen from some local people's sensitivity to discuss the issues of local-migrant relationships, local environmental pollution, and the suffering of migrant workers. According to my fieldwork experience, there is a clear difference between talking with migrant people and local people. Almost all migrant people would take the initiative to raise the issues of environmental pollution, environmental governance, the hardship of doing e-waste, or local-migrant relationships. These topics are often used at the beginning of a conversation as "opening words." After knowing I was doing research here, a lot of migrant people would start the conversation with words like: "Guiyu is so dirty, the environment is very bad." With local people, the atmosphere can be quite subtle when mentioning these topics. Most of the time I had to search proper opportunities to avoid making the dialogue tense and awkward. This is particularly true with people who are

involved in the e-waste business. The below field notes record my conversation with a local woman Yuan

I saw a local old couple sitting in a small garden built by themselves near a newer *laozhai*. I went forward and had a talk with the old lady Yuan... We talked about this garden for a little while and then I asked how long they had lived here. She answered that they had been living here for more than ten years. Her sons were not living here, they were doing business in Industrial Park. She continued, "In recent years the environmental governance has become too strict, especially this year. It is more difficult to do business now." I said, "Yes, I also have heard about that... But the environment seems to be better." She didn't reply and just nodded. Then she turned to other topics like weather, grandchildren, education, and others... During this entire conversation, her husband didn't say anything. (July 18, 2018)

It should also be noticed that most people belong to this type of ignorance at different degrees when one considers their positionalities and cognitive differences. In other words, people can be variously reflexive towards cultural imperialism based on different social categories, which further determines the degree to which one is wilfully ignorant. For example, we can see from previous discussion that there are also some voices from local people criticising the local environmental pollution and unfair treatment towards migrant workers.

We Know, but We Don't Focus on It

A third type of wilful ignorance is a status when people know the situation of migrant workers well, but do not address it. This type of ignorance is mainly occupied by the mass media and NGOs. They both have widely used migrant workers' plights and stories to emphasise the seriousness of the pollution and attract the public's attention towards the e-waste industry in Guiyu, but environmental injustice faced by migrant workers is not their main aim. As illustrated in the Introduction, none of the main tasks and actions of Greenpeace is directly related with changing the situation of migrant workers.

Dotson (2017) uses the notion of "epistemic backgrounding" to refer to the situation of black girls whose appearance serves just as a background and never becomes the core issue/target of analysis. She argued, "(T)here has never been a robust endangered Black girl narrative...They are disappeared even when they were required for the sake of appearance" (p. 424). They are, in F. B. Williams's (as cited in Dotson, 2017, p. 424) term:

"beneath the shadow of a problem." Migrant workers' situation is similar to this "epistemic backgrounding" in a sense that their appearance in reports of mass media and NGOs is only a background information without being the main target. Their environmental suffering and injustice are seen and acknowledged, but never constructed as a main problem. They could not have their own narrative— a strong narrative that allows people to know and understand not only their lives and plights but also the complexity of the issue of migrant workers. This strong narrative is not only about the stories of migrant workers that serve to support other claims, but rather as an independent social and political issue that needs to be concerned seriously. As a result, even though the reports on the environmental problems of Guiyu have achieved a lot of attention from the public and have further led to strong environmental governance, migrant workers have never been considered seriously. Their situation is even worse in various senses. The main reason that contributes to this wilful ignorance of migrant workers can be attributed to the aims and strategies taken by NGOs and the media. In other words, they have more knowledge about the environmental suffering and injustice of migrant workers, but the local political environment and organisational aims can all influence their preferences, strategies, and actions in reality. I will discuss this further in Chapter Six.

Furthermore, the factor of gender also achieves the least attention from NGOs and the media. In Greenpeace and Anthropology Department (2003b) report that includes thirty individual interviews with migrant workers, only four women are involved. When asked why so few women voices were a part of the interviews, Henry, who participated in organising that research, explained to me:

Because women are often not willing to talk. Because of their work type such as burning circuit boards, they often don't have much interaction with other people. If you are going to interview them, they will not talk with you. Some may talk to you, but they usually cannot supply much information. They also don't care about these things; they just care about the work at hand. There is another big social background to explain why there are more men interviewed— the patriarchal tradition. The status of men is slightly higher than that of women in the family. For the interviewers, the most important thing is to achieve information. Men are more willing to express.

Women workers are thus presupposed as "not willing to talk" and "don't know much information," which is totally incongruent with my own experience. This again demonstrates the "negative epistemic space" where migrant women workers' knowledge

and voices cannot be expressed. If we say migrant workers are "beneath the shadow of a problem," migrant women workers are not even recognised in the existing stories of migrant workers. They have disappeared twice in the dominant narratives about environmental pollution and suffering. Their specific experiences and plights have rarely been fully revealed, addressed, and understood.

Conclusion

We can see that the social and environmental injustice experienced by migrant women workers derives not from their own "willingness to work" but an intersectional set of power relations. A lack of knowledge about this complexity can further result in misunderstanding and ignorance towards their experiences. In addition, although different forms of wilful ignorance from the government, dominant groups, media, and NGOs are usually produced and maintained at different degrees and out of different reasons, they all result in aggravating the suppression and injustice towards migrant workers and sustaining the advantages of the privileged.

In the essay *Epistemic Responsibility and Culpable Ignorance*, Medina (2013) elucidates the relationship between the responsible agency and knowledge. He raises the thesis of cognitive minimums: to be a responsible agent demands one to be minimally knowledgeable about one's own mind, the social world, and the social others one interacts with. He argues that responsibility and cognition are bound up with each other—there is no responsibility unless there is minimal knowledge about self, others, and the world. Therefore, epistemic responsibility cannot be treated as independent from ethic-political responsibility and issues of social justice. In the case of migrant women workers in Guiyu, wilful ignorance based on a distorted knowledge or a lack of knowledge about migrant workers lead to the inaction and wilful omission to perform organisational responsibilities at an institutional level, and the personal irresponsible actions at an individual level. Both can reinforce existing social and environmental injustice.

Besides these parties that have been mentioned, it is also important to explore migrant women workers' own perceptions, consciousness, and reactions towards their own social and environmental suffering. Power can never be unidirectional from the powerful to the powerless, but is rather always in contest. In the next chapter, I shall turn to discussing *power to* as a capacity and empowerment that migrant women workers can

potentially possess to counter the intersectional suppressions that contribute to their social and environmental injustice.

Chapter Five: The Intersectional Agency of Migrant Women Workers

Introduction

In a situation of being ignored, it is important to explore how migrant women workers react towards intersected power relations that contribute to their social and environmental injustice. As we have discussed in Chapter One, in terms of environmental justice agency, it is easy for scholars to fall into an either/or trap—people who are faced with environmental injustice either have an intact agency to act against it or keep silent towards it. Migrant women workers in Guiyu seem to embody a "wilful" perspective towards their predicaments, though such a conclusion is hasty and requires close examination when taking into consideration of two factors. The first is the meaning of agency, i.e. what is agency and what does it mean to have agency against social and environmental injustice. Agentic manifestation could be more diverse than a simple either/or logic. The second is the complexity of intersectionality, i.e. how multiple power relations based on different systems of oppression are intersected to shape the agentic orientation of migrant women workers.

This chapter thus aims to answer the question of how intersectional power relations might facilitate or restrict the development of their agency against social and environmental injustice. Based on the fieldwork materials and online resources, I shall give a fine-grained analysis of the complex agentic orientation of migrant women workers towards intersected power relations. I shall further propose a more complex picture of the agentic power, which challenges the wholeness of their agency as "migrant women workers." I argue that the "intersectional agency" against social and environmental injustice among migrant women workers is more complicated and even internally tense instead of being an intact whole.

Intersectional Analysis of the Emergent Agentic Manifestation

Existing intersectional environmental justice analyses emphasises how multiple positionalities (of being disadvantaged as a woman, racial minority, or immigrant) shape people's consciousness and claims for environmental justice. However, as I have argued in Chapter One, this dominant way of employing intersectionality is relatively unitary and not diverse enough. To a large extent, this is a result of the priority given by scholars to

analysing open and active resistances, without fully considering the ambiguities and complexities of agency itself. I further argue that agentic power can emerge in different ways and manifest diversely given the intricacy of power. Therefore, the concept of agency that shall be beneficial to discussion in this project refers to one's capacity to negotiate with the multiple faces of power that put one in an oppressed and marginalised position. It has both temporal and spatial dimensions and can manifest in various forms (social movements, collective actions, everyday resistance, compromises, negotiations, aspirations, etc.) with whatever motivations (intentionally or unintentionally, consciously or unconsciously, rationally or affectively, etc.). It is the "capacity to negotiate with power in whatever form" (Parker & Dales, 2014, p. 165).

I have also argued that it is important for scholars to rethink the question of what the particularities of agency are in the context of environmental justice and intersectionality. On the one hand, it is necessary to consider more seriously the relationship between environmental justice agency, social justice agency, and environmentalist agency, all of which are closely related but do not emerge in unison at all times. On the other hand, intersectionality requires scholars to be critical towards the interactions between different power relations in shaping one's agency. Considering these two points shall allow us to have a more nuanced understanding of "intersectional agency" that concerns environmental vulnerability along with the various intersected systems of oppression.

Taking into account these views on agency and drawing on the data that I have collected from the fieldwork and internet, I shall lay out my analysis on the emergent agency of migrant women workers in Guiyu. Once again, the analysis shall be put forward in terms of class, migrant status, gender and age in sequence, and with intersectionality as a tool for analysis.

Class

Migrant people have formulated certain means to resist the power from local bosses. For example, the information circulated through the network of fellow villagers helps migrants in finding better bosses. Migrant workers can exchange information about the "bad bosses" who fail to pay their salaries on time or treat migrant workers poorly. H. N. He (2004)

illustrates a scene in a composite market¹ where migrant workers usually gathered and waited for recruitments:

A local boss who rode a black motorcycle had waited for half an hour in front of the workers, but no one talked to him. One worker said in private, "He is too dark-minded. He deducts money after the workers finish the job. No one is willing to work with him."

According to online reports and my interviewees, requiring employers to raise the salary often happens among migrants. Such actions are usually based on fellow-villager networks. As Sun told me,

At the very beginning in 1990s, the salary for burning circuit boards was only 24 yuan per day. The salary rose up gradually since then, often required by the employees. Last year the salary was 155 yuan per day and this year it has increased to 170 yuan per day. Normally our fellow villagers discuss together in private, and one will go to talk with the boss. If the boss refused to give a higher salary, workers would leave.

However, there are also conflicts among workers from different provinces. In Greenpeace and Anthropology Department of SYSU's (2003c) report, a local boss revealed such conflicts among people from different provinces. He said,

I don't want to make the business too big, because the workers in the workshop are always divided into gangs based on provinces. There are many contradictions and even fights...I know a factory that hired too many people. Workers from two provinces fought with each other and the factory could not even come into operation. (p. 19)

Even though such serious conflicts are rare nowadays, we still cannot say that migrant workers from different provinces are unified. As I mentioned in the previous chapter, Jiang complained about Sichuan women several times in conversation with me. She said, "People from Sichuan are really annoying. A Hubei people also told me that Sichuan people are too fierce." Zhong is from Guangxi and he works with other people from Sichuan and Guizhou, he told me that his boss required them not to fight but cooperate with one another.

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¹ Such composite markets have disappeared in recent years because there are fewer jobs and migrant workers in Guiyu.

Besides requiring salary increases, stealing and cheating also occur, though this would result in serious punishment by an employer if discovered (H. N. He, 2004). Once I was visiting Industrial Park, I noticed a women worker who looked very busy. I went forward and asked her about the work she was doing, she said, "I actually don't know how to do the work, I am new here... You have to look like you are familiar with the work, otherwise the boss will not give you high salary." Open resistance to being disciplined by employers was observed multiple times during my fieldwork. The following field notes record my observation of the migrant women workers in a workshop:

The (women) boss warned the migrant women workers: "Be disciplined when you work, don't be so slack." The workers quiet down for a little while and started talking again. The boss came again and stood right behind them for a while, and then they quiet down again. But after two minutes, they started talking and playing music loudly. The boss stared at them, warned them, and stood behind them again. But it didn't work at all. At the end of the day, the boss asked them to come earlier the next day. But they didn't care that much. One worker said, "It doesn't matter, she always asked us to come earlier, we never did. We are thick-skinned and don't care about what she said. She can do nothing to us."

There are also sharp criticisms towards the local bosses (particularly those who delay the payment or treat migrant workers poorly) and the boss-worker relationship. A migrant interviewee in Greenpeace and Anthropology Department of SYSU's (2003b) report said, "People should be equal, but it seems that the relationship between boss and worker is like the master and slave. To work, you must obey the boss... otherwise you might be beaten if you argue back or resist" (p. 39). Discontent and grievance towards the working environment and lack of labour protection from the local government also exist. Some migrant workers complain that there are no regulations and supervisions towards migrant workers' health and safety at all. When I asked whether Hu had got any payment from her boss to cure her illness, Lin said with anger, "No way!" Hu added, "There is no protection at all, no medical protection, no labour protection, no life protection, and no one cares about us."

On the other hand, migrant workers are critical towards local government's ignorance and the exclusion of their interests in both periods of environmental pollution and governance. When asked whether the village committee takes care of migrants or not, a man named Shi from Sichuan said with indignation, "How could that be possible! If you

come to work, just work; if not, just leave." In addition, they are particularly critical towards the unfair treatments they have experienced in the environmental governance, which has not improved their working condition at all but has resulted in increased financial and personal instability, such as being arrested. As Liu said to me,

It is so unreasonable to arrest migrant workers. The government should arrest the boss not the workers. If not for being poor, who would be willing to do the jobs that damage our health so seriously? Migrant people who have their own business in Guiyu are easier to be checked and arrested, because the village committee members would announce the local people in advance before the environmental governance.

Many participants also complained that the environmental governance makes them turn poor again. As Xing complained to me, "The environment becomes better, but the economy declines. It is more difficult to earn money now."

However, despite the resistance and critiques towards local boss and the local government, consent and conformity are more common among migrant workers, especially with respect to their environmental situation. It is more normal to hear from migrants the word of adapting (xiguan)— adapting to the working conditions, living conditions, and the hardship of e-waste jobs both physically and mentally. In other words, most migrant workers accept them and do not make active resistance as they do when encountering other unjust issues such as wage arrears. When I visited Lin at her home, she said to me many times that she was tired and didn't want to go to work. "Working is too tiring... too tiring," she repeated. However, later she also told me,

When I first started working, I was not familiar with anything. The only thing on my mind was "I want to go back to my hometown, I want to go back to my hometown." Later, I gradually got used to it. It was difficult at first, but once your body has adapted to the working environment and style, you don't feel that tired.

Li also expressed this type of physical adaptation when I mentioned that the smell in Industrial Park was pungent. He said, "We have already been accustomed to the smelly air now, even in the Industry Park... Our nose has already become desensitised."

Adaption does not only manifest physically, but also cognitively. As a lot of migrant workers have said to me: "It is just a matter of getting used to it" (*Xiguan jiu haole*). Even though there are concerns about the environmental harms towards people's health, the working hardship is regarded as an inevitable part in the process of earning

money. In other words, migrant workers themselves have internalised the power that shapes enduring hardship as an essential stage to make money. Such cognitive claims are often entangled with affective energies such as self-encouragement and pride. Enduring hardship has even been beautified as a good quality by migrant workers themselves. As Chuan said,

In Guiyu there is no guarantee, no contract, and all are individual bosses. The jobs are highly fluid and there is no way to achieve guarantee...We have already gotten accustomed to the bad environment and the hardship.

Sometimes I feel proud of enduring all these difficulties. The younger generation cannot endure as much hardship as we do.

Guiyu is even regarded as "the heaven for migrant workers" by some migrants because there are many jobs available, and the cost of living is lower than other places (J. Chen, Li, & Kong, 2014).

In some situations, pride about being able to endure hardship does not only cultivate adaptation, but even esteem, affirmation, and attachment towards the work. Bei, a former e-waste worker, commented on three-wheel truck drivers,²

They can earn over 10,000 yuan each month. Migrant workers can earn more than college graduates. This work is hard, they all have suffered a lot. However, it is good for their children because they can earn a lot of money. Local people start to do business when they are very young, so they are very business minded. Although they are not well educated, they all have made a lot of money.

Zhong expressed a similar view, he said,

In my village, educated people often work with a low salary after graduation, for example my cousin who is doing advertising design. I don't think he can make much money. People with a graduate certificate who work in schools can only earn a few thousand yuan a month. In other formal companies, the salary is no more than 3,000 yuan. The educated people's jobs are easier, but they earn less... I like doing more difficult work that can earn more money. I don't understand why other people in my village continue studying, studying, and studying. I don't like studying.

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² Three-wheeled truck drivers transport goods (usually with a capacity of over one ton at a time) for employers. This work needs a lot of strength to load and unload, which makes the work very toilsome.

Through comparing himself (less educated, difficult work, and earn more) with other people (more educated, easier work, and earn less), Zhong has shown a process of cognitive-affective negotiation that allows him to not only "adapt to" the work but also justify his current situation, assuring himself that his situation and choice is better than other educated people who have more decent jobs but earn less.

Once such cognitive-affective negotiation is completed, questioning working conditions and a lack of protection turns into tolerance and ignorance. This is particularly true in the early years when migrant workers do not have much knowledge about labour rights and have achieved some help from their boss. A migrant interviewee in Greenpeace and Anthropology Department of SYSU's (2003b) report noted, "I don't expect the boss to supply these protections and guarantees, I can accept only if they pay money on time as promised" (p. 26). Li had a cerebral infarction seven years ago and he was not sure whether the illness was related with his work or not. However, his doctor told him that he was too young when getting this illness. His sister once said to him that she wanted to work at Guiyu to earn money, and he said to her, "Are you crazy? You can only earn 1,000 to 2,000 yuan every month and there is no freedom at all. You don't know how tiring the work is." Even so, Li was very adaptive to the working situation and style. He said to me,

You have to be fast when you are working. If you are slow you cannot make money... You have to sit through it... How can you talk when there is so much work to do? It is impossible to just sit and chat there... If you don't study good and have skills, you have to do such work to earn money... Someone has to do this kind of work in our society anyway.

Another time when I talked with Li about the importance of children's education, he said, "I don't feel regretful that I didn't study well before. I just work steadfastly every day. It is impossible for everyone to have a good job." Bei has also expressed similar thoughts. Below is my dialogue with him.

Bei: All the jobs in Industry Park are tiring, dirty, and harmful to people's health. This place is poisonous. I have done nearly all kinds of e-waste dismantling and recycling work since I've come here.

Ye: Why do you choose to do such work if it's so harmful?

Bei: To put it simply, for earning money... Money is not a good thing, but you must have it... I have to think of my family and endure...endure... Look at the buildings there. The urbanisation in Guiyu has been so fast. My hometown only has picturesque sceneries.

Ye: Yes, it is. How do you see the development of Guiyu in the last few decades?

Bei: The local people rely heavily on migrant workers to become rich. That is how it goes. They cannot make money with their own hands.

Ye: How do you see this?

Bei: There is a saying that there should be rich and poor people at the same time. We often discuss this. If there are no rich people, poor people would not work actively; and if there are no poor people, rich people cannot find workers to earn money.

Like Bei, the economic pressure to raise children and support elderly parents constitute migrant workers' willingness to endure pollution to earn money. Lower levels of education, lack of skills, and an older age also limit their choices to find other jobs that have a higher salary. Therefore, even though they are aware of the risks brought by the work, maintaining a livelihood is the most urgent and important thing. Moreover, there are ongoing cognitive-affective negotiations with hardships which workers are critical of. With these affective energies such as self-encouraging, being proud of hardship, favoring more challenging work with higher salaries, and feeling regretless, the internalisation of power that shapes one's conceptions becomes more solidified. In addition, as almost all the migrants plan to go back to their hometown in the future, sacrificing their health in a short term in exchange for fortune is a worthy tradeoff for many migrants.

Migrant Status

The discrimination towards and exclusion of migrant people from local people have aroused a strong consciousness and reaction among migrant people. Resistance against *power over* based on one's migrant status includes individual and collective actions against bullying and exclusion, individual tactics to deal with unfair treatment from the local government, and the discursive struggle between migrant and local people.

Migrant people from the same hometown usually live together in a shared *laozhai* and support each other materially and emotionally. This might include helping take care of the children, sharing news and information, and eating and entertaining together. Liu told me that her neighbours were all her fellow villagers, and they often gathered and chatted with each other. She said,

We don't have much interaction with the local people, only with fellow villagers. When I am tired of working, I will go to see my fellow villagers. We often gather and play cards, especially when it rains, just like in our hometown. It is good to have fellow villagers here.

Song's home at a *laozhai* was a "socialising centre" for her fellow villagers. Whenever I visited, there were people coming in and out all the time. Because Song had to take care of her grandsons at that time, she didn't go to workshops and instead did the odd job of assembling plastic flowers in her home. Song usually undertook a certain amount of work from the local factories, and then disseminated this work among her fellow villagers. Neighbours often went to her home and helped her do work while chatting. My fieldnotes below have recorded these interactions at Song's home.

When I arrived in the late evening, Song was doing the work of assembling plastic flowers at home. There were two other fellow villagers helping her work... Later, another fellow villager came to hand over the finished products together with her grandson. I had a small talk with her... Another woman, who is about 30 years old, was sitting in the yard and playing with her mobile phone, occasionally talking with other men who stopped by. They talked to each other in Sichuan dialect. Although I have been to Song's home for many times, I did not see most of them before... The nearby children came here and played with Song's second daughter, and the yard became bustling... Fei was just out of work and had to go to the kindergarten to pick up her children later, she also stopped by and had a short chat with us. Such a scene made me feel like I was not in Guiyu but Sichuan. (June 1, 2018)

This network of fellow villagers functions to not only help workers find employment and support one another in everyday life, but to fight against the local people's bullying. According to the news (e.g. H. N. He, 2004) and narratives from my participants, there used to be collective resistance towards local people's violence and suppression. For example, a protest held by Sichuan people happened several years ago after a Sichuan worker was accused of stealing and was then beaten to death by a local person. Around 2,000 Sichuan migrants in Guiyu gathered in front of the higher-level government in an organised way to seek fair treatment. Chuan, who has participated in this protest, illustrated to me the situation with emotion,

I still remember that day. The spontaneous organisers (Sichuan fellow villagers) rent a lot of buses to pick us up in the early morning. We firstly went to the government of Chaoyang District, but the government just ignored us. Then we went to the Shantou government (higher level government) and

protested in front of the government's gate. The officials finally solved this problem under pressure. The local people compensated 600,000 yuan (about 90,000 US dollars today) at last to the worker's family.

As mentioned in the previous chapter, even though discrimination and exclusion still exist, direct bullying towards migrants is now rare to see. This can be regarded as an achievement, and due to resistance shown by migrants. Many migrant people have expressed this to me. Li has said, "The local people do not dare to exclude migrant people now, there are a lot of local people being beaten by the migrants." Ren also illustrated two stories which happened to his fellow villagers and himself:

The PSC members usually come to collect the environmental hygiene management fee late at night because most workers work outside during the daytime. Some migrants have a bad temper and live together with several other men. When the PSC members opened the door, they started to beat them. After this they didn't go to collect fees at night anymore... I haven't paid the fee for a long time. The PSC members know me. Once they asked me to pay the fee when I was eating outside. I told them I didn't have money. They asked me to go borrow from other people. I agreed, then I left and didn't return.

Discursive struggle as a daily practice also exists between migrant people and locals. While local people regard migrant people as being rude, dirty, annoying, having a low *suzhi* (personal quality), and disturbing the local peace, migrant people have exactly the same accusation towards locals. Criticism of local people's brutality and rudeness often appears in everyday life. One example is the mutual blame against each other for the disruption of local public security. Local people often accuse migrant people of breaking the peace of Guiyu through stealing, robbing, and hurting people. Migrant people also complain a lot about the bad local security because of the barbarism of the local people. Besides this, they often criticise local people's ignorance towards the environmental pollution, saying that they "only care about earning money." As Lin's husband Gong said, "The local people don't attach importance to the environmental hygiene. They only care about earning money...Our hometown is much better than here." Liu also mentioned that, "The local people— especially the poor family— raise a lot of children, and they don't attach importance to education... They care more about earning money."

Therefore, migrant people have strong agentic orientation towards power relations based on migrant status to fight against discrimination, bullying, and unfair treatment from the local government. Such a strong agentic orientation is highly entangled with affective

connections of fellow villager relationships and solidarity and strong antagonism towards the locals. However, it is also because of such affective resistance (or a less sense of attachment) towards the local people and Guiyu that their agentic orientation towards environmental injustice based on migrant status is relatively weak. An analysis of this point could be further divided into two related aspects: that they don't have a strong environmentalist agentic orientation in Guiyu and that they are not reflexive towards how power relations contribute to their environmental injustice.

Even though most of the migrants I have contacted have been here for more than 15 years, none of them have shown a strong sense of belonging towards Guiyu. Almost all of them expect to go back to their hometowns sometime in the future. When asked what her plan is for the future, Lin said, "If I cannot continue working anymore, I will definitely go back to my hometown. The environment is good there and people are nicer. My health will also become better. There is no garbage in my hometown at all." Affective resistance towards the local people is thus an important reason that makes migrant people feel less attached to Guiyu. The other day when I visited Lin's home again, she and her husband Gong were having dinner around a small table. They mentioned that they had been in Guiyu for almost 19 years. I asked, "Do you have feelings of attachment towards this place?" They looked at each other for a second then laughed together. Gong replied, "I don't know how to answer. This place is better than our hometown in terms of making money. Our hometown is in the mountainous area, it's not as convenient as it is here to earn money." Even though the Chinese government has been facilitating the "construction of a new socialist countryside" (shehuizhuyi xinnongcun jianshe), with central and local policies to encourage migrant workers to go back to hometown, there are still very few job opportunities in their hometowns. As Bei said, "The government encourages us to go back to our hometown, how? How can we go back to the poor places where there are no jobs at all? It is better to earn money outside and then go back."

Expectation to return to one's hometown and less affective attachment towards Guiyu make migrant workers show less care towards the local environment. Almost all migrants I spoke to discussed the issue of environmental pollution in a relaxed tone, comparing the environment of their hometown with that of Guiyu. They usually view the local environmental pollution from the perspective of a bystander, sometimes with a sense of teasing. For example, once I had a talk with Shi and Chuan about the polluted river in front of the *laozhai* they lived in. It was May and the river was filled with water hyacinths, which make it difficult to tell that it is a river (see Figure 14). Shi then said with jeer,

"Look at this river, how spectacular! Once a friend of mine came here, he took a lot of photos. You can also take pictures and post them online."



Figure 14 The polluted river full of water hyacinth.³

This can also be seen from their lack of involvement to engage in a local protest against building a waste incineration plant in Guiyu, an event that occurred in 2016. According to online news sources (S. Shi & Kou, 2016), the protest was mainly organised by local people of Huamei village. Thousands of local people went to the town-level government and protested against the plant. I asked Ren about this protest, he said, "The local smart people mobilised other people to go on the streets. There was already so much waste in Guiyu, but the government still wanted to build a waste incineration plant." I asked whether he attended the protest, he answered, "I didn't attend the protest. As migrants we don't care about this sort of issue."

The high tolerance towards the local environmental pollution is also related to migrants' status as workers or workshop owners. With respect to the environmental protection policy, most people understand the importance of clean environment towards themselves and the next generation, but at the same time, they are also aware that environmental governance will cause them job loss. Liu and her husband's business (of

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³ Source: Ye Zhang, taken on May 13, 2018.

sorting plastic waste) has been highly influenced by local environmental governance. She complained, "Even though the environmental governance makes the environment better, it also makes the economy seriously decline... It is difficult to earn money now. All is messed up and everyone is stressed." The workshop that Ju worked in was temporarily closed during the environmental governance storm, so she had to stay at home. She complained that the environmental governance was too strict, and it was difficult to find a job. I asked her whether she regarded environmental governance as a positive or negative thing. She answered, "It is both good and bad. The good side is that the environmental hygiene becomes better. The bad side is that I don't have work to do now."

Some migrants secretly participate in the illegal e-waste recycling activities that create serious pollution, others keep indifferent towards local neighbourhoods who illegally operate workshops and release pollution. For example, Liu pointed to a house in front of her home, which looked normal from outside, and told me that it was actually a workshop that washed plastics. As this type of work would use strong acid to wash the waste, it is not allowed by the government to be done outside Industrial Park. She said,

The new buildings around the house all belong to them. In the previous days of environmental governance, they closed the door from inside and continued operating. The polluted water was discharged to the river directly. A lot of fish in the river have died recently, you can see how dirty the river water is. The fish are not edible at all.

One's migrant status has restricted the development of not only environmentalist agency but also environmental justice agency, two concepts that are closely related. If sacrificing health and environment is regarded as an inevitable outcome for the sake of earning money, it would be difficult to form a strong sense of environmental injustice. One interviewee Tang in Greenpeace and Anthropology Department of SYSU's (2003b) report expressed this view more directly.

Tang does not care about the problems of air and water pollution. *He feels that other people live in Guiyu in the same way anyway*. Guiyu is not his hometown, he just comes here to make some money, and he will go back to his hometown sooner or later. Therefore, he does not care what the local people do to the environment, as long as he can earn his money. (p. 21, emphasis added)

Their migrant status and the status as worker thus are bonded together to shape their agentic orientation. It is through the cognitive-affective negotiations that they themselves have internalised the power that normalises the working condition and working

mode, naturalises the necessity of enduring hardship to make money, positions them as "just for earning money," and portrays their situation as a result of "being highly fluid" and a "wilful personal choice," which have restricted both their environmentalist agency and environmental justice agency as "migrant workers."

However, this does not mean that migrant workers only focus on earning money to survive and do not have aspirations. On the contrary, they aspire to voice themselves and to be heard. Bei told me that his cousin was also a Ph.D. student, and said, "I really want my cousin to help me write an article about my own experience, including what I have done these years and why I have to travel so far away to work." In a separate conversation, Li added to this by telling me,

Only the bosses and governmental officials are afraid of being interviewed. Migrant workers are not afraid of being interviewed and some even would like to talk with scholars and journalists, because they are treated badly by the government and local boss. They want to make voices through media.

Greenpeace and Anthropology Department of SYSU's (2003b) report has shown an episode when interviewing a migrant man.

When Li came in, he asked us specifically if telling him about our lives would make a change. We were very confused after listening to this and told him that it might generate some impact or might not. He was obviously disappointed, but he still accepted to be interviewed...When we were going to leave, Li asked us again, "Are you really not reporters?" After getting a clearly negative answer, Li sighed again and did not speak any more. (pp. 27-28)

Looking back on my own experience of engaging with migrant workers, most of them were very sincere and generous in sharing their stories, opinions, and aspirations. Like Li in the Greenpeace's report, some participants in my research also hoped that my research might generate some influence toward their life in the future. For example, Qi, a local women farmer, was quite disappointed when she heard that I am a student instead of a journalist. However, she still shared with me the story of her family being bullied by the local powerful people. She further said, "I hope that people like you can help us have a voice ... You must study hard and come down to the field often... If you come here again in the next few years, I will still be here." They also have shown their knowledge, wisdom, and reflection in their interactions with me and my research. As Qi said,

Researchers should do visits without showing their identities. Only in this way can they see who is good and who is bad...Once there were two people living

in my village doing research. They didn't go out to see what the reality was really like to make real investigations. This kind of research would be useless. It seems like they were afraid of attracting trouble...You should talk to the farmers instead of those who dress well. They don't know the real condition and they will lie to you.

Other participants, who have supplied important suggestions to my fieldwork, have also revealed agentic moments while being involved in this research.

Ren: If you go to the workshop, the workers will not talk with you, they are busy with working and the boss will not allow you to talk with them...You should go to the *laozhai*.

Song: Take it slow. Building relationship takes time and should be done in a more natural way. Once they are familiar with you through daily interactions, they would like to be your participants.

Li: If one pays me to be interviewed, I will feel humiliated...I am happy to talk with you because we are friends.

Some also regard my engagement with them as a chance to vent their feelings and emotions. They were usually very generous to invite me to their homes and share their life with me. When I first met Fei, she talked to me actively and asked about my research. Without asking her anything, she started illustrating her own stories and sorrows:

My dream is to have an international travel someday. This would depend on my son as I cannot make it by myself in this life. I will wait until my son grows up, goes to school, and earns money. This is my hope... Last time I took my cousin to find a job, they all required a junior college or high school certificate. I only graduated from junior high school. What could I do? It is so embarrassing... My family's condition was not good at that time, so I didn't continue reading... I want to give my children good conditions so that they can study well. I used to be particularly anxious, and I was afraid that I would get depression someday. Whenever I thought that I could not supply good conditions for my children, I would shed tears. My husband comforted me and told me that we'd offer as much as we can to the children.

Migrant workers are not just "machines" to make money without caring about other things. As Fei's online personal profile said, "Human cannot live just for making a living." They aspire for respect from other people, their children being educated and becoming successful, and a better and more decent life in the future. However, their ways to fulfill

these aspirations are restricted in consideration of their past experiences and their current situation. In Appadurai's (2013) words, their "capacity to aspire" is limited, as for most migrant workers sacrificing health to earn money becomes the most practical (if not the only) way for them to connect their concrete desires with current contexts.

Gender and Age

As we have seen in previous chapters, some migrant women workers have a strong critical awareness of the more difficult roles that women have to play. They are aware of the fact that a woman's life is more difficult than a man's, that there is an inequality between men and women in the distribution of housework, and that the migrant status makes migrant women more vulnerable to violence and harassment compared to migrant men.

In terms of completing housework, some migrant husbands provide favors for their wives by offering to cook or wash clothes at home. This, however, happens only when women workers are torn between housework and work. It also usually happens at the individual level and is not a regular behaviour, nor do husbands take the initiative. Once I visited Lin, I saw Lin's husband was cooking while she helped wash vegetables. After they finished dinner, Lin started washing the dishes. I asked Lin whether it is normal to see men help with housework. Lin said with a sense of complaint, "My husband helps cook only when he returns home earlier than me. I take all the other housework like washing dishes and clothes. It is still rare to see men do housework." Even though concrete and open actions of resisting doing housework are rare, complaints exist among migrant women workers. This can also be seen from Sun, who illustrated the negotiation she made with her husband when their daughter was born in Guiyu. She said,

When we had our daughter in the early 2000s, we only earned 27 yuan every month. At that time, my husband was a pedicab driver, his own income could not support the whole family... I said to him, "If I go to work and you help me take care of the baby, we can earn more money." He agreed. So, every day he put our daughter on his pedicab and brought her with him when working outside... Other drivers laughed at him, but we just didn't have any other ways...

Such gender consciousness can also be observed in the working place. After Song's daughter complained about the higher salary for the new boys, she shouted out with indignation, "I want to be a boy in my next life!" One of her friends also showed agreement with her. This cry could be seen as a sign of awareness of gender inequality in

the working place, though it happened on an individual and occasional level. Song's second daughter has also shown feelings of envy towards her almost same-year-old nephew, who was carefree and did not need to think about anything and do any work. However, gender and age consciousness in the workplace is still relatively weak, particularly for older women. It is rare to hear women complain about their lower salaries than men when I talked with them about this issue. For example, after Sun explained that women earn less than men even for the same amount of work, I said, "It is a little unfair." She just smiled and did not say anything. In addition, even though most older women have a clear awareness of the ageism that they have experienced in finding more decent and clean jobs, there is a heightened sense of conformity in action towards this rule rather than being resistant. This is particularly true when the idea that the older generation is much tougher than the younger generation is accepted and even praised. For them, Guiyu is more convenient to earn money, because as Gong said: "In other places, it would be difficult to find a job if you were old. But in Guiyu, age does not matter as long as you are willing to do the work." This is also an important reason for older migrant workers to stay in Guiyu, because at least they have opportunities to find a job and earn money.

Many women migrants also criticise the local patriarchal suppression in Guiyu, illustrating that the local women have a lower status in the family compared with migrant women workers. Here are illustrations from Liu, Qing, and Lin when talking about the situation of local women.

Liu: Local women's status is very low. Most of them are afraid of their husbands. Once I saw a local man scold his wife who did not dare speak a word. The mother-in-law usually doesn't offer any help in taking care of the children. They have to go to school to pick up and drop off the children, do the housework, as well as take some odd jobs everyday... Some local men are very lazy and don't go out to make money, but they still raise so many children. I really don't understand this. The poorer the family, the more children. There are many girls in Guiyu, because people want to have boys, so they just continue giving birth to babies until boy comes. The situation is much better in my hometown. The local people here don't treat women as humans.

Qing: A local neighbour of mine already has five girls. Young people in my hometown all don't want to have so many children, including myself, even though the government encourages us to have more now. I asked the doctor in my hometown to put the intrauterine device for me (to prevent pregnancy). The

doctor refused because I only have one child. In my hometown, if you only have one child, the village committee members would come to your home and persuade you to have more children. But currently I just don't want to have more, it is too tiring to raise a child.

Lin: The local people give birth to a lot of children until the boy comes. One boy is not enough, he should have brothers... It is normal to see a woman bring 5-6 children all by herself here... The children cannot eat well, dress well, or receive a good education... In my hometown, young people don't want to give birth to so many babies now.

However, as we have seen, certain patriarchal practices such as favoring boys over girls do not disappear among migrant people, including migrant women. For example, many migrants still hold the traditional idea that once a daughter gets married, she belongs to her husband's family. Girls do not enjoy as many resources as boys and are required to support their brothers to go to school and get married. As we have seen in Ren's case, he did not regard building houses for her daughter as necessary, even though he claimed that he liked his daughter more than his sons. Having boys is a guarantee for parents so that their sons can take care of them when they become old. Ju, a migrant woman who has three daughters and a son, was very proud when saying that her daughters helped to buy a house for her son in their hometown. Her neighbour, Sun, said in a complimentary tone when talking about this, "Her two married daughters gave a lot of money for them to buy the house, they are really promising." Patriarchal perceptions are often held by migrant women workers in an unconscious way. Qing felt relived because her first kid was a boy. She said, "My sister is not as lucky as me, her first child is a girl." Xing illustrated to me the experience of her neighbour,

My neighbour, a fellow villager of mine, is only 24 years old, but she is already the mother of four girls... She is definitely going to give birth to more babies... Her husband still treats her well even though she gives birth to four girls. But her parents-in-law are not happy with her. It's good that her parents-in-law are in their hometown now, otherwise her life would not be as easy as it is now.

We can see that cognitive notions are once again closely entangled with affective expressions such as pride and feeling relieved and lucky, which in turn strengthen certain patriarchal conceptions and practices.

Therefore, the influences of migration towards the formation of gendered agentic orientation are ambiguous. For example, as I have mentioned in the previous chapter, migration allows some women to be more independent and empowered when they are away from their parents-in-law and begin earning money. As Song once complained to me about his husband,

He doesn't care about the children's book fees and the rents at all. After he came to Guiyu, he went to work during the daytime but gambled at night. He also quarrelled with me, blaming me for not making money for him... I didn't want to live with him anymore, so I moved out with my children. I knew it would be very difficult, but I just didn't want to live with him anymore... I can only earn about 1,000 yuan every month and my son asks me not to work anymore. But I still want to, at least I can earn some money for my family.

On the other hand, the comparison between local women and migrant women allows migrant women workers to generate some critical reflections towards the local patriarchal practices and the importance of being independent. However, such a comparison can also lead to a sense that "we are in a better situation," which makes it difficult to challenge the patriarchal perceptions and practices that have been internalised by migrant women workers unconsciously. For example, Liu told me that one of her fellow villagers introduced a local (Guiyu) girl that had some brain problems to another fellow villager. She said, "They held a very grand wedding ceremony at our hometown. It is much better than here. I didn't see anything when the two sons of the local people behind my house got married." Wives who can earn money and take good care of the family at the same time are regarded as being capable (nenggande) and "qualified" as good wives. As Sun criticised her neighbour Song, "She cannot do anything well. She cannot take good care of the children, her home is really a mess, and she also cannot earn much money when working outside." Through comparing with Song, Sun had a sense of pride when she mentioned that her current salary is quite high, and her family was more well-organised. The cognitive-affective negotiation emerges again along the axis of gender. The sense of being capable and independent even further makes some migrant women workers have the feeling that they have a higher status in the family, particularly for those who can earn more than the husband, such as Sun.

Some migrant people do attach importance to their children's growth and education, with the awareness that education might be the best way (if not the only way) for the next generation to change their fortune and become successful. When I first met

Liu's husband Gui, he was just back from work. After I introduced myself to him, he said, "It is good to have a higher education degree, which can allow you to do a more decent work. Unlike us, this work is so dirty and tiring." The next time when I met him, he said similar words to me again. Liu and Gui attached great importance to their children's education as some other migrant people do. As Ren said to me, "I said to my daughter that as long as she studies hard, I can borrow money and even collect rubbish to support her." The realisation of such an aspiration, however, is often restricted by the actual situation in which migrant children are located in— either in their hometown as left-behind children or in the migrant place. Lacking educational resources and parental care makes it easier for migrant girls to internalise the idea that going out to earn money as early as possible is a better way for them than studying in school.

In an afternoon, I heard from Song that a friend of her first daughter was going to quit junior high school and start working. She was going to work in a toy industry at Shantou. Her parents were in another province and she was going with her sister and her sister's boyfriend. Song felt sad for her, "She cannot even get a graduate certificate from the junior high school. She should at least finish the junior high school to have a certificate." The next time when I visited Song's home, that girl was also here. She looked quite happy when saying that the salary there would be much higher than that of her current work in Guiyu. Song's first daughter would also be faced with going to work after graduating from junior high school one year later. As she also did not perform well in school, for her earning money was more important than studying at the current stage. When I visited their home at the beginning of the summer holiday at June, Song's first daughter looked very distressed because she still could not find a working place. The former workshop she worked in was closed temporarily during the environmental governance storm. Song said that the workshop was reopened, but the boss did not contact her. "Last year, she earned 3,000 yuan during the summer holiday," Song added regretfully. Song also told me the follow-up story of her daughter's friend, "She could not find a job at Shantou, and then she went to see her parents in Fujian province. But that girl does not seem to be doing well, her parents treat her very badly." Situated in such a condition, it is easier for the younger migrant girls to internalise the idea of working as early as possible. This could also be seen as a result of less experience in society and a weaker "capacity to aspire." In other words, they have accumulated less experience, stories, relationships, and expansive horizons of possibility to imagine a different future than quitting school to earn money.

We can see that the agentic orientations of migrant women workers are quite fragmented both in workplace and everyday life. In addition, such dispersive consciousness of gender injustice is often not related with environmental injustice spontaneously. The former does not necessarily lead to the development of a sense of environmental injustice based on gender. That is to say, it is less acknowledged by migrant women workers that they are more vulnerable towards environmental pollution than men because of their status as women. It is more difficult for migrant women workers to link gendered power relations with a higher exposure to environmental risks. This is particularly true when compared with power relations based on other social categories of class, migrant status, and even age, against which migrant workers have developed certain senses of environmental injustice—though still weak and restricted. For example, when women complain about doing more housework than men, they usually do not relate this to higher exposure of environmental risks. Most of them are also considerate of their husbands' hard work. As Jiang said, "My husband works in the Industrial Park, he works 11 hours every day. He is so laborious." When mentioning that other migrant women workers went to work and that she did not do any work in recent years because she had to take care of her son's children, Jiang even showed a sense of embarrassment. This is also true with migrant women workers who complete e-waste work while their husbands do lighter work. For example, Sun, who was doing the work of burning circuits boards, did not show any discontent towards his husband Ren, who was a hotel security guard and a part-time pedicab driver. Her neighbour Ju worked at Guiyu by herself while her husband was at their hometown unemployed. Sun said, "Ju works very hard and has saved a lot of money. If she earns 4,300 yuan this month, she would send back 3,500 yuan; if she earns 3,500 yuan, she would send back 3,000. She never has any complaints." Jiang's embarrassment of not being able to work and take care of children at the same time and Sun's praise towards Ju again reflects the affect of pride of being a capable woman in the family.

Characteristics of the Agentic Development

As we can see from the above discussion, the agentic orientation of migrant women workers is very complex and needs to be discussed in a more detailed way than in an either/or logic. The diverse manifestations of agency, the intersectional functioning of power in shaping agency, and the relationship between environmentalist, social justice, and

environmental justice agency alert us that "intersectional agency" towards social and environmental injustice among migrant women workers is more complicated and even internally tense instead of being an intact whole.

Firstly, within one specific system of oppression, migrant women workers might generate agency against different faces of power at various levels. In other words, they may have cultivated consciousness and reactions towards certain faces of power, but have internalised others. In the case of class, migrant workers have formulated different ways of negotiating with the power that contribute to their vulnerable situation. The fellow-villager network allows them to act in concert to require salary increase and fight against unfair treatment from the boss, such as arrears of wages and violence towards workers. Everyday forms of resistance such as stealing, cheating, and shirking also exist. Some migrants also have shown critical reflection towards the unequal relationship between boss and workers. However, even though complaints about the working environment and the local environmental pollution can often be heard, consent and conformity towards their environmental situation both in working and living spaces is normal. This is because they tend to internalise the conceptions that make them environmentally vulnerable, such as "all work in Guiyu are dirty," "one has to endure hardship to earn money," or "my boss is really good to me." Such internalisation further results in an adaptation to the environmental pollution both physically and mentally. In this sense, once the normalisation of such concepts is accepted, discontent and grievance towards the environment shall turn into tolerance and ignorance.

A similar situation happens when looking at the agentic manifestation based on one's migrant status. Migrant people have generated relatively strong agentic orientations towards power based on migrant status. As we have seen, in the face with local people's and government's physical violence, discrimination, and unfair treatment, migrant people have fostered various ways of countering the multiple faces of power individually and collectively, reflexively and through action. However, such reflections and resistances towards power based on migrant status do not lead to a strong sense of agency towards environmental injustice. This is closely related with their self-positioning as "coming here mainly to earn money as workers" and "going back to hometown in the future," which has restricted the development of their environmentalist agency and environmental justice agency. This also reveals that conceptions based on class and migrant status are often intersected and internalised by migrant workers at the same time, which together weaken their sense of environmental injustice.

In terms of gender and age, the agentic manifestation against different faces of power is more dispersive, fragmented, and ambiguous. In some cases, among migrant women workers there are some reflections towards the uneven distribution of housework at home and the local patriarchal system in Guiyu. In other cases, the patriarchal norms and practices have still been internalised by migrant women workers at different levels. Individual agentic orientations towards patriarchal norms such as favouring boys are often dispersed and occasional. In addition, conceptions such as "women should do housework" and "older women are more proper to do dirty tiring works" that make them environmentally vulnerable have not been challenged strongly by action.

In addition, we can also see that various affective energies are deeply entangled in one's negotiations with multiple faces of power. Affects of gratitude (towards the boss), indignation and antagonism (against the local people and government), pride (of enduring hardship and being a capable wife), self-encouragement, pity, sense of relief and luck (to give birth to boys first), embarrassment (of not working and taking care of family at the same time), complaint and anger (of the husbands), affective connections (with fellow villagers), less attachment to Guiyu are closely embedded in migrant women workers' reactions and perceptions in relation to domination and oppression. Some of the affects, such as the antagonism towards the local people and sense of solidarity based on fellow villager network, cultivate strong agentic manifestation in resisting power along the migrant axis. However, a less attachment towards the locals also has resulted in their indifference towards local environmental pollution and the environmental injustice they have been faced with. In other cases, along the axes of class, gender, and age, affects such as pride, embarrassment, and luck are closely intertwined with cognitive meaning making and perception shaping, which provides a certain level of comfort to face contradictions but also facilitates the internalisation of certain conceptions and practices that subordinate them socially and environmentally. Though other affects such as anger and complaints towards one's boss and husband also exist, they are more dispersive and fragmented, unlike in the case of one's migrant status.

In this sense, we can see that migrant women workers have developed different agentic manifestations towards power based on their social categories. Comparatively, grievance and resistance towards power based on migrant status are stronger than that towards power based on class, gender, and age. While not intending to generalise, if we could summarise their agentic orientation based on migrant status as "strong reflexivity, strong action," the agentic orientation based on gender and age could be summarised as

"weak reflexivity, weak action." Agentic manifestation along the axis of class is more complex and mixed from highly critical to highly internalised. There is thus an uneven development of agency in relation to different systems of oppression.

Secondly, there is a gap between agentic development towards social injustice and towards environmental injustice. As we have seen, not all agentic senses of social injustice can automatically turn into a sense of environmental injustice. To a large extent, this is a result of migrant workers' internalisation of power— particularly the third and fourth faces of power— that make them environmentally vulnerable. Within all the systems of oppression based on class, migrant status, gender, and age, the power that make migrant people environmentally vulnerable are easier to be internalised by migrant people themselves.

In consideration with the relationship between environmental justice agency and environmentalist agency, the development of the former could also be restricted by the latter. In other words, if sacrificing the environment and people's health to earn money is regarded as inevitable and normal, it would be difficult for people to further develop a strong sense of environmental justice. This is particular true for migrant workers who expect to leave Guiyu in the future and do not have a strong sense of belonging and responsibility towards the town. This, however, does not mean that migrant people do not have any concern for the environment. They understand the importance of clean water and air not only for the sake of their health. They further criticise the corruption in the process of environmental governance, look down upon local people's inaction towards pollution, and often complain about the local environmental pollution. It is because of certain cognitive beliefs and affective energies based on their status as a worker (I come here mainly for earning money) and status as a migrant (I do not feel attached to Guiyu and will leave in the future) that the development of an action-oriented environmentalist agency is restricted, which further has influenced the formation of their environmental justice agency. It is also because they have less "capacity to aspire" that allows them to imagine other ways to fulfil their aspirations. Sacrificing health to earn money becomes the most practical way for them to connect their concrete desires with their current contexts.

Thirdly, the ways of intersection among power relations within different systems of oppression in shaping migrant women workers' agentic orientations are various. For example, as other scholars (Lee, 1998; Chan & Pun, 2009) have already noted, fellow villager networks based on migrant status can be transgressed and further develop into a more general sense of workers' network. It is clear in the above analysis that such a

transgression also happens among migrant workers in Guiyu, though it does not develop into large-scale open struggles against local bosses. However, inter-provincial conflicts also happen among migrant workers, which can prohibit a generation of stronger coalition and solidarity. Another example is that the migrant status has improved migrant women workers' gender consciousness in reflecting upon certain local patriarchal practices. It also helps maintain and even facilitate the internalisation of existing patriarchal norms and practices when they imply that "our hometown is much better than here," or "migrant women workers have a higher status than local women in the family." Additionally, we can see from the above discussion how the internalisation of intersected conceptions based on migrant status and class shape environmentalist agency and environmental justice agency.

Finally, just like "wilful ignorance" happens at various levels among different dominant groups, agentic manifestation also varies among different people. This can be based on whether and to what extent certain conceptions have been internalised and normalised. For example, those whose health have been seriously influenced by e-waste work might generate a stronger critique towards the working environment and style. On the contrary, migrant workers who show more consent towards the working environment usually have not been influenced seriously by the pollution. Hu, who often got sick and had paid a lot of money for medical expenses, complained a lot about the working environment and the lack of labour protection and medical insurance. In contrast, her fellow villager Lin did not complain as much as Hu. Lin said, "I have been doing the work of burning circuit boards since I came here in 2000s. My health is good and not seriously influenced by the work. Other people have got different types of illness."

Conclusion

Intersectional environmental justice agency is often related with the awakening of "multiple consciousness" of those who are positioned at the intersection of multiple systems of oppression, such as the "intersectional activists." However, "intersectional" should not be simply understood as equal to "multiple." Rather, it could be internally tense and complicated in consideration with dialogical relationships between *power over* and *power to*, as well as the various ways in which power relations intersect to shape one's agency. In addition, even though social justice agency, environmentalist agency, and environmental justice agency are closely related, the development of the last does not

equal to the simple addition of the first two. The analysis in this chapter shows that the agentic orientation towards social and environmental injustice among migrant women workers is particularly complicated.

What might be implications of the dispersive and internally tense "intersectional agency" to making environmental and political changes? On the one hand, intersectional agency might raise different types of challenges, such as the seemingly contradictory goals between migrant workers and ENGOs. While migrant workers may not care much about and even contribute to local environmental pollution, ENGOs, contrastingly, aim at protecting the local environments. On the other hand, faced with such challenges, intersectionality can also supply us with new thoughts and imaginations on how to help migrant women workers empower themselves. Besides pushing forward to make institutional changes and achieve policy support, making political changes may require us to undertake activities such as raising migrant workers' awareness for protecting both the environment and their health (which might be indispensable from transforming certain affective energies such as the aversion towards the local people), questioning and challenging the intersected normalised conceptions that make them socially and environmentally vulnerable, supplying education to migrant women workers to protect their rights, and developing their "capacity to aspire" that allows them to have more solid imaginations and concrete ways to fulfil them. It also alerts us to pay more attention to and spend more efforts on acting against power based on certain categories (such as gender and age) that are more often ignored both by the dominant society and migrant women workers. All of this requires a close engagement with migrant women workers on the ground and a need for collaborative efforts from multiple parties (NGOs, local governments, scholars, local people, etc.).

With both the challenges and implications, it is important to further ask whether it is possible to build intersectional politics, which is important to make transformative changes around multiple issues simultaneously. This question is particularly crucial when dominant groups— even NGOs— hold certain levels of wilful ignorance towards migrant women workers, as discussed in Chapter Four. In the next chapter, I shall explore the obstacles and possibilities in building intersectional politics and partnerships among multiple parties through analysing the historical and contemporary transnational, national, and local political dynamics.

Chapter Six: Political Dynamics and The Possibility of Intersectional Politics

Introduction

Chapter Four demonstrates that the social and environmental injustice against migrant women workers in Guiyu is a result of the intersected power relations embedded in multiple systems of oppression. Chapter Five reveals that although the agentic power against the intersected power relations among migrant women workers is especially complicated, it, however, points to a relatively weak sense of acting against environmental pollution and injustice. These two chapters together remind us that in order to make social, political, and environmental changes, an integrated process that aims to challenge the intersected power relations ought to be undertaken. This requires collaborating efforts from different parties that involve environmental protection, migrant labour protection, eliminating poverty, child education, gender equality, and so on. However, both Chapter Four and Five also raise challenges in facilitating such intersectional politics. While Chapter Four reveals migrant women workers' situation of being wilfully ignored (at various degrees and for different reasons) by the local government, certain NGOs, the media, and other dominant groups, Chapter Five shows that the intersectional agency of migrant women workers also poses challenges and higher requirements for collaborative work.

This chapter aims to explore the obstacles and possibilities of generating intersectional politics through examining existing political forces from the civil society at transnational, national, and local levels, in relation to issues of e-waste pollution, labour protection, gender equality, and so on. I shall pay particular attention to the horizontal cooperation between different organisations and groups of people, as well as the vertical interactions among activities and projects taken at transnational, national, and local levels. I argue that there are various kinds of networks, organisations, and individuals at multiple scales to challenge the power relations in the global electronics industry. However, they are still far away from directly challenging the local power relations and influencing the situation of migrant women workers in Guiyu.

Transnational Social Movement Organisations and Networks

As mentioned in the Introduction, international organisations such as BAN, SVTC, and Greenpeace that are early advocates in revealing the global e-waste trade have a long-term relationship with Guiyu. Both reports published by BAN & SVTC in 2002 and by Greenpeace & Anthropology Department of SYSU in 2003 have used Guiyu as an example to attract attention from official organisations and the public. Greenpeace and other international ENGOs like to connect human health and environmental pollution in their advocacy. They often create a strong story of a specific case to raise social concerns about a given environmental issue. Guiyu is a typical example of this type of advocacy. With the implementation of environmental governance in recent years and the shifting of e-waste trade from China to other countries such as Vietnam, Malaysia, Pakistan, etc., the global focus on Guiyu has gradually weakened.

We can use BAN as an example to illustrate the current involvement of major international NGOs at the issue of e-waste and Guiyu. BAN's mission is "to champion global environmental health and justice by ending toxic trade, catalysing a toxics-free future, and campaigning for everyone's right to a clean environment." The fulfillment of this mission is achieved through "interrelated strategies for policy, marketing solutions, and public engagement." Nowadays, BAN launches its activities around four projects: the e-Trash transparency project; electronics stewardship; plastic pollution prevention; and green ship recycling. Specific actions include releasing research reports (often through collaborating with other organisations), holding or participating in related forums or conferences, organising campaigns among the public, tracking the flow of e-waste using GPS (Global Position System) based trackers, protesting against using prison labour, and so on. To ensure the occupational health and safety of e-waste labour, BAN has also created the electronics stewardship standard to promote responsible electronics reuse and recycling practices.² In Guiyu, BAN has made several follow-up visits since 2002. After his latest visit in December 2015, the executive director of BAN Jim Puckett commented that: "This day of action in Guiyu has been promised for over a decade and it is remarkable to finally see it" (BAN, 2015). However, he also said that the basic harmful technologies exercised in the process of e-waste recycling remains the same and Industrial Park has not done enough to improve its working environment. In other words, what is currently going

¹ Taken from the mission statement on BAN's website: https://www.ban.org/mission

² For more information on the e-Stewards Standard of BAN, see http://e-stewards.org/

on in Guiyu is the centralisation of dismantling workshops, rather than the real industrialisation of circular economy.

Like BAN, Greenpeace has also shifted its focus in recent years. The problem of e-waste—under the theme of "Eliminate Toxic Chemicals"—remains an important part of the activities taken by Greenpeace in East Asia. Their activities in China mainly include four aspects: investigating industrial pollution in China; exposing corporate polluters and demanding them to stop using toxic chemicals such as Polyvinyl Chloride (PVC) and Brominated Flame Retardants (BFRs); giving policy-making recommendations to the government; and engaging with the public to raise their awareness. Having its office at Beijing and Hong Kong, Greenpeace has more chances to follow up with the development of Guiyu than other international NGOs. There have been ongoing follow-up visits and communication with local contacts since 2003. Nowadays, Greenpeace has changed Guiyu's positioning from revealing the danger of e-waste to showing the feasibility of a circular economy. However, the current development of Guiyu is not so satisfactory to them as well (Zhuang, 2017).

Nowadays, there also have developed other transnational social movement organisations and networks that concern the electronics industry such as Global Anti-Incinerator Alliance (GAIA), International Campaign for Responsible Technology (ICRT), and GoodElectronic network (GE). These global networks are very important for building alliances among worldwide grassroots groups, NGOs, scholars, and individual activists, through sharing information, collaborating in certain activities, and exchanging thoughts and ideas. Members in these networks are usually independent organisations or individuals who share similar norms and values on the electronics industry. For example, ICRT's partners and allies include various types of organisations (such as environmental, labour, human rights organisations) from different regions of the world. It describes itself as:

[A]n international solidarity network that promotes corporate and government accountability in the global electronics industry. We are united by our concern for the life-cycle impacts of this industry on health, the environment, and workers' rights. By sharing resources, we seek to build the capacity of grassroots organisations, local communities, workers and consumers, to achieve social, environmental, and economic justice.³

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³ ICRT website: https://icrt.co/about-us/

David, a staff member of an international NGO in China, explained how such networks operate in reality:

These action networks take certain unified actions together—unified actions in a broad sense. It operates more as though our final appeals are common or we seek a common ground while reserving differences, not that we rush to a place together and take collective actions. Each institution may have its own specific appeals, but members in one network usually have the same basic appeals and share the same values. Or we have similar goals at different stages in the next few years on a given issue, and our strategies might be similar or complementary. For example, some institutions may play more roles in advocacy, others may work more on pushing policy-making.

These networks often overlap with each other and form a broader global social movement network.⁴ In terms of the global electronics industry, these transnational organisations and networks all share the vision of global environmental injustice regarding the shifting of toxic risks from the privileged and rich to the poor and marginalised across and within boarders (Ford, 2003; Pellow, 2007, p. 95). They are concerned with how the electronic industry effects both the environment and people's health throughout the whole life cycle of electronic products, from mining minerals to manufacturing, recycling, and disposal.

GE network can be used as an example to show how such a vision is practiced. As a network that concerns "both human rights and sustainability in the global electronics industry", GE has 113 members worldwide.⁵ It launched a five-year programme in January 2014 that focused on "information, training and capacity building of workers and their representative organisations" (GE, 2015, p. 12). In March 2015, the GE network, ICRT and their other allies issued the "Challenge to the global electronics industry," which shows solidarity among different networks and organisations. In the last few years, members of the GE network around the world have undertaken different types of activities at the local level, including meetings/trainings of unionists and workers in Asian countries (such as Thailand, Indonesia, Malaysia, etc.); investigations of working conditions in electronic industries; as well as seminars, workshops, and conferences that discuss topics of e-waste, human rights, labour rights, gender issues, occupational illness and safety.

⁴ For example, NGOs can be involved in different networks at the same time. Staff in different networks also have close relationships with each other (Pellow, 2007).

⁵ For a list of GE network members, see https://goodelectronics.org/about-us/members/

There are six organisations and two individuals in China involved in the GE network. Five of the organisations— Asia Monitor Resource Centre (AMRC), Globalisation Monitor (GM), Labour Action China (LAC), Labour Education and Service Network (LESN), Students and Scholars Against Corporate Misbehaviour (SACOM)—are labour NGOs based in Hong Kong. The last one, Institute of Public and Environmental Affairs (IPEA), is a non-profit environmental research organisation registered and based in Beijing. Activities of these NGOs in China include investigations of the working conditions in electronic industries in the Pearl River Delta (PRD) region, workshops on worker monitoring, and expert meetings about issues concerning chemical poisoning in China. However, the promotion of the activities in China has been restricted by two factors.

Firstly, the activities of labour NGOs have been faced with severe suppression from the central and local governments. GE network revealed in its *Annual Report 2015* (2016) that there was less space in China for organisations to unfold their work since 2015. It said, "Hong Kong based NGO SACOM is one of the organisations that was forced to keep a low profile for a significant period of time, which affected the pace of their investigative work" (GE, 2016, p. 3).

On the one hand, organisations in Hong Kong (which is one of the Special Administrative Regions of China) are still regarded as foreign, which has increased the difficulties for them to undertake activities at mainland China regarding the strict regulations on overseas NGOs.⁶ On the other hand, as local labour NGOs at the PRD region often have close relations with Hong Kong-based labour NGOs, the suppression of the former would also have a negative influence on the activities of the latter. Since mid-1990s, a lot of local labour NGOs (including women's labour NGOs)⁷ started to emerge and develop in south China as a result of China's integration into the global economy and the emergence of millions of migrant workers (Howell, 2004). The development of labour NGOs in mainland China is often supported (both financially and technically) by Hong

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⁶ Law of the People's Republic of China on the Administration of Activities of Overseas Non-Governmental Organisations within the Territory of China, adopted in 2016 and amended in 2017, lays more strict requirements for overseas non-governmental organisations in terms of registration and recordation, activities, funding, etc.

⁷ There are mainly three types of labour NGOs regarding their registration status in mainland China. The first type is to cooperate with organisations that have a lawful status such as the Communist Youth League, who can allow labour NGOs to operate under their names and act relatively independently. The second type is to register as a commercial organisation but operate as a non-profit organisation. The third type is to operate without any registration at all, with illegal status (Pun, 2009; C. K. C. Chan, 2012).

Kong and other foreign civil society organisations (Y. Huang, 2006; Y. Huang & Guo, 2006). For example, the research report *The Poisonous Pearl* (2016), produced by LESN, LAC, and The Centre for Research on Multinational Corporations (SOMO) mentions that LAC and LESN have cooperated with labour rights grassroots activists in mainland China for a number of years (p. 10), showing the close interactions and collaborations between labour NGOs in Hong Kong and in the PRD region.

However, the central and local governments are particularly sensitive to labour NGOs, regarding them as increasing chaos to the government (Z. B. Yu & Yang, 2011). This is especially true for NGOs that are supported or funded by foreign organisations. For example, the Guangzhou Administrative Measures of Social Organisations (released by People's Government of Guangzhou in 2014 and implemented in 2015) requires that social organisations need to report to the related governmental departments at least 15 days in advance if they are going to accept foreign grants and funds. This has cut off the funding origin of many local labour NGOs in Guangzhou (R. K. Feng & Li, 2015). More importantly, foreign organisations that supply funding to domestic labour NGOs are often pictured by Chinese government as "foreign hostile forces" (jingwai didui shili) that carry out "enemy infiltration" (difang shentou) and threaten the political safety of China (Batke, 2018). For example, the Jasic Incident, a labour rights protest occurred in the company of Shenzhen Jasic Technology from July to August 2018, was defined by the Xinhua News Agency as being instigated and supported by overseas labour NGOs (Hou, 2018). Many labour rights activists in PRD region have "disappeared" or have been arrested. A lot of labour NGOs have been paralysed or forced to close in recent years (X. T. Du, Zhang, & Jiang, 2012; Fang & Zhang, 2015; Elmer, 2019). This makes the activities of labour NGOs based in both Hong Kong and mainland China difficult to carry out.

Secondly, the activities performed by these NGOs focus more on workers in big electronic industries. Existing investigations and research (e.g. AMRC, 2006; SACOM, 2008; LAC, LESN, & SOMO, 2016) in mainland China are all done in formal electronic manufactures whose clients are brand companies such as Apple and Samsung. The GE network also describes itself in its mission as having "a specific focus on big brand companies." Figure 15 shows the distribution of 22 labour NGOs (six of them give a special focus on migrant women workers) in the Guangdong province, 21 of which are

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⁸ GoodElectronic network website: https://goodelectronics.org/about-us/mission-vision/

located in the urban areas of Guangzhou, Dongguan, and Shenzhen. There is no labour NGO in Shantou (where Guiyu is located). Because of this spatial restriction, labour NGOs are mainly focused on offering community-based service to migrant workers in formal factories of manufacturing zones. Therefore, migrant workers in rural areas such as Guiyu are in a more marginalised position. Henry mentioned that there used to be labour groups in Shenzhen, Guangzhou, and Hong Kong who consulted with him about the impact of e-waste pollution on workers' health. He also said,

This happened many years ago and I don't know whether they went to Guiyu and took action there. I personally don't think so, because these labour groups in Shenzhen, Guangzhou, and Hong Kong are more concerned with labour issues in big factories such as Foxconn. The common way they use it is to build trade union among workers to fight for rights. From this point of view, Guiyu is not suitable for them, because in Guiyu there are only casual migrant labours and individual workshop owners. The employment relationship between workers and bosses in Guiyu is very flexible. There is thus a difference between migrant workers in Guiyu and big factories in terms of workers' difficulties, health issues, and rights. Migrant workers in Guiyu are more marginalised, just like the informal waste pickers. The labour organisations do not have the capacity and energy to focus on them.

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⁹ For a full list of these labour NGOs, see http://www.ngo20map.com/. The number is calculated by a non-profit organisation in China named NGO2.0. Given their complicated registration status, it is hard to say whether this list has incorporated all labour NGOs in Guangdong.

¹⁰ These labour NGOs aim to supply various kinds of support to migrant workers in the factories of the PRD region. Briefly speaking, there are mainly three types of mobilising strategies used by labour NGOs (J. W. He & Huang, 2008; C. K. C. Chan, 2012; Y. Xu, 2013). The first one is to provide cultural activities (such as educational classes, entertainment activities, or fellowship activities, etc.) to communities of migrant workers through building labour service centres (*shegong fuwu zhongxin*). The second one is to provide legal services for migrant workers whose labour rights have been violated by their employers (such as arrears of wage and occupational injury). The third is to undergo social investigations and policy advocacy, in-factory training for the workers, and outreach programmes on labour rights. A more militant strategy that focuses on collective bargaining and struggles (such as the cases of Wal-Mart Strike in 2016 and Jasic Incident in 2018) has also been observed by scholars in recent years (Franceschini & Lin, 2019). According to China Labour Bulletin (CLB), labour protests happen in mainland China all the time. For a strike map in mainland China, see https://maps.clb.org.hk/strikes/en.



Figure 15 Distribution of labour NGOs in Guangdong province. 11

The distribution pattern of NGOs that focus on women in Guangdong province is similar to that of labour NGOs (Figure 16). There are two types of NGOs that focus on women: labour NGOs that give a focus on gender and general women NGOs that concern broader women and child issues. Women labour NGOs, e.g. The Chinese Working Women Network (CWWN), are also community-based service certres that offer services on law training and education, occupational injury support, and gender advocacy. Other general women NGOs focus on issues of gender equality, women empowerment, poverty elimination, and childcare. For example, Xingning Women and Children's Service Centre in Guangdong province aims to supply social welfare activities such as assisting the poor, supporting educational pursuits, and serving women and children, within the community it is located in. Another NGO named Rural Women Development Foundation in Guangdong aims to support rural women and children in terms of cultural life, health, rights protection, and capacity building. It has carried out nationwide projects to improve the living conditions, potential, and participation in public affairs among rural women. However, most of the general women NGOs are not concerned with environmental and labour issues.

¹¹ Created using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property

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Figure 16 Distribution of NGOs focused on women in Guangdong province. 12

In fact, the issue of gender has been emphasised in the global environmental injustice network on electronic industry, even though these organisations and networks are not particularly women focused. The gender perspective has widely been emphasised in global environmental conservation and management. Women are regarded as not only playing an essential role in the management of natural environment but also being affected differently by environmental pollution and degradation (Merchant, 1981; Rodda, 1991). In various research reports (e.g. SOMO, 2009), activities, and conferences of the GE network, different situations faced by men and women workers have been mentioned repeatedly. For example, one aim of GE's five-year programme is to unfold training to 10,000 workers in Asia and South America, "with a special focus on women workers" (GE, 2015, p. 13). In an article by United Nations Environmental Programme (2017) named Women and the Rising Tide of Environmental Crime, Guiyu is used as an example to show why the perspective of gender and human rights is important for organisations to analyse environmental crimes. The Basel, Rotterdam, and Stockholm (BRS) Conventions have also launched the BRS Gender Action Plan in 2013 to mainstream gender issues within both the activities of the BRS Secretariat and its programmes on hazardous chemicals and waste

¹² Created using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved. Data comes from http://www.ngo20map.com/.

management. ¹³ For the latter, two scoping studies in Indonesia and Nigeria have been done to provide a better understanding of the specific effects of hazardous waste towards women. These two studies were done by Women Engage for a Common Future (WECF), a nonprofit network whose motto "gender just and healthy planet for all" falls under the principles of intersectionality, solidarity, and gender justice. ¹⁴ It is also worth noting that over 150 women's and civil society organisations worldwide are in WECF, yet none of them are located in China. However, engagements between women's organisations and environmental organisations and networks are still scarce. For example, in networks such as GE and GAIA, besides some labour NGOs that show concern to women issues, no general women NGOs were involved.

Domestic Social Organisations and Networks

ENGOs in China are supposed to be in a more beneficial position in the context of environmental governance in recent years. They are more encouraged by the governmental organisations than labour NGOs. As Zhao—founder of a domestic ENGO—said, after the Eighteenth National Congress of the CPC in 2012, China's ENGOs are faced with less pressure from the government. Zhao compared ENGOs with labour NGOs in China. He said,

Labour issues are so sensitive because China is still a productive country, which needs a lot of labour to achieve economic growth. Workers are the most important factor at this moment. The activities taken by labour organisations will bring about changes in the quality and capability of workers, so the government will definitely restrain their development. On the contrary, environmental organisations are different. It was difficult for ENGOs to even get registration 15 years ago when they started to protest pollution. But after the Eighteenth National Congress, their situation is much better.

Even though the shifting policies of the central government have provided more opportunities for ENGOs to promote their advocacies, contemporary environmental governance has been argued to be (fragmented or semi) authoritarian instead of incorporative and participatory (Ho, 2007; Mertha, 2009; Beeson, 2010; Gilley, 2012;

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¹³ For a more detailed illustration about this project, see http://synergies.pops.int/Gender/BRSGenderActionPlan/Overview/tabid/7998/language/en-US/Default.aspx.

¹⁴ WECF website: https://www.wecf.org.

Zhan & Tang, 2013). This is particularly true for international NGOs that are active in China. David mentioned that the implementation of the law on international NGOs requires more time for them to adapt, which has increased their workload and influenced their efficiency. Henry also said,

I think that stricter environmental governance is a good thing in itself, but it does not mean that it is more beneficial to the development of ENGOs. There are mainly two factors that constrain ENGOs to exercise their supervisory role. The first is that there are more rules and regulations instead of encouragement or support towards ENGOs. It is quite difficult for ENGOs to exercise supervision, document problems, or criticise the government's work. The media's power has also been weakened. The second is the issue of funding. The new law prevents NGOs from accepting foreign funds, which is very unfavourable for the NGOs. Then, how can you say that NGOs can carry out their work under these regulations? Obviously, it is very contradictory.

Besides Greenpeace, among the 3,055 environmental organisations in China, there are very few that focus on issues of e-waste. ¹⁵ In fact, like Greenpeace, some domestic ENGOs are also concerned with the issues of toxicity in the IT industry, targeting the green supply chain of brand IT companies. For example, since 2010, Friends of Nature, IPE (member of GE network), and Green Beagle have published seven IT industry investigative reports, jointly signed by other over 30 domestic NGOs. These reports aim to reveal the problems related to environmental pollution and labour protection in the Chinese suppliers of brand IT companies (particularly Apple). ¹⁶ There are also some domestic environmental organisations and networks that focus on the general issue of waste, in terms of waste sorting, incineration, management, policy-making, and so on. For example, the China Zero Waste Alliance (CZWA) aims to promote the resolution of waste crisis in China through facilitating dialogue and cooperation between the government, enterprises, scholars, the public, and non-profit organisations in the process of waste management. ¹⁷ Until now, there are 34 organisations and 15 individuals in the Alliance. Many domestic

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¹⁵ This data comes from the Heyi Institute, a non-profit organisation dedicated to the development of environmental protection movement in China. The environmental organisations in this list include social organisations, university organisations, international organisations, foundations, and public institutions. For a map of these environmental organisations in China, see http://www.lvziku.cn/eo.

¹⁶ For more information on these reports, see http://www.ipe.org.cn/reports/Reports_18334_1.html

¹⁷ From CZWA website: http://www.lingfeiqi.org/.

ENGOs have also joined transnational action networks such as Break Free from Plastic (BFFP), which is a global movement that aims to reduce plastic waste through building solidarity worldwide.¹⁸

However, these organisations and networks all operate based on the vision of environmentalism instead of environmental justice. Even though some organisations such as Greenpeace and IPE are participants of the global environmental justice network on electronic toxics, they still position their activities in China as being based more on environmentalism instead of environmental justice. When asked to what extent ENGOs in China are concerned with migrant workers, Henry answered,

ENGOs are environmental instead of labour organisations. They are concerned more with environmental pollution than with labour rights. For example, the previous reports on Guiyu released by Greenpeace mentioned just a few aspects of migrant workers, such as their low wages and the horrible working environment. They did not go further to analyse their social status and other issues.

Henry has also tried to build another two e-waste NGOs in China. He said,

In terms of these two organisations, our first aim is to understand e-waste flow. The second is to do some e-waste-related publicity in big cities to raise the public's awareness. However, we initiated these two NGOs not because we wanted to focus on Guiyu or the migrant workers there.

Therefore, even though human health is an important factor for domestic ENGOs to consider, the political and social dimension of environmental pollution is not their focus. Unlike the global environmental justice network on electronic industry, domestic environmental organisations and networks do not engage closely with other social organisations such as labour and women's organisations. Members in CZWA, for example, are ENGOs and the activities (forums, investigations, policy suggestions) they undertake usually do not have direct connections to labour rights, human rights, or women's issue.

This is partially related to the sensibility of labour issue in China. As T. Hao (2008) argues, NGOs in China are often inclined to keep away from politics and play a low-key role in society. Non-confrontational strategies and tactics are important for ENGOs to survive and make their claims (F. Wu, 2009; E. T. Brooks, 2012). As Liao, the director of Global Village of Beijing, said, "I don't appreciate extremist methods. I'm engaged in

¹⁸ BFFP website: http://breakfreefromplastic.org.

environmental protection and don't want to use it for political aims" (as cited in Ho, 2011, p. 916). There is also a difference between activities taken by international NGOs in China and overseas. David said,

In China, we need to take a more euphemistic approach, and we cannot do showy moves such as non-violent direct action... Sometimes it is also a little "dangerous" to openly participate in these global networks, they (the government) might wonder whether you want to stir up events together... What we are doing is seeking negotiable and tactful approaches within the institutional framework. It's not that you cannot act at all without direct action, but that you can look for some strategies and spaces to make your claims.

This further raises the challenge for ENGOs to "address the broader political, economic and social issues that underlie environmental issues" (Y. Lu, 2007, p. 63). Directly involving environmental vulnerable groups (such as training peasants and migrant workers) in their activities would make the actions radical and reckless, which can attract trouble from the government. For example, there is a difference between revealing migrant workers' exposure to environmental pollution in investigative reports and engaging with migrant workers in reality more directly. The latter is often regarded as more dangerous and sensitive.

However, there are another two points that need to be emphasised. Firstly, ENGO's lesser involvement in social and political issues does not mean that they do not understand the complexity and intersectionality of multiple issues. As David said,

Although I have just talked about the importance of paying attention to people's health in making environmental claims, it is still a very straightforward strategy. The social issues involved are very complicated, and it is about how ENGOs are going to locate social problems in their projects.

David also mentioned a conflict that he had felt,

The more you talk with these migrant workers, the more you put them in a difficult situation. Environmental protection is good, but it will also lead to the problem of unemployment. On the other hand, we must carry out environmental protection activities because it is important in the long run.

This is one of the reasons that makes David value the chances of communicating with scholars and experts from different areas, who can offer him a more comprehensive picture of one issue instead of a simple either/or logic. He further stated,

My talk with a Tsinghua chemistry professor at a forum was very inspiring to me. He studies chemicals and at the same time he can also incorporate issues of environment, economy, competition, and industries... Because many pollution issues are chemical-related, I can see that his work could be a strong professional support for us to do related campaigns in the future... I think it is indispensable to discuss with scholars from different areas. As an NGO, it is not enough to just talk about passion, enthusiasm, and social responsibility. No organisation can live by faith or enthusiasm alone. You have to think and talk more about practical things, thus professional, concrete and solid academic research can be complementary and supportive to our advocacies.

This further draws forth an informal network beyond the formal networks we have discussed so far. David knows many scholars in a wide range of research areas at different universities, ranging from medical and chemical scientists to social science scholars who work on sustainability, informal waste pickers, environmental history, and so on. He knows these scholars through attending forums and conferences or being introduced by other people in the "quanzi" (circle). In Chinese culture, quanzi refers to the informal network of people who have similar interests or work on similar issues. Its formation is based primarily on personal relationships. People who engage in environmental protection and other related issues form a quanzi, through which they can share information and knowledge, seek assistance, introduce people, and build collaborations. For example, Zhao mentioned that his organisation has supplied accommodation to several graduate students who are usually introduced by other organisations or individuals. It is also from David that I came to know other related scholars and students who later introduced me to other people, shared information, and offered to help me. This informal network does not only include scholars and NGO members but also journalists, universities, lawyers, grassroots activists, governmental members, etc. (G. Yang, 2005; Y. Lu, 2007). Compared with formal networks, the informal network of *quanzi* is more dispersive, intricate, and covers a broader range of people in various ways. It is also more open, flexible, fluctuant without a fixed border, which creates a space for generating new thoughts and imagining new possibilities. In other words, it can allow us to envision a different type of *power with*.

For example, such an informal network allows people to not only share information and resources, but also have a deeper understanding of the intersectionality of social, economic, and environmental issues. As David said,

I know a professor from Tsinghua University whose research focus is history instead of environmental pollution, from whom I know better about whether China has repeated the mistakes in environmental history... Professor Chen studies the informal waste pickers who take the role of "the last one kilometre" in the waste chain. They are in a similar situation of migrant workers in Guiyu. Chen thinks that we should not discuss this problem in a dichotomic way (either totally suppressing waste pickers or leaving it alone). Sometimes there is no absolute right or wrong for each side. The problem is how we can maximise the benefits and achieve better results.

Zhao also mentioned the research of a graduate student staying in his organisation when talking about the issue of *chaiqian* (house removal) caused by pollution in a village. He said,

There is a researcher in our institution, who is a Ph.D. student from Hong Kong and studies the issue of *chaiqian*. The media and environmentalist organisations often attribute the problem of *chaiqian* to pollution. But in fact, pollution is only a part of the issue instead of the whole problem. It is also related with other aspects such as the land-based finance, the geographical location of the village, and the development plan of the government.

Both David and Zhao allow us to see that even though there are difficulties in building formal intersectional alliances and networks, the informal network offers opportunities to deepen their understandings about the intersection between environmental issues and other social and political issues.

Secondly, it is also important to emphasise the complicated relationship between state and civil society in both the formal and informal networks. On the one hand, there are often joint actions between ENGOs and other governmental organisations. For example, in the Fourth National Zero Waste Forum organised by CZWA and other governmental and non-governmental organisations in 2016, 19 more than 200 representatives from different parties have participated and discussed different attempts and successful experiences in waste sorting and resource recycling. 20 ENGOs also supply policy suggestions towards the government. It is thus important to avoid treating the government as an intact whole, but rather composed of different organisations and concrete people at different levels. As

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¹⁹ Including Chengdu City Management Committee, Chengdu Commerce Commission, Chengdu Environmental Protection Agency (EPA).

²⁰ For a more detailed illustration of this forum, see http://www.lingfeiqi.org/node/45

Henry said, "We often discuss the government in a more general sense. In fact, some specific departments of the government such as the EPA might understand the importance of ENGOs and even welcome them." Local officials in Guiyu also have close cooperation with universities and scholars in building a circular economy (Chaoyang Yearbook Compilation Committee, 2018, p. 201).

People in the government are also important participants in the informal network. For example, through formal cooperation, scholars often build close *guanxi* (personal relationships) with governmental officials, who become part of the broader informal network of *quanzi*. For example, many scholars David knows have close collaborations and personal relationships with members in both town-level government and village committees in Guiyu. My fieldwork also shows that some governmental members are willing to talk and discuss openly and honestly on certain issues. Y. Lu (2007, p. 60) illustrates the case in which people in the government who share similar views show support towards ENGOs and grassroots activists and even become allies in certain environmental campaigns. It is therefore important to take into consideration this nonconfrontational aspect of state-civil society to seek for opportunities and different ways to make changes.

The Local Political Dynamics

Besides direct investigations and reports done by NGOs and the media in Guiyu, it is also necessary to look into the concrete actions from other social forces that have been done on the ground. I shall mainly explore two parties in this section: scholars and the local residents.

Research Institutes and Scholars

At the international and national levels, scholars and researchers are quite active in both the formal and informal networks through cooperating with other environmental and labour NGOs, participating related forums, and taking part in environmental activities. Many scholars have a presence in the above-mentioned global and domestic organisations and networks. In addition, as we can see from previous citations, a lot of research has been done particularly on the effects of e-waste pollution in Guiyu towards human health, which requires engaging with the local and migrant people directly on the ground.

Xia Huo, a medical scientist, has focused on Guiyu for many years. In 2003, Huo and another professor established the "E-waste student research group" at the Shantou

University Medical College to explore the impact of e-waste towards human health in Guiyu. The main activity done by this group has been to collect data through providing free health examinations for locals and migrants, paying particular attention to vulnerable groups such as pregnant women, children, and newborns. Over a number of years, these researchers have carried out a number of blood tests for heavy metals for children. They also have held health education lectures in kindergarten classes across several villages in Guiyu. The topics of these lectures cover the dangers of e-waste pollution, the protective measures, lead poisoning, child injury prevention, child health knowledge, and so on. Until 2011, they have carried out more than 40 public and educational activities in Guiyu, distributing more than 10,000 brochures and leaflets about health education to the residents, and conducting free medical examinations for more than 1,000 children (Linyz, 2011). These activities are also welcomed by parents. Huo said, "In the past, we asked for kindergarteners to cooperate with us. Now the parents ask us to increase the frequency of doing health examinations" (Caogen bobao, 2012).

Huo and her group are also concerned with migrant workers' health. They attract migrant workers to register and take medical examinations through undertaking health education and offering free health examinations, medicine, and booklets. They also set up stalls near the districts where migrant workers are concentrated and conduct random sample surveys in some migrant workers' rental houses. However, even though they understand that migrant workers suffer from serious environmental pollution in both their working and living places, their research does not give a special focus on migrant workers. Huo explained, "The workshops are attached to private homes, so it makes it hard to get in... The workers who come here are temporary, and once they get sick, they go back to their villages. It's hard to track them" (Standaert, 2010).

There are many scholars like Huo from the science area that have conducted research in Guiyu. However, these works all start from a medical or scientific perspective, without caring about social issues of labour rights, gender inequality, or migrant-local relations. In addition, most of the research is short-term and the interactions between researchers and the local and migrant people happen in random and dispersive ways. Even Huo and her group's long-term work in Guiyu cannot sustain attention from migrant workers. This is also true for scholars who cooperate with local governments in building the circular economy of Industrial Park. They are often from scientific areas such as the environment and energy, environmental health, pollution control, and the circular economy, and do not have actual engagements with residents and migrant workers.

During my fieldwork, several participants have mentioned that it is normal to see scholars doing research in Guiyu. Li told me that there used to be students carrying out research and encouraging migrant workers to participate. He said,

They need to draw blood and take some nails and hair from participants for testing. Participants would get a pre-paid phone card worth 100 yuan afterwards... Some have participated, but I didn't. I felt it was not worth it and a little embarrassing. They also wouldn't tell us the result.

Min often saw researchers from different organisations in the hotel where she worked. Some were from professional institutions or companies to collect samples from the local soil and water for analysis. Min said, "I sometimes would have a talk with them. They told us not to eat the local fish and rice. They are all polluted. It is true that the fish here do not taste good."

Huo and her group's work on the ground is important for the local and migrant people to raise their consciousness of environmental pollution and its effects on human health. However, given the limitations of human resources, a single research perspective (medical or scientific), and a lack of collaboration with other parties, their engagement with the local and migrant people is relatively weak and the influence is restricted particularly in relation to the social and political factors embedded in environmental issues. Though dispersive and trivial, such interactions between researchers and participants might still generate subtle changes. For example, the dialogical relationship between me and the participants sometimes allows to see their reflections in relation to my work. Once I was chitchatting with several migrant women workers. Min asked me not to write bad things about Guiyu. She said, "Don't say bad words about Guiyu. In the past many foreigners came here to make negative reports about Guiyu, which have made this place become so well known." Another participant, Xie, objected immediately, "The things written must be objective and fair, you should not try to hide anything intentionally." I further said, "It is also because of these foreign reports that the government now starts to concern with the environmental pollution in Guiyu." Min thought for a moment then nodded.

Local Residents

It is also necessary to illustrate residents' responses and reactions towards the local environmental pollution. In the early years, as the e-waste chain in Guiyu was very complete and most people were involved, there rarely were opposite voices against the e-waste industry and environmental pollution. In Greenpeace and Anthropology Department

of SYSU's (2003c) report of local interviewees, a local retired teacher Ma said, "Because everyone is doing business in this industry, no one would complain. Even though people who are not in these industries might have some opinions, they would not bring up the issue because of *mianzi*" (p. 3).²¹ Another local person, Peng, had a food stall in a market and was not involved in the e-waste industry. When asked about the local pollution, he said, "Of course, everyone wants the environment to be good, but in this current situation, no one needs to blame anyone. Everyone just wants to earn money for a living. Environmental protection is the matter of government, we cannot control these things" (p. 10). Other people might keep silent as a result of being afraid of attracting trouble. In another interview the author of the same report wrote, "when we asked whether residents have expressed opinions (about the environmental pollution) towards the government, Peng's eldest son got in a word: 'who dares to say that?'" (p. 11). Therefore, even though there have been complaints about environmental pollution from people who are not in the e-waste business, most of them would choose to accept it because of pressure from other local people.

In recent years, along with environmental governance, there are also more and more local people who would inform the government anonymously when seeing illegal ways of dealing with e-waste. The vice-deputy of the Industrial Park Committee said in a report that, "With the environmental governance, local people's awareness of environmental protection is also increasing. Some people start to report to us the illegal workshops so that we can take action to ban them" (C. S. Shen, 2017). This has also been verified by several participants in my research. Liu told me that it is important for migrant people who operate e-waste businesses to find an influential local landlord who can offer some support when being reported to the government by others. She said,

Some local people also start protesting against the pollution now. For example, if a migrant is doing dismantling business that creates noises and pollution, he might receive a complaint from the neighbours... Those who report to the government are usually local people that are not involved in the industry but influenced by the pollution.

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²¹ In Chinese culture, *mianzi* (face) briefly refers to one's reputation and dignity in the social network. In this situation, Ma means that reporting to the government about the pollution shall make one be looked down upon or hated by other people, which will further make him/her "lose face" (*diu mianzi*).

Ren also told me the cases of migrant people who did the work of extracting gold from the e-waste being reported by the local people. He said, "Extracting gold from the e-waste can generate very smelly and poisonous smoke. People often do it secretly at night. But sometimes the neighbours who cannot bear the smoke often report to the government." From this we can also see that there is a conflict between migrant workers who rely on the e-waste industry to earn money and the local people who try to protect the local environment.

However, these voices and actions by local people who resist environmental pollution are still deemed as trivial and scattered, without forming strong resistance and collective actions. As mentioned, there was a collective protest in 2016 against the construction of a waste incineration plant. The local government planned to build a waste incineration plant in Guiyu, which aroused the panic and worry from local people. Thousands of local people gathered in front of the town-level government. The local clan forces also intervened and led in negotiating with the governmental officials. People in the same clan at Huamei village went to the government and protested together, which again shows the unity of the clan. In addition, the leaders in the clan council—who enjoy high prestige and authority in dealing with the local political, social, and cultural affairs—have also negotiated with the village committee and the town-level government to put pressure on them. The protest was successful with the project being canceled by the government at last. As mentioned, migrant people were not involved in this protest from the beginning to end. However, from this protest we can see that there is an obvious difference between the local people's attitude towards local e-waste pollution and towards the waste incineration plant. When I raised this confusion, Guang answered that, "The local people rely heavily on the e-waste industry to earn money. The waste incineration plant is different. People cannot benefit from it at all and have to face more risks. In addition, the local government also lacks credibility among the local people." This again reveals that interest in environmental protection is an important factor that influences people's thought and action towards environmental pollution.

Scholars have argued that there is often a divergence among residents in rural villages towards local environmental pollution (X. Yu, 2014; Z. J. Chen, 2015). This is also true at Guiyu. The local political dynamic is quite complicated as a result of the different positionalities people are located in. On the one hand, local people have different degrees of consent towards environmental pollution. People who benefit from the e-waste industry often keep silent towards and even continue producing pollution. On the contrary,

people whose life have been influenced by the pollution would complain or report to the government. While affluent local people have more capability to move outside, poor local people have to stay and suffer from the pollution. The latter thus have more complaints, particularly if they are not involved in the industry. Another factor is that people are less likely to report people with whom they have a relationship or similar interests (e.g. people in the same clan), thus migrant people are more likely to be reported to the government by other people. In addition, neither the local people's collective protest against the plan nor do individual actions of reporting have any connections with ENGOs and scholars. On the contrary, as we can see from the previous chapters, local people often keep vigilant towards journalists and NGOs who often make negative reports on Guiyu.

On the other hand, migrant people are not involved in environmental protection actively. This results from a lack of belongingness to Guiyu. During the protest against the waste incineration plant, a local person posted in an online chat the following sentiment: "My beautiful hometown Guiyu that gave birth to me and raised me up is my root... I cannot and dare not forget my origins and roots in Guiyu." Zhao also emphasised the importance of belongingness in claiming environmental rights. He said,

From a perceptual point of view, the basis of environmental rights is that people and the land are emotionally connected. This is the most obvious reason to protest against pollution. Because I grew up in this land, I love the land, river, and mountain, I will stand up to protect them when they are destroyed. For some foreign investors or workers, they actually come to this land just to obtain. His first aim to come here is not to change, but to obtain. The environmental rights are not as important for them as for local people, because he can choose to leave at any time.

Discussion and Reflection

Environmental injustice related to toxic waste is often the product of "multiple scales and forms of hierarchy that are layered and intersecting" (Pellow, 2007, p. 81), which thus requires multi-spatial and collaborating efforts from different organisations. We can see from the above analysis that there are various kinds of networks, organisations, and individuals at transnational, national, and local levels to challenge the power relations in the global electronic industry. However, existing political efforts are still far away from

directly influencing the situation of migrant workers and challenging the local power relations

Firstly, transnational social organisations and networks operate based on the vision of global environmental injustice, with a clear sense of intersectionality in making claims and carrying out projects worldwide. However, it is often difficult for such networks to string together the forces at multiple spatial levels and take concrete activities at the local level. For some networks such as GE, activities in China are highly restricted given the low tolerance of the government towards labour-related organisations. In addition, the trend within these organisations and networks to pay more attention to the brand companies and their worldwide suppliers makes migrant workers in rural areas and informal e-waste workshops more marginalised. The deficiency of attention to migrant workers at places like Guiyu reflects a failure in facilitating environmental justice on multiple scales. Environmental injustice experienced by migrant women workers in Guiyu is rooted in not only the power relations within the global chain of toxic waste, but also intersectional power relations at the local level. Addressing the problem thus requires a more comprehensive understanding about the production of their environmental injustice and collaborative work on multiple scales.

Secondly, for various reasons, political engagement at the local level is relatively weak. On the one hand, environmental, labour, and NGOs centred on women are often based in urban areas and usually carry out community-based activities. Organisations involved in a global toxic environmental justice network are thus often detached from Guiyu. On the other hand, engagement between researchers and people in Guiyu are often short-term and dispersive, with a single scientific or medical perspective. In addition, even though scholars are quite active in both the formal and informal networks, collaboration with other organisations at the local level is still rare given the absence of the latter on the ground. Either in the period of environmental pollution and governance, both local and migrant people are not active in the local environmental protection against e-waste industry, given the complex positionalities they are located in. Both local people and migrant workers often regard their interests as being contradictory with the current environmental protection, which threatens their livelihood. This would make collaborative work more difficult to achieve if we cannot actively involve community members in making environmental and political transformations.

Thirdly, in terms of domestic ENGOs, though understanding the intersectionality between environmental issue and other social and political issues, they often avoid being

too political and carrying out activities that are regarded as sensitive and dangerous, such as empowering migrant workers directly. If such intersectional vision cannot be practiced, it is difficult for ENGOs to fully challenge the complex power relations that make migrant women workers environmentally vulnerable. Simply pointing out the environmental risks faced by migrant workers based on an environmentalist vision is not enough and might even result in adverse effects towards migrant workers, such as losing their jobs, facing safety risks, and even worse working conditions. This is particularly true when one considers the power dynamics that are embedded in the prevailing conceptions and understandings about migrant workers. Compared with migrant workers in formal industries, those in informal workshops are more often referred to by NGOs and scholars as focusing on short-term survival without caring about the environment and their health (e.g. Griner, 2017), even though they are aware that this should not be used to justify the environmental suffering of migrant workers. However, this is still problematic if ENGOs could not question and challenge the maintenance of such perceptions in their activities and claims. Related actions might include engaging more with the local people and government, carrying out capability building among migrant workers to raise their awareness, or at least challenging the way of using such conceptions to justify the existing environmental injustice. It is unfair to require ENGOs to solve all related issues such as unemployment and gender equality, but it is important for them to at least start going beyond the comfort zone of "we know but we don't focus on it." As Y. Lu (2007) argues,

NGOs need not only to face up to the local government, but also to educate and empower the local communities in order to change local power relations.

Whether they like it or not, Chinese ENGOs will need to confront political issues and to develop the skills for such a task. (p. 68)

This is also true for scholars (either from science or social science areas) to think about us as academics differently (Kompridis, 2016), and reexamine the social responsibility that scholars should shoulder. This would mean moving out of the "comfort zones of settled practices and assumptions" (Coles, 2016, p. 10) towards real actions, and pursuing new and more radical alternatives to change the game.

The situation we are faced with is particularly complicated and is full of external and internal tensions that can make significant political transformations difficult to achieve. The strict political environment that makes certain topics (e.g. labour issues) sensitive, the wilful ignorance from the dominant society, the less involvement of NGOs and scholars with the local community (both local and migrant people), the intersectional

power that plays out in relation to agency development of migrant workers, and the contradictory interests among different groups and institutions all pose obstacles towards building solidarity power. To deal with such a situation not only requires bravery to leave one's comfort zone and make breakthroughs, but also techniques, passions, practical visions, and long-term efforts. The approach of "relational organising" taken by some NGOs and networks in Western societies to facilitate multiracial collaboration in community building might offer some insights here.

The key for "relational organising" is to cultivate participation and collaboration through patient relationship building in local communities. It refers to what Coles (2017) has emphasised as "the transformative ecologies of community partnerships" that could "generate symbiotic relationships and synergies among several different organisations around multiple issues simultaneously" (p. 152). It aims to increase the social capital that refers to the "features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Warren, 2001, p. x). "Relational organising" aims at building relational power not only among (multiracial) community members but also between NGOs and community members, local institutions (e.g. churches and schools), scholars/research institutes, and governmental officials. The widely discussed example of "relational organising" is the Industrial Areas Foundation (IAF) in America. Many scholars have discussed the ways in which the work done by IAF can help revitalise American democracy through relational community building (Warren, 2001; Coles, 2004; 2006). A typical method used by IAF is the one-to-one relational meeting to bring different collectives together. The point of these meetings, Chambers (2003) summarises,

is for the purpose of developing a public relationship; [which] focuses on the spirit and values of the other; requires an intentional focus that goes beyond ordinary conversation; necessitates probing and agitating the depths of the other; demands a measure of vulnerability on both sides; applies selectively, with leaders only; bridges the barriers of race, religion, class, gender, and politics; is a form of art that requires patient development and use of particular skills (p. 45).

Such relational organising not only offers space for people to make voices but also emphasises receptivity and listening, through which diverse affects (such as anger, sorrow, and aspirations), thoughts, interests, and deeper reflections towards one's own and others' experience can be achieved. In other words, participants in relational organising can

gradually develop a relational sense of interest among different groups in practices of sharing and listening. Relational organising is thus important to negotiate tensions emerged in building cooperation and solidarity.

Relational organising can be a promising way to cope with the complexities in Guiyu. However, the issue of contextualisation emerges again when taking into consideration the specific social, cultural, and political situations of Guiyu. The achievement of relational organising relies on a lot of factors, the most primary one would be existing community-based institutions that can supply as a starting point to bring people together (Warren, 2001, p. 20), institutions which are largely absent in Guiyu. Other factors such as a long and intense tradition of democratic struggle, a more mature civil society and democratic public sphere all contribute to the practice of relational organising. This, however, does not mean that relational organising cannot work out in the context of China, but that relational organising might generate new forms and strategies in new contexts. Through drawing on the key spirit of relational organising and struggling with different tensions and obstacles, new ways of generating relational power might be achieved. One promising opportunity could be the informal *quanzi*, in which members from different parties (NGO members, scholars, media, and governmental officials) can express and exchange ideas, make advocacies, seek new possibilities, build connections, cultivate a sense of relationality and intersectionality, and take collaborative actions. Even though there is still a long way to go, this could at least serve as a starting point for us to take further actions.

Conclusion

We can see that intersectionality offers a framework to make collaborative efforts but at the same time poses challenges to achieve that. Applying intersectionality on the ground would face not only obstacles from the outside (e.g. resistance from the broad social and political environment) but also tensions within intersectionality itself (e.g. the seemingly contradictory positions of migrant workers who do not care about the local environment and ENGOs that aim at environmental protection). In a report made by ILO named *The Labour, Human Health and Environmental Dimensions of E-waste Management in China* (2015), the authors propose that "Addressing the informal sector requires an integrated approach that takes into account the social implications of transformation." This process does not only include labour protection, but also other social-economic dimensions such as

alternative livelihoods, capacity building, consciousness raising, gender and age equality, and child labour.

This, however, could not be achieved with the work of a simple organisation in the short term, but requires ongoing collaborative work among multiple organisations in multiple spaces. The discussion in this chapter shows that even though there are some promising formal and informal connections as well as dispersive reflections and resistances at work, there is still a long way to go in carrying out such an integrated approach and building relational power. Intersectionality, at the very least, allows researchers to identify the difficulties and discover potential conflicts, which should not be regarded simply as obstacles to achieve solidarity but also as evidence of unsolved problems and impetus to seek possibilities and generate new strategies to deal with challenges.

Conclusion

The development of environmental justice studies—particularly the pluralistic understanding of justice as distribution, recognition, participation, and capability (Schlosberg, 2009; Walker, 2012)— has shown the complex power dynamics embedded in the diverse phenomena of social and environmental injustice. Intersectionality, which concerns the intersection among power relations within different systems of oppression, adds another dimension that can complicate our discussion on environmental justice. Recent literature shows that scholars have paid more attention towards intersectionality and proposed to engage more deeply with it in environmental justice studies (e.g. Buckingham & Kulcur, 2009; Kaijser & Kronsell, 2014; Malin & Ryder 2018; Mann, 2011; Pellow, 2016). However, on the one hand, even though environmental justice scholars have widely stressed the importance of power relations, environmental justice literature still lacks a close examination of "power" (for exceptions see Gaventa, 1982; Kaijser, 2014; Partzsch, 2017; Svarstad & Benjaminsen, 2020), the meaning of which has been widely discussed among social and political theorists (e.g. Lukes, 2005; Haugaard, 2002; 2012). On the other hand, literature review shows that although analyses with an intersectional perspective have emerged in previous and current environmental justice research, a more textured and solid way of applying intersectionality should be used to better understand the complex power relations in various environmental injustice phenomena. This dissertation explores a theoretical paradigm that waves together intersectionality, environmental justice, and power. It first discussed the complex meanings of power as power over, power to, and power with, which mirror the three main themes of environmental justice analysis: the production and maintenance of environmental injustice, the formation of agency, and building solidarity with other social movements. Second, possibilities and challenges of incorporating intersectionality into these three areas have been examined further.

The proposal of such a framework comes from a deep concern for the social and environmental injustice experienced by migrant women workers in China. Even though migrant women workers in China have long been a concern for both domestic and international scholars, the environmental injustice experienced by them and their reactions towards it are often ignored. First, existing quantitative research on the environmentally vulnerable status of migrant workers in China is often based on a simple distributive concept of justice and has widely ignored the factor of gender. Gender is either not

considered at all or held to be an irrelevant variable when environmental inequality is discussed (e.g., Nie, 2013). The ignorance of gender is a result of the pure distributive way of understanding environmental justice and a lack of intersectional perspective, both of which emphasise the power relations based on multiple systems of oppression in shaping environmental injustice. Second, responses from migrant workers towards the environmental injustice they are faced with have rarely been explored. This is particularly true when migrant workers are involved in the production of local pollution (through engaging in works that create pollution). Under such a situation, they are often portrayed simply as either victim of pollution or being acquiescent towards and even wilfully accepting the pollution and environmental injustice. Such views have denied their agency and ignored the complicated nature of intersectional power relations in shaping agency. Therefore, to understand the social and environmental injustice experienced by migrant women workers in China more thoroughly, a pluralistic understanding of environmental justice that centres power relations, an intersectional perspective, and a focus on agency all ought to be embraced.

The experience of migrant women workers at Guiyu is not just fixed into the above-mentioned theoretical framework. In turn, the contextualised, grounded, and textured way of employing and connecting different theories in the case of Guiyu allows us to not only expand our thinking about environmental justice and intersectionality and make intense critiques about the complex negotiations between *power over*, *power to*, and *power with*, but also explore more possibilities and visions to make practical transformations.

Firstly, some existing quantitative (e.g. Collins et al., 2011; Liévanos, 2015; McKane et al., 2018; Sicotte, 2014) and qualitative analyses (e.g. Weber & Hilfinger Messias, 2012; Kaijser & Kronsell, 2014; Vickery, 2018) on the experience of environmental injustice have tried to incorporate an intersectional perspective. While quantitative analyses are still inadequate to explain the operation of multiple faces of power in shaping the unique experience, qualitative studies often risk ignoring the multiple dimensional perspective of intersectionality (i.e. the everyday, subjective, intersubjective, experiential, organisational, structural, and representational levels of differentiation). Intersectionality thus should be employed in a way that can reveal how multiple faces of power based on different social categories intersect to produce and maintain environmental injustice. This means, first, to attend to all the possible faces of power from an intersectional perspective; and second, to explore any possible ways of intersection among multiple power relations. Through deconstructing the intersectional power relations with

solid fieldwork materials, Chapter Four shows that besides unequal exposure to environmental hazards, political and institutional exclusion, devaluation and misrecognition, and a lesser chance of enjoying a healthy life, there is a more profound power of intersectional "wilful ignorance" from the dominant society that can aggravate injustice against migrant women workers and sustain the advantages of the privileged at the same time. Such "wilful ignorance" is a result of the intersected conceptions, perceptions, and stereotypes owned by the dominant groups (at different degrees) that support a distorted/false sense of reality about migrant women workers. This corresponds to other scholars' studies that emphasise the importance of discussing people who are in a relatively dominant and privileged position when examining the persistence of environmental injustice (Norgaard, 2011; Dotson & Whyte, 2013; Belser, 2014). It has also expanded existing analysis through offering a distinction between politics of denial and ignorance. Scholars have widely explored the socially organised nature of the denial of environmental disaster, suffering, and injustice (Cohen, 2001; Zerubavel, 2006; Norgaard, 2006, 2011). However, rather than "denying" the existence of environmental injustice, the problem at Guiyu is that the dominant society cannot detect and acknowledge such injustice, which is rooted in the power relations within the knowledge production.

Secondly, existing intersectional analyses on environmental justice agency (e.g. Krauss, 1993; Pulido & Peña, 1998; Larkins, 2017; Ducre, 2018) often focus more on examining how agency is modulated by the multiple identities owned by environmental justice activists. This, in fact, is a result of a prevalent lack of concern among scholars in the development of environmental justice agency beyond activist movements (Shriver, Messer, Whittington, & Adams, 2019). More attention should be paid to analysing the acquiescence towards and adaptation to the environmental suffering and injustice by vulnerable groups. As Lora-Wainwright (2017) argues, it is important to understand individual responses such as fatalism, resignation, and naturalisation of pollution to understand environmentalism. This dominant way of exploring agency of environmental justice activists ignores the complicated correlation between marginalisation experiences and subjectivity formation (between *power over* and *power to*). It further ignores the complexities of the agentic manifestation in its fragmented, temporal, spatial, and affective forms, as well as the relationship between environmental justice agency, social justice agency, and environmentalist agency. My analysis in Chapter Five on the agentic manifestation of migrant women workers in Guiyu has shown a more complex picture of agency than a simple dualism of subordination vs. resistance. The agentic development

against social and environmental injustice among migrant women workers is often complicated and even internally tense. "Intersectional agency" thus should not be regarded as equal to "multiple agency," but rather a result of the persistent negotiations with the intersected, multiple faces of power based on different social categories by the subordinated. It also shows that there is a gap between social justice agency, environmentalist agency, and environmental agency, as the latter is not a simple addition of the former two. This point is important for us to understand the discrepancy often found between social justice movements, environmentalist movements, and environmental justice movements.

Thirdly, many scholars regard the world-system and globalisation itself as a process of ecological unequal exchange between the South and North world through an accumulation of extraction and contamination (Rice, 2009; Smith et al., 2006; Frey, 2012; Hornborg, 2012). Transnational organisations and networks, such as Basel Action Network (BAN) and Greenpeace, are pivotal in combating the global e-waste trade through sharing resources, taking joint actions, and building solidarities among grassroots organisations, trade unions, research organisations, etc. They also share the vision of environmental injustice regarding the shifting of toxic risks from the privileged and rich to the poor and marginalised across and within boarders (Ford, 2003; Pellow, 2007). However, environmental injustice related to toxic waste experienced by the marginalised groups in the South is often the product of "multiple scales and forms of hierarchy that are layered and intersecting" (Pellow, 2007, p. 81). This is to say, environmental injustice is a mixed result of the unbalanced power relations embedded in both the global political economy and the local social, economic, political, and cultural dynamics. Thus, addressing environmental injustice within the e-waste chain would require a multi-scalar and intersectional collaborating efforts from different organisations. While existing literature on intersectional politics between environmental justice and other social justice movements have shown the possibility and importance of building intersectional solidarity, further discussions on the obstacles that might impede its formation are needed. It is critically important to avoid portraying intersectional solidarity among different activists and movements as an inevitable and automatic outcome of the intersected systems of oppression. Contradictions brought by intersectionality itself, the complex agentic manifestation of the intersectionally subordinated group of people, and the external social and political environments all pose challenges towards intersectional politics. Through examining the existing political forces from civil society (in relation to issues of

electronics industry, labour protection, gender equality, etc.) at the transnational, national, and local level, Chapter Six shows that there are various endeavours at different scales to challenge the power relations in the global electronics industry. However, they are still far away from directly challenging the local power relations and influencing the situation of migrant women workers in Guiyu. There is still a long way to go in carrying out a multi-scalar intersectional approach and building relational power in addressing environmental injustice faced by workers in informal e-waste sectors who have achieved less attention from scholars and NGOs than those in formal electronic industries.

This dissertation thus supplies a more textured analysis on these three topics mentioned, weaving together theories from environmental justice, intersectionality, power, agency, coalitional politics, and global e-waste politics. Both environmental justice and intersectionality have revealed great potential when traveling beyond their original places, which not only helps enrich our understanding about and inject new power to the theories *per se* but also allows us to have a deeper understanding of the issues at stake in new contexts.

The experience of migrant women workers at Guiyu thus has confirmed the importance of analysing environmental justice in a contextualised way as proposed by many scholars (G. Walker, 2009a; Kalan & Peek, 2005). It shows that the production of environmental injustice, the development of migrant workers' agency, and the local political dynamics are rooted in the power relations embedded in local clan dynamics, patriarchal tradition, migrant worker-boss negotiation, state-society relationship, and global e-waste dynamics at specific political, economic, cultural, and societal contexts. It is also for this reason that central and local environmental governance in China, which has been argued to be top-down, authoritarian, and environmentalism-oriented (Beeson, 2010; Gilley, 2012; Zhan & Tang, 2013; Lo, 2015), often has limited success. In support of a command-and-control model and a restriction on civil society and individual liberty, EC is mainly dominated by central and local governments and allows little space for other social actors to play a part. This can be seen clearly from the non-participatory approach taken by central and local governments when making and implementing environmental policies about e-waste industry, which has significantly prohibited the functioning of labour and environmental NGOs in China. This dissertation expands the discussion through evaluating and reflecting upon the construction of EC from the prospective of justice, which has been proposed by many scholars to be incorporated into the construction of EC (J. H. He, 2013; M. Xu & Kang, 2013; H. L. Liu, 2016). It shows that pure top-down environmental

governance can generate adverse effects that raise serious questions about justice. This is particularly important for migrant (women) workers, who would be significantly influenced by the ongoing industrial transition brought by environmental governance under EC but are often "wilfully ignored" by the dominant society. It also shows that the construction of EC should be connected more with other national projects and policies in relation to migrant workers, rural revitalisation, new urbanisation, etc. and be facilitated based on specific local situations.

Through illustrating the lived experiences and narratives of migrant women workers, many studies (e.g., Pun, 2005; Hanser, 2008; Jacka, 2015) have examined the intersected systems of oppression (based mainly on class, gender, and migrant status) faced by migrant women workers. While some arguments in this project correspond well to the previous studies, other discussions and findings also fill some gaps and make some contributions towards existing literature on migrant women workers in China. First, although the issue of working environment and health has been examined by some scholars, the environmental injustice perpetrated against migrant women workers has not received sufficient attention or been fully and systematically examined. Second, this dissertation emphasises that the ignorance of the experience of migrant women workers (particularly those in informal sectors) is often structurally and epistemologically produced and maintained. Breaking down such ignorance would require changing the "negative epistemic space" they are located in. Third, while the analysis of agency corresponds to some scholars' argument that the agency of migrant women workers in China is often dispersive, fragmented, and cannot be reduced to a single dominant oppositional logic (Pun, 2005; Lui, 2018), it contributes to present analysis through offering a more textured and deeper investigation of the complicated, intersectional agentic manifestation of migrant women workers at Guiyu.

Either in the stage of doing fieldwork or writing the dissertation, there has always been one question in particular that has come to mind. How can we imagine a different future for migrant women workers in Guiyu and other similar places around the world? This question is particularly urgent when we see how social and environmental injustice experienced by them are wilfully ignored by dominant groups, governmental officials, and even NGOs at different degrees, and how migrant women workers have cultivated a relatively weak sense of acting against environmental pollution and injustice. Existing political forces are still too far away (in terms of both distance and activeness) from influencing and engaging with migrant women workers, making this question even more

pertinent. The analysis in this dissertation has implications for different parties (including the central and local governments, environmental and other social NGOs at different levels, scholars from science and social science areas, local people and migrant people) to take action and develop cooperative relations with each other. For example, the concept of "wilful ignorance" urges NGOs, scholars, and governmental officials to start challenging the intersectional normalised perceptions that make migrant women workers socially and environmentally vulnerable. Both central and local governments should take more consideration in incorporating environmental justice to environmental governance. The complicated agentic manifestation of migrant women workers requires us to focus more on their capacity building, in terms of not only being aware of protecting their environmental and labour rights but also the capacity to aspire, the transformation and cultivation of certain affects, and power to challenge the dominant perceptions. The discussion on the political dynamics in relation to Guiyu encourages ENGOs and scholars to engage more heavily with social and political issues (as well as the local and migrant people on the ground) instead of starting from a purely environmentalist, medical, or scientific perspective. The informal intersectional network of *quanzi* also poses some possibilities for developing power with through facilitating interactions, exchanging ideas, making advocacies, and generating collective actions among different parties involved.

There could be more implications for us to explore. However, the more intense critique on the intersectional power shown in this project also raises more challenges when it comes to putting these implications into practice. The intersectional power perpetrated against migrant women workers seems so fierce and complicated and involves various issues, which include but are not limited to, global e-waste chains, national policy orientation shifting, informal waste economy, local environmental protection and governance, migrant-local relationships, gender and age suppression, child labour, unemployment, and poverty. Each of these questions needs a lot of time and effort from multiple parties to deal with. For example, improving the antagonistic relationship between the local and migrant is important for not only alleviating the exclusion and devaluation of the migrant workers, but also cultivating their environmentalist and environmental justice agency. However, such an antagonistic relationship has been so deep-rooted socially and culturally that it will require time, a variation of techniques, and long-term efforts to repair the damage. In addition, these intersectional issues not only closely intersect with one another but also entail tensions and contradictions when addressing them simultaneously,

which can create various kinds of conflicts and obstacles when pushing forward them together.

Therefore, there seems to be a lot of action that we can do but also too much resistance in carrying them out. I think that currently the first and foremost step should be improving the "visibility" of and eliminating the "wilful ignorance" towards the social and environmental injustice experienced by migrant women workers— particularly those in informal economic sectors. NGOs, scholars, the media, and even some governmental officials can start to seek opportunities to challenge the persistent knowledge and conceptions that naturalise the horrible working environment, normalise the devaluation of migrant labour, and subordinate young girls, children, and older women. It is true that they "have high fluidity" and "mainly come to Guiyu for earning money," but this should not be used as a reason to ignore their suffering. This could at least begin a new chapter and open space for researchers and policy-makers to move forward and explore new possibilities and ways to deal with the complicated, intersected issues at stake. Existing actions of enforcing environmental governance policy and simply encouraging migrant workers to go back to their hometown cannot solve the problem, but only bring greater challenges and difficulties to migrant workers.

The analysis in this project thus seems to pose more questions, challenges, and implications than concrete suggestions to deal with this issue, which I recognise as a limitation of this project that requires future attention. Relational organising could be a promising way for us to deal with the complexities in relation to Guiyu. However, as we have discussed, it also requires contextualised adjustments that include localised strategies and techniques. The most urgent question will be how we can turn these implications into concrete actions. Future studies can work more on issues such as how to improve migrant-local relationships, how to motivate ENGOs and facilitate collaborations on the ground, how to utilise the informal network of *quanzi* to build solidarity and connections, and so forth.

Without ignoring all the work that needs to be done further, I believe that the textured intersectional analysis of the social and environmental injustice experienced by migrant women workers in Guiyu can help expand scholars' understanding and theorising of environmental justice, intersectionality, and power. This project has also opened more possibilities, visions, and challenges for us to promote environmental and political change.

References

- Adam, E. M. (2017). Intersectional coalitions: The paradoxes of rights-based movement building in LGBTQ and immigrant communities. *Law & Society Review*, *51*(1), 132-167.
- Admin. (2012, February 10). Zaofang "dianzi laji diyi zhen," women keyi qidai shenme (Visiting the No. 1 e-waste town, what could we expect?). *Chaoren Zaixian*. Retrieved from http://www.chaoren.com/news/chaoxun/view/2013-10-30/858.html (In Chinese)
- Agyeman, J., Bullard, R. D., & Evans, B. (2002). Exploring the nexus: Bringing together sustainability, environmental justice and equity. *Space and Polity*, 6(1), 77-90.
- Agyeman, J., Schlosberg, D., Craven, L., & Matthews, C. (2016). Trends and directions in environmental justice: From inequity to everyday life, community, and just sustainabilities. *Annual Review of Environment and Resources*, 41, 321-340.
- Akram, S., Emerson, G., & Marsh, D. (2015). (Re) Conceptualising the third face of power: Insights from Bourdieu and Foucault. *Journal of Political Power*, 8(3), 345-362.
- Alcoff, L. M. (2007). Epistemologies of Ignorance Three Types. In S. Sullivan & N. Tuana (Eds.), (2007). *Race and epistemologies of ignorance* (pp. 39-57). Albany: State University of New York Press.
- Alcoff, L. M. (2018). Rape and Resistance. Cambridge: Polity Press.
- Alexander, J. C. (1992). Recent sociological theory between agency and social structure. *Schweizerische Zeitschrift für Soziologie*, *18*(1), 7-11.
- Allen, A. (1998a). Rethinking power. *Hypatia*, 13(1), 21-40.
- Allen, A. (1998b). Power trouble: Performativity as critical theory. *Constellations*, *5*(4), 456-471.
- Allen, A. (1999). Solidarity after identity politics: Hannah Arendt and the power of feminist theory. *Philosophy & Social Criticism*, *25*(1), 97-118.
- Alpermann, B. (2013). Class, citizenship, ethnicity: Categories of social distinction and identification in contemporary China. In D. C. Endara, T. Schwarz, & B. Wittger (Eds.), *Interdependencies of social categorisations* (pp. 237-261). Madrid; Frankfurt am Main: Iberoamericana Vervuert Publishing Corporation.

- AMRC. (2006). Report on industrial relations and working conditions in IMF-related TNCs in China. Retrieved from https://goodelectronics.org/report-on-industrial-relations-and-working-conditions-in-imf-related-tncs-in-china/
- Appadurai, A. (2001). Deep democracy: Urban governmentality and the horizon of politics. *Environment and Urbanization*, *13*(2), 23-43.
- Appadurai, A. (2004). The capacity to aspire: Culture and the terms of recognition. In M. Walton & V. Rao (Eds.), *Culture and public action: A cross-disciplinary dialogue on development policy* (pp. 59-84). Washington: World Bank Publications.
- Appadurai, A. (2013). *The future as cultural fact: Essays on the global condition*. London; New York: Verso.
- Arendt, H. (1958). *The human condition*. Chicago: Chicago University Press.
- Arquette, M., Cole, M., Cook, K., LaFrance, B., Peters, M., Ransom, J., ... & Stairs, A. (2002). Holistic risk-based environmental decision making: A Native perspective. *Environmental Health Perspectives*, 110, 259-264.
- Asad, T. (Ed.). (1998). *Anthropology & the colonial encounter*. New York: Humanity Books.
- Babcock, B. A. (1980). Reflexivity: Definitions and discriminations. *Semiotica*, 30(1-2), 1-14.
- Bachrach, P., & Baratz, M. S. (1962). Two faces of power. *American Political Science Review*, *56*(4), 947-952.
- Bailey, A. (2009). On intersectionality, empathy, and feminist solidarity: A reply to Naomi Zack. *Journal for Peace and Justice Studies*, *19*(1), 14-36.
- Ballet, J., Koffi, J. M., & Pelenc, J. (2013). Environment, justice and the capability approach. *Ecological Economics*, 85, 28-34.
- BAN, & SVTC. (2002). *Exporting harm: The high-tech trashing of Asia*. Available from http://www.ban.org/E-waste/technotrashfinalcomp.pdf
- BAN. (2015). China's Guiyu shifts away from crude processing. Available from https://www.ban.org/news/2015/12/17/chinas-guiyu-shifts-away-from-crude-processing
- Barbalet, J., & Qi, X. (2013). The paradox of power: Conceptions of power and the relations of reason and emotion in European and Chinese culture. *Journal of Political Power*, 6(3), 405-418.
- Batke, J. (2018, September 7). Shanghai labor union preventing "enemy infiltration" along with managing foreign NGOs. *ChinaFile*. Retrieved from

- http://www.chinafile.com/ngo/analysis/shanghai-labor-union-preventing-enemy-infiltration-along-managing-foreign-ngos
- Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine*, *110*, 10-17.
- Beamish, T. D., & Luebbers, A. J. (2009). Alliance building across social movements: Bridging difference in a peace and justice coalition. *Social Problems*, *56*(4), 647-676.
- Beeson, M. (2010). The coming of environmental authoritarianism. *Environmental Politics*, 19(2), 276-294.
- Belser, J. W. (2014). Privilege and disaster: Toward a Jewish feminist ethics of climate silence and environmental unknowing. *Journal of the Society of Christian Ethics*, *34*(1), 83-101.
- Bilge, S. (2010). Beyond subordination vs. resistance: An intersectional approach to the agency of veiled Muslim women. *Journal of Intercultural Studies*, *31*(1), 9-28.
- Boogaard, B., & Roggeband, C. (2010). Paradoxes of intersectionality: Theorizing inequality in the Dutch police force through structure and agency. *Organisation*, 17(1), 53-75.
- Bowleg, L. (2008). When Black+ lesbian+ woman≠ Black lesbian woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, *59*(5-6), 312-325.
- Brigden, K., Labunska, I., Santillo, D., & Allsopp, M. (2005). Recycling of electronic waste in China and India: Workplace and environmental contamination. *Greenpeace International*, 55.
- Brooks, A. L., Wang, S., & Jambeck, J. R. (2018). The Chinese import ban and its impact on global plastic waste trade. *Science Advances*, 4(6).
- Brooks, E. T. (2012). *The adaptive media strategy of Greenpeace in China* (Masters' thesis). Available from https://etd.ohiolink.edu/pg 10?::NO:10:P10 ETD SUBID:76351#abstract-files
- Bruner, E. M. (1986). Experience and its expressions. In V. Turner & E. D. Bruner (Eds.), *The anthropology of experience* (pp. 3-32). Urbana: University of Illinois Press.
- Bryant, B. (2011). Introduction. In B. Bryant (Ed.), *Environmental crisis or crisis of epistemology?: Working for sustainable knowledge and environmental justice* (pp. 1-34). New York: Morgan James Publishing.

- Buckingham, S., & Kulcur, R. (2009). Gendered geographies of environmental injustice. *Antipode*, *41*(4), 659-683.
- Bullard, R. D. (1990). *Dumping in Dixie: Race, class, and environmental quality*. Boulder, Colorado: Westview Press.
- Bullard, R. D. (Ed.). (1993). *Confronting environmental racism: Voices from the grassroots*. Boston, MA: South End Press.
- Burawoy, M. (1982). *Manufacturing consent: Changes in the labor process under monopoly capitalism*. Chicago; London: University of Chicago Press.
- Burawoy, M. (2004). *Another thirty years: Special preface to the Chinese Version of Manufacturing Consent*. Available from http://burawoy. berkeley. edu/Biography/Thirty% 20Years. Pdf
- Butler, J. (1993). *Bodies that matter: On the discursive limits of sex*. New York; London: Routledge.
- Butler, J. (1997). *The psychic life of power: Theories in subjection*. Stanford, California: Stanford University Press.
- Butler, J. (2005). Giving an account of oneself. New York: Fordham University Press.
- Campbell, S. (2003). *Relational remembering: Rethinking the memory wars*. Lanham, MD: Rowman & Littlefield Publishers.
- Campbell, R., & Wasco, S. M. (2000). Feminist approaches to social science: Epistemological and methodological tenets. *American Journal of Community Psychology*, 28(6), 773-791.
- Cao, J. Q. (2000). *China along the Yellow River*, Shanghai: Shanghai Literature and Art Publishing House. (In Chinese)
- Cao, J. Q. (2012). Zaizao "ciyu" (Reproduce "concepts"). *Beijing Cultural Review*. (2). (In Chinese)
- Caogen bobao. (2012, March 6). Zai Shantou Guiyu women kandaole shenme— Zaofang dianzi laji diyizhen (What have we seen at Guiyu town, Shantou: Visiting the "first e-waste town." Retrieved from http://club.st001.com/thread-1106-11290642.html (In Chinese)
- Caraway, T. L. (2005). The political economy of feminization: From "cheap labor" to gendered discourses of work. *Politics & Gender*, *1*(3), 399-429.
- Caraway, T. L. (2007). *Assembling women: The feminization of global manufacturing*. Ithaca, NY: Cornell University Press.

- Carruthers, D. V. (2008). The globalization of environmental justice: Lessons from the US-Mexico border. *Society and Natural Resources*, *21*(7), 556-568.
- Chambers, E. T. (2003). *Roots for radicals: Organizing for power, action, and justice.*New York: Continuum.
- Chan, C. K. C., & Pun, N. (2009). The making of a new working class? A study of collective actions of migrant workers in South China. *The China Quarterly*, 198, 287-303.
- Chan, C. K. C. (2012). Community-based organizations for migrant workers' rights: The emergence of labour NGOs in China. *Community Development Journal*, 48(1), 6-22.
- Chan, K. W., & Zhang, L. (1999). The hukou system and rural-urban migration in China: Processes and changes. *The China Quarterly*, 160, 818-855.
- Chaoyang Yearbook Compilation Committee. (2003). *Chaoyang Yearbook 1979-2003*. Guangdong: Guangdong People's Publishing House. (In Chinese)
- Chaoyang Yearbook Compilation Committee. (2012). *Chaoyang Yearbook 2012*. Guangdong: Guangdong People's Publishing House. (In Chinese)
- Chaoyang Yearbook Compilation Committee. (2018). *Chaoyang Yearbook 2018*. Guangdong: Guangdong People's Publishing House. (In Chinese)
- Che, X. H., & Zhan, Y. J. (2015, December 25). Guiyu xunhuan jingji chanyeyuan zhuanxing bulvweijian (The transformation of Guiyu circular economy industrial park faces difficulties). *Economic Information Daily*. Retrieved from http://dz.jjckb.cn/www/pages/webpage2009/html/2015-12/25/content_13709.htm (In Chinese)
- Chen, B. L. (2009). The politics of space of dormitory and workroom— The lived experience research of women migrant labor in Shanghai. *Social Work*, (10), 13-15. (In Chinese)
- Chen, F. (2009). State, institution, and working class formation: Western literature and its implications for labor studies in China. *Sociological Studies*, (5). (In Chinese)
- Chen, J. (2011). Internal migration and health: Re-examining the healthy migrant phenomenon in China. *Social Science & Medicine*, 72(8), 1294-1301.
- Chen, J., Chen, S., & Landry, P. F. (2013). Migration, environmental hazards, and health outcomes in China. *Social Science & Medicine*, 80, 85-95.
- Chen, J., Li, S., & Kong, X. X. (2014, July 24). "Dianzi laji zhidu" zhuanxing bulv weijian (The transformation of the "e-waste capital" is difficult). *Economic Information*

- Daily. Retrieved from http://jjckb.xinhuanet.com/2014-07/24/content_513985.htm (In Chinese)
- Chen, K. H. (2003). Civil society and Min-Jian: On political society and popular democracy. *Cultural Studies*, *17*(6), 877-896.
- Chen, K. H. (2010). *Asia as method: Toward deimperialization*. Durham, NC: Duke University Press.
- Chen, T. (2014). Environmental action in China: A study of literature. *Journal of Hohai University (Philosophy and Social Sciences)*, (1), 33-90. (In Chinese)
- Chen, Z. J. (2015). Zhidu jinzhang, xiangcun fenhua yu nongmin huanjing kangzheng (Institutional tension, rural differentiation and peasant environmental resistance). *Journal of Nanjing Agricultural University (Social Science Edition)*, (3), 1-9. (In Chinese)
- Choo, H. Y. (2012). The transnational journey of intersectionality. *Gender & Society*, 26(1), 40-45.
- Choo, H. Y., & Ferree, M. M. (2010). Practicing intersectionality in sociological research:

 A critical analysis of inclusions, interactions, and institutions in the study of inequalities. *Sociological Theory*, 28(2), 129-149.
- Chow, E. N. L. (1987). The development of feminist consciousness among Asian American women. *Gender & Society*, *1*(3), 284-299.
- Christensen, A. D., & Jensen, S. Q. (2012). Doing intersectional analysis: Methodological implications for qualitative research. *NORA-Nordic Journal of Feminist and Gender Research*, 20(2), 109-125.
- Chun, J. J., Lipsitz, G., & Shin, Y. (2013). Intersectionality as a social movement strategy: Asian immigrant women advocates. *Signs: Journal of Women in Culture and Society*, *38*(4), 917-940.
- Clark, B., Auerbach, D., & Xuan Zhang, K. (2018). The Du Bois nexus: Intersectionality, political economy, and environmental injustice in the Peruvian Guano trade in the 1800s. *Environmental Sociology*, 4(1), 54-66.
- Clifford, J. (1986). Introduction: Partial truths. In J. Clifford & G. E. Marcus (Eds.), *Writing culture: The poetics and politics of ethnography* (pp. 1-26). Berkeley, Los Angeles, London: University of California Press.
- Cohen, S. (2001). *States of denial: Knowing about atrocities and suffering*. Cambridge: Polity Press.

- Cole, E. R. (2008). Coalitions as a model for intersectionality: From practice to theory. *Sex Roles*, *59*(5-6), 443-453.
- Cole, L. W., & Foster, S. R. (2001). From the ground up: Environmental racism and the rise of the environmental justice movement. New York: New York University Press.
- Coles, R. (2004). Moving democracy: Industrial Areas Foundation social movements and the political arts of listening, traveling, and tabling. *Political Theory*, *32*(5), 678-705.
- Coles, R. (2006). Of tensions and tricksters: Grassroots democracy between theory and practice. *Perspectives on Politics*, *4*(3), 547-561.
- Coles, R. (2016). Visionary pragmatism: Radical and ecological democracy in neoliberal times. Durham, NC: Duke University Press.
- Coles, R. (2017). Catalyzing ecologies of transformative community partnerships. In C. Dolgon, T. D. Mitchell, & T. K. Eatman (Eds.), *The Cambridge handbook of service learning and community engagement* (pp. 147-157). Cambridge, UK; New York: Cambridge University Press.
- Collins, P. H. (1990). Black feminist thought: Knowledge, consciousness, and the politics of empowerment. Boston: Unwin Hyman.
- Collins, T. W., Grineski, S. E., Chakraborty, J., & McDonald, Y. J. (2011). Understanding environmental health inequalities through comparative intracategorical analysis: Racial/ethnic disparities in cancer risks from air toxics in El Paso County, Texas. *Health & Place*, *17*(1), 335-344.
- Connell, R. W. (2002). *Gender*. Cambridge: Polity Press; Malden, Mass: Blackwell Publishers
- Conquergood, D. (1983). A sense of the other: Interpretation and ethnographic research. In I. Crouch & G. Owen (Eds.), *Proceedings of the seminar/conference on oral traditions* (pp. 148-155). Las Cruces: New Mexico University Press.
- Cook, J. A., & Fonow, M. M. (1986). Knowledge and women's interests: Issues of epistemology and methodology in feminist sociological research. *Sociological Inquiry*, *56*(1), 2-29.
- Cooper, D. (2004). *Challenging diversity: Rethinking equality and the value of difference*. Cambridge, UK; New York: Cambridge University Press.
- Costas, D. (2014). Foreword: Intellectuals in a time of crisis. In M. Tsilimpounidi & A. Walsh (Eds.), *Remapping 'Crisis': A guide to athens* (pp. 8-14). Alresford: Zero

- Books.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 139-166.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, *43*(6), 1241-1299.
- Crenshaw, K. W. (2011). From private violence to mass incarceration: Thinking intersectionally about women, race, and social control. *UCLA Law Review*, *59*, 1418-1472.
- Crowder, K., & Downey, L. (2010). Interneighborhood migration, race, and environmental hazards: Modeling microlevel processes of environmental inequality. *American Journal of Sociology*, 115(4), 1110-1149.
- Cui, J. X., & Zhang, Y. B. (2016). On causes of and solutions to environmental justice problems in China. *Journal of Nanjing Forestry University: Humanities and Social Sciences*, *16*(4), 18-29. (In Chinese)
- Cui, K. (2015). The insider-outsider role of a Chinese researcher doing fieldwork in China: The implications of cultural context. *Qualitative Social Work*, *14*(3), 356-369.
- Cutter, S. L., Mitchell, J. T., & Scott, M. S. (2000). Revealing the vulnerability of people and places: A case study of Georgetown County, South Carolina. *Annals of the Association of American Geographers*, *90*(4), 713-737.
- Dahl, R. A. (1957). The concept of power. Behavioral Science, 2(3), 201-215.
- Davies, B. (1991). The concept of agency: A feminist poststructuralist analysis. *Social Analysis: The International Journal of Social and Cultural Practice*, (30), 42-53.
- Davies, C. A. (2002). *Reflexive ethnography: A guide to researching selves and others*. London; New York: Routledge.
- Davis, K. (2008). Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful. *Feminist Theory*, *9*(1), 67-85.
- De Kleyn, L. (2017, November 8). Environmental justice and intersectional feminist analysis of power and process in decision-making for native forest management.

 Paper presented at Environmental Justice 2017: Looking Back, Looking Forward, Sydney.
- de Onís, K. M. (2012). "Looking both ways": Metaphor and the rhetorical alignment of intersectional climate justice and reproductive justice concerns. *Environmental Communication: A Journal of Nature and Culture*, *6*(3), 308-327.

- Debbane, A. M., & Keil, R. (2004). Multiple disconnections: Environmental justice and urban water in Canada and South Africa. *Space and Polity*, 8(2), 209-225.
- Deng, Z. L., & Jing, Y. (2011). The construction of the Chinese civil society. In Z. L. Deng (Ed.), *State and civil society: The Chinese perspective* (pp. 25-46). Singapore: World Scientific Publishing.
- Dhamoon, R. K. (2011). Considerations on mainstreaming intersectionality. *Political Research Quarterly*, 64(1), 230-243.
- Di Chiro, G. (2008). Living environmentalisms: Coalition politics, social reproduction, and environmental justice. *Environmental Politics*, 17(2), 276-298.
- Digeser, P. (1992). The fourth face of power. *The Journal of Politics*, 54(4), 977-1007.
- Doetsch-Kidder, S. (2012). Social change and intersectional activism: The spirit of social movement. New York: Palgrave Macmillan.
- Dotson, K. (2017). Theorizing Jane Crow, theorizing unknowability. *Social Epistemology*, *31*(5), 417-430.
- Dotson, K., & Whyte, K. (2013). Environmental justice, unknowability and unqualified affectability. *Ethics & the Environment*, 18(2), 55-79.
- Driessen, H. (1998). The notion of friendship in ethnographic fieldwork. *Anthropological Journal on European Cultures*, 7(1), 43-62.
- Du Bois, W. E. B. (2015). The souls of black folk. New York: Routledge.
- Du, Q. (2009). Public participation and the challenges of environmental justice in China. InJ. Ebbesson & P. Okowa (Eds.), *Environmental law and justice in context* (pp. 139-157). New York: Cambridge University Press.
- Du, X. T., Zhang, R. W., & Jiang, H. B. (2012, September 3). Laogong NGO: chengzhang de fannao (Labour NGO: The growing pains). *Nanfang Daily*. Retrieved from http://www.chinadevelopmentbrief.org.cn/news-5810.html (In Chinese)
- Ducre, K. A. (2018). The Black feminist spatial imagination and an intersectional environmental justice. *Environmental Sociology*, *4*(1), 22-35.
- Eaton, S., & Kostka, G. (2014). Authoritarian environmentalism undermined? Local leaders' time horizons and environmental policy implementation in China. *The China Quarterly*, 218, 359-380.
- Edwards, G., Reid, L., & Hunter, C. (2016). Environmental justice, capabilities, and the theorization of well-being. *Progress in Human Geography*, 40(6), 754-769.
- Egan, M. (2002). Subaltern environmentalism in the United States: A historiographic review. *Environment and History*, 8(1), 21-41.

- Elliott, K. C. (2015). Selective ignorance in environmental research. In M. Gross & L. McGoey (Eds.), *Routledge international handbook of ignorance studies* (pp. 165-182). London; New York: Routledge.
- Elmer, K. (2019, Jan 22). At least five labour rights activists arrested across China. *South China Morning Post*. Retrieved from https://www.scmp.com/news/china/politics/article/2183209/least-five-labour-rights-activists-arrested-across-china
- Emirbayer, M., & Mische, A. (1998). What is agency?. *American Journal of Sociology*, 103(4), 962-1023.
- Environmental Equity Workgroup. (1992). *Environmental equity: Reducing risk for all communities: Report* (Vol. 2). United States Environmental Protection Agency, Office of Policy, Planning and Evaluation.
- Erel, U., Haritaworn, J., Rodríguez, E. G., & Klesse, C. (2010). On the depoliticisation of intersectionality talk: Conceptualising multiple oppressions in critical sexuality studies. In Y. Taylor, S. Hines & M. Casey (Eds.), *Theorizing intersectionality and sexuality* (pp. 56-77). Basingstoke; New York: Palgrave Macmillan.
- Fang, B., & Zhang, Z. (2015, December 23). Nianzhong baodao: 2015 zhongguo NGO zao quanmian daya (Year-end report: 2015 Chinese NGOs were fully suppressed). *VOA Chinese*. Retrieved from https://www.voachinese.com/a/voa-news-china-ngo-20151223/3115461.html (In Chinese)
- Fawcett, B., & Hearn, J. (2004). Researching others: Epistemology, experience, standpoints and participation. *International Journal of Social Research Methodology*, 7(3), 201-218.
- Feng. R. K., & Li, L. J. (2015, March 2). Zhongguo laogong weiquan NGO de kunjing (The dilemma of Chinese labour rights protection NGOs). *FT Zhongwen Wang*. Retrieved from http://www.ftchinese.com/story/001060495?full=y&archive (In Chinese)
- Feng, S. Z. (2007). The silent majority: Chaxu geju and environmental action in urban China, *Journal of Renmin University of China*, (1). (In Chinese)
- Figueroa, R. M. (1999). *Debating the paradigms of justice: The bivalence of environmental justice* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI Number: 9938806).

- Figueroa, R. M., & Waitt, G. (2008). Cracks in the mirror: (Un) covering the moral terrains of environmental justice at Uluru-Kata Tjuta National Park. *Ethics, Place & Environment*, 11(3), 327-349.
- Figueroa, R. M., & Waitt, G. (2010). Climb: Restorative justice, environmental heritage, and the moral terrains of Uluru-Kata Tjuta National Park. *Environmental Philosophy*, 7(2), 135-164.
- Foley, D. E. (2002). Critical ethnography: The reflexive turn. *International Journal of Qualitative Studies in Education*, *15*(4), 469-490.
- Ford, L. H. (2003). Challenging global environmental governance: Social movement agency and global civil society. *Global Environmental Politics*, *3*(2), 120-34.
- Foucault, M. (1990). *The history of sexuality, volume 2: The use of pleasure*. New York: Vintage Books.
- Foucault, M. (1995). *Discipline and punish: The birth of a prison* (2nd ed.). New York: Vintage Books.
- Foucault, M. (1997). The politics of truth. New York: Semiotext(e).
- Franceschini, I., & Lin, K. (2019). Labour NGOs in China: From legal mobilisation to collective struggle (and back?). *China Perspectives*, (1), 75.
- Fraser, N., & Nicholson, L. (1988). Social criticism without philosophy: An encounter between feminism and postmodernism. *Theory, Culture & Society*, *5*(2-3), 373-394.
- Fraser, N. (1996). Social justice in the age of identity politics: Redistribution, recognition, and participation [Lectures]. Retrieved from https://tannerlectures.utah.edu/ documents/a-to-z/f/Fraser98.pdf
- Frey, R. S. (2012). The E-waste stream in the world-system. *Journal of Globalization Studies*, *3*(1).
- Frey, R. S. (2006). The flow of hazardous exports in the world-system. In A. Jorgenson & E. Kick (Eds.), *Globalization and the environment* (pp. 133-149). Leiden; Boston: Brill Academic Press.
- Frye, M. (1983). *The politics of reality: Essays in feminist theory*. Trumansburg, NY: Crossing Press.
- Gao, B. Z. (2006). Minzuzhi fazhan de sange shidai (The three periods in the development of ethnography). *Journal of Guangxi University for Nationalities: Philosophy and Social Science Edition*, 28(3), 58-63. (In Chinese)

- Gao, B. Z. (2012). "Gongmin shehui" gainian yu zhongguo xianshi (The concept of "civil society" and the Chinese reality). *Thinking*, *38*(1). (In Chinese)
- Gao, G. (1996). Self and other: A Chinese perspective on interpersonal relationships. In W.
 B. Gudykunst, S. Nishida & S. Ting-Toomey (Eds.), *Communication in personal relationships across cultures* (pp. 81-101). California: Sage.
- Gao, X. J. (2017, October 10). Renkou Liudong, poxi guanxi yu nongcun jiating bianqian (Population mobility, the relationship between mother-in-law and daughter-in-law, and rural family changes). *China Women's News*. Retrieved from http://paper.cnwomen.com.cn/content/2017-10/10/042750.html (In Chinese)
- Garry, A. (2011). Intersectionality, metaphors, and the multiplicity of gender. *Hypatia*, *26*(4), 826-850.
- Gaventa, J. (1982). *Power and powerlessness: Quiescence and rebellion in an Appalachian Valley*. Chicago: University of Illinois Press.
- GE. (2015). *GoodElectronics Annual Report 2014*. Available from https://goodelectronics.org/goodelectronics-annual-report-2014-3/
- GE. (2016). *GoodElectronics Annual Report 2015*. Available from https://goodelectronics.org/goodelectronics-annual-report-2015/
- Geertz, C. (1973). The interpretation of cultures: Selected essays. New York: Basic Books.
- General Office of the State Council. (2014). *National project on new urbanisation (2014-2020)* (No. 9 [2014] of the General Office of the State Council). Retrieved from http://www.gov.cn/gongbao/content/2014/content_2644805.htm (In Chinese)
- General Office of the State Council. (2015). *Opinions of the General Office of the State*Council on supporting migrant workers and other personnel to return to hometown

 (No. 47 [2015] of the General Office of the State Council). Retrieved from http://www.gov.cn/zhengce/content/2015-06/21/content_9960.htm (In Chinese)
- General Office of the State Council. (2017). Notice of the general office of the State

 Council on issuing the implementation plan for prohibiting the entry of foreign

 garbage and advancing the reform of the solid waste import administration system

 (No. 70 [2017] of the General Office of the State Council). Retrieved from

 http://www.gov.cn/zhengce/content/2017-07/27/content_5213738.htm (In Chinese)
- Gilley, B. (2012). Authoritarian environmentalism and China's response to climate change. *Environmental Politics*, *21*(2), 287-307.
- Gilson, E. (2011). Vulnerability, ignorance, and oppression. *Hypatia*, 26(2), 308-332.

- Göhler, G. (2009). Power to and power over. In S. Clegg & M. Haugaard (Eds.), *The Sage Handbook of Power* (pp. 27-39). London: Sage.
- Gong, W. J. (2014). Socio-spatial distribution of environmental risk in population. *Journal of Xiamen University (Arts & Social Science)*, (3). (In Chinese)
- Greenpeace. (2004). *Annual Report 2004*. Available from https://www.greenpeace.org.cn/2004/ (In Chinese)
- Greenpeace. (2008). Liu yue shisi ri lvseheping jieting guowai dianzi laji huogui, qi yue si ri women yu xianggang tebie xingzhengqu zhengfu huitan (*On June 14th*, *Greenpeace stopped foreign e-waste containers, and on July 4 we met with the Hong Kong government*). Available from https://www.greenpeace.org.cn/e-waste-shipment/ (In Chinese)
- Greenpeace & Anthropology Department of SYSU. (2003a). *Guiyu dianzi laji chaijieye de renleixue diaocha baogao, zhubaogao (Anthropological report on e-waste disassemble industry in Guiyu, Shantou, the main report)*. Available from http://www.greenpeace.org/china/zh/press/reports/guiyu-report (In Chinese)
- Greenpeace & Anthropology Department of SYSU. (2003b). Guiyu dianzi laji chaijieye de renleixue diaocha baogao, waidiren gean fangtan ji (Anthropological report on e-waste disassemble industry in Guiyu, Shantou, migrant interviews). Available from https://www.greenpeace.org.cn/guiyu-migrant-interviews/ (In Chinese)
- Greenpeace & Anthropology Department of SYSU. (2003c). *Guiyu dianzi laji chaijieye de renleixue diaocha baogao, bendiren fangtan ji (Anthropological report on e-waste disassemble industry in Guiyu, Shantou, local interviews)*. Available from http://www.greenpeace.org/china/zh/publications/reports/toxics/2003/guiyu-local-interviews/ (In Chinese)
- Griner, A. (2017, January 6). Looks are deceiving in Chinese town that was US e-waste dumping site. *Reveal*. Retrieved from https://www.revealnews.org/article/looks-are-deceiving-in-chinese-town-that-was-us-e-waste-dumping-site/
- Gu, M. D. (2011). Sinologism: A critique of methodologies in China knowledge production. *Journal of Tsinghua University: Philosophy and Social Science*, (2). (In Chinese)
- Gu, M. D. (2012). Sinologism: An alternative to orientalism and postcolonialism. Routledge.
- Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry*, *10*(2), 261-280.

- Guiyu suliao. (2018a, Jun 7). Guiyu youyou qi ming shuiwuran renyuan bei xingshi juliu (Another seven people who released water waste are under criminal detention). Retrieved June 10, 2018, from https://mp.weixin.qq.com/s?__biz=MzA3NzM2OTEyNw==&mid=2649962907&idx=1&sn=2705e2d05417793bd58c4ad68943106f&chksm=875483d3b0230ac5c1fb 8162d7db569e33cd6de5917f3bad10c021fca171cf595c981e809107&scene=38#we chat_redirect (In Chinese)
- Guiyu suliao. (2018b, Jun 11). Guiyu geda changjia zhuyi, qu gongjianfa yijing lianshou... (To industries at Guiyu town, the public security organs have joined forces...). Retrieved June 15, 2018, from https://mp.weixin.qq.com/s?__biz=MzA3NzM2OTEyNw==&mid=2649962909&idx=1&sn=6c46863e321d242ca82e12d31397a543&chksm=875483d5b0230ac38e147e5aaf44d2f145ad26f1cce6e7da45f94f532589e243eb33bdc56686&scene=38#we chat_redirect (In Chinese)
- Guo, S. H. (2008). Shengtai shehui zhuyi guanyu shengtai zhimin kuozhang de mingti dui woguo tiaozheng waizi zhanlue de qishi (The enlightenment from the ecological socialism's proposition on ecological colonization expansion to China's strategy of adjusting foreign capital). *Contemporary World and Socialism*, (3), 104-108. (In Chinese)
- Guo, S. J. (2012). *Chinese politics and government: Power, ideology and organisation*. London; New York: Routledge.
- Guo, Y. (2015). Zhongguo nongcun huanjing baohu de zhengyi zhi wei (The dimension of justice in the environmental protection in China's countryside). Beijing: People's Publishing House. (In Chinese)
- Häkli, J., & Kallio, K. P. (2014). Subject, action and polis: Theorizing political agency. *Progress in Human Geography*, 38(2), 181-200.
- Hammersley, M., & Paul, A. (2007). *Ethnography: Principles in practice* (3rd ed.). London; New York: Routledge.
- Han, D. (2010). Policing and racialization of rural migrant workers in Chinese cities. *Ethnic and Racial Studies*, *33*(4), 593-610.
- Hancock, A. M. (2007a). Intersectionality as a normative and empirical paradigm. *Politics & Gender*, *3*(2), 248-254.
- Hancock, A. M. (2007b). When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspectives on Politics*, *5*(1), 63-79.

- Hancock, A. M. (2011). *Solidarity politics for millennials: A guide to ending the oppression Olympics*. New York: Palgrave Macmillan.
- Hankivsky, O., Grace, D., Hunting, G., Giesbrecht, M., Fridkin, A., Rudrum, S., ... & Clark, N. (2014). An intersectionality-based policy analysis framework: Critical reflections on a methodology for advancing equity. *International Journal for Equity in Health*, 13(1), 119.
- Hansen, M. H., & Liu, Z. (2018). Air pollution and grassroots echoes of "ecological civilization" in rural China. *The China Quarterly*, *234*, 320-339.
- Hanser, A. (2005). The gendered rice bowl: The sexual politics of service work in urban China. *Gender & Society*, *19*(5), 581-600.
- Hanser, A. (2008). Service encounters: Class, gender, and the market for social distinction in urban China. Stanford, CA: Stanford University Press.
- Hao, D., Yi, R. H., Wu, Y., Lu, Y. F., & Fang, C. L. (2015). Pollution characteristics and exposure risk assessment of polybrominated diphenyl ethers in different types agricultural soils in Guiyu area. *Journal of Agro-Environment Science*, 34(5), 882-890.
- Hao, T. (2008, May 29). NGOs and government: A new basis for cooperation. *China Dialogue*. Retrieved from https://www.chinadialogue.net/article/show/single/en/2049-NGOs-and-government-a-new-basis-for-cooperation
- Harding, S. G. (Ed.). (1987). Feminism and methodology: Social science issues. Bloomington, IN: Indiana University Press.
- Hatfield, C. (1973). Fieldwork: Toward a model of mutual exploitation. *Anthropological Quarterly*, 46(1),15-29.
- Haugaard, M. (1999). Power: Social and political theories of. In L. Kurtz (Ed.),Encyclopaedia of violence, peace and conflict (2nd ed.) (pp. 1710-1724). San Diego: Academic Press.
- Haugaard, M. (Ed.). (2002). *Power: A reader*. Manchester; New York: Manchester University Press.
- Haugaard, M. (2012). Rethinking the four dimensions of power: Domination and empowerment. *Journal of Political Power*, *5*(1), 33-54.
- Havel, V. (2009). *The power of the powerless: Citizens against the state in central-eastern Europe*. London; New York: Routledge.

- He, B. G. (2011). The ideas of civil society in mainland China and Taiwan, 1986-92. In Z.L. Deng (Ed.) *State and civil society: The Chinese perspective* (pp. 197-240).Singapore: World Scientific Publishing.
- He, C., Zhou, Y., & Huang, Z. (2016). Fiscal decentralization, political centralization, and land urbanization in China. *Urban Geography*, *37*(3), 436-457.
- He, H. N. (2004, June 3). Fencheng liangban de guangdong guiyu (Guangdong guiyu is divided into two halves). *Southern Weekly*. Retrieved from http://news.sina.com.cn/c/2004-06-03/11273382527.shtml (In Chinese)
- He, J. H. (2013). Shengtai wenming shiye xia huanjing zhengyi de kunjing jiqi chulu (The dilemma of environmental justice and its way out from the perspective of ecological civilization). *Studies in Ethics*, (5). (In Chinese)
- He, J. W., & Huang, H. (2008). Zhujiang sanjiaozhou diqu nongmingong weiquan NGO:Miaoshuxing fenxi (Labour NGOs in Pearl River Delta: A descriptive analysis).The Hong Kong Journal of Social Sciences, 35, 1-21. (In Chinese)
- He, M. J. (2009). Labor process and the differentiation of sisterhood: A case study on female migrants in China. *Sociological Studies*, (2). (In Chinese)
- He, X. S., Xu, D., & Sun, Y. N. (2008). Narratives of migrant women workers: Realities and metaphors in sociological perspective. *Journal of East China University of Science and Technology (Social Science Edition)*. 23(3), 7-10. (In Chinese)
- Heiman, M. K. (1996). Race, waste, and class: New perspectives on environmental justice. *Antipode*, 28(2), 111-121.
- Heimer, M., & Thøgersen, S. (Eds.). (2006). *Doing fieldwork in China*. Copenhagen: NIAS Press.
- Hekman, S. (1991). Reconstituting the subject: Feminism, modernism, and postmodernism. *Hypatia*, *6*(2), 44-63.
- Held, V. (1993). Feminist morality: Transforming culture, society, and politics. Chicago: University of Chicago Press.
- Held, V. (2006). *The ethics of care: Personal, political, and global*. Oxford; New York: Oxford University Press.
- Ho, P. (2001). Greening without conflict? Environmentalism, NGOs and civil society in China. *Development and Change*, *32*(5), 893-921.
- Hodge, B., & Louie, K. (1998). *Politics of Chinese language and culture: The art of reading dragons*. London; New York: Routledge.

- Holifield, R. (2001). Defining environmental justice and environmental racism. *Urban Geography*, 22(1), 78-90.
- Holifield, R. (2012). Environmental justice as recognition and participation in risk assessment: Negotiating and translating health risk at a superfund site in Indian country. *Annals of the Association of American Geographers*, 102(3), 591-613.
- Hong, D. Y. (2001). Dangdai zhongguo huanjing gongping wenti de sanzhong biaoxian (Three manifestations of environmental justice issues in contemporary China), *Jiangsu Social Science*, (3). (In Chinese)
- Hong, D. Y., & Ma, X. F. (2004). Reproduction of dual social structure: A sociological analysis of non-point source pollution in Chinese countryside. *Sociological Studies*, (4), 1-7. (In Chinese)
- Honkasalo, M. L. (2009). Grips and ties: Agency, uncertainty, and the problem of suffering in North Karelia. *Medical Anthropology Quarterly*, 23(1), 51-69.
- hooks, bell. (1981). *Ain't I a woman: Black women and feminism*. Boston, MA: South End Press.
- Hoover, E. (2018). Environmental reproductive justice: Intersections in an American Indian community impacted by environmental contamination. *Environmental Sociology*, *4*(1), 8-21.
- Hope Alkon, A. (2011). Reflexivity and environmental justice scholarship: A role for feminist methodologies. *Organisation & Environment*, 24(2), 130-149.
- Hornborg, A. (2012). *Global ecology and unequal exchange: Fetishism in a zero-sum world*. London; New York: Routledge.
- Ho, P. (2007). Introduction: Embedded activism and political change in a semi-authoritarian context. In P. Ho & R. L. Edmonds (Eds.), *China's embedded activism: Opportunities and constraints of a social movement* (pp. 19-37). London; New York: Routledge.
- Hou, Q. (2018, August 24). Shenzhen jiashi gongsi gongren "weiquan" shijian de beihou (Behind the incident of "safeguarding legal rights" by Shenzhen Jasic Company workers). *Xinhua News Agency*. Retrieved from http://www.xinhuanet.com/local/2018-08/24/c 1123326003.htm (In Chinese)
- Howell, J. (2004). New directions in civil society: Organizing around marginal interests. In J. Howell (Ed.), *Governance in China* (pp. 143-171). Lanham, MD: Rowman & Littlefield.

- Hu, A. G., & Zhao, L. (2006). Employment and informal economy in the economic transformation in the process of urbanization in China (1990-2004). *Journal of Tsinchua University (Philosophy and Social Science)*, *3*(21). (In Chinese)
- Hu, J. T. (2007). Hold High the Great Banner of Socialism with Chinese Characteristics and Strive for New Victories in Building a Moderately Prosperous Society in all Respects—Delivered at the 17th National Congress of the Communist Party of China. Retrieved from http://www.chinadaily.com.cn/hqzg/2007-10/31/content 6220592.htm
- Huang, D. (2019, March 28). 2018 nian quanguo guti feiwu jinkouliang tongbi xiajiang 46.5% (National solid waste imports fell by 46.5% year-on-year in 2018). *Xinhuashe*. Retrieved from http://www.gov.cn/xinwen/2019-03/28/content 5377925.htm (In Chinese)
- Huang, P. C. (1993). "Public sphere"/ "civil society" in China? The third realm between state and society. *Modern China*, 19(2), 216-240.
- Huang, Y. (2006). Wailaigong zuzhi yu kuaguo laogong tuanjie wangluo (Labour organizations and transnational labour solidarity network). *Open Times*, (6), 89–103. (In Chinese).
- Huang, Y., & Guo, W. Q. (2006). Kuaguo wangluo zai zhongguo de laogong weiquan xingdong (The labour rights activism of multinational network in China). *Modern China Studies*. (2). Available from https://www.modernchinastudies.org/us/issues/past-issues/92-mcs-2006-issue-2/966-2012-01-05-15-35-10.html (In Chinese)
- Huang, Z. Z. (2009). Zhongguo bei hushi de feizhenggui jingji: Lilun yu shijian (The ignored informal economy in China: Reality and theory). *Open Times*, (2), 51-73. (In Chinese)
- Huijg, D. D. (2012). Tension in intersectional agency: A theoretical discussion of the interior conflict of white, feminist activists' intersectional location. *Journal of International Women's Studies*, 13(2), 3-18.
- Huo, X., Peng, L., Xu, X., Zheng, L., Qiu, B., Qi, Z., ... & Piao, Z. (2007). Elevated blood lead levels of children in Guiyu, an electronic waste recycling town in China. *Environmental Health Perspectives*, 115(7), 1113.
- Hynes, M. (2013). Reconceptualizing resistance: Sociology and the affective dimension of resistance. *The British Journal of Sociology*, *64*(4), 559-577.

- Iles, A. (2004). Mapping environmental justice in technology flows: Computer waste impacts in Asia. *Global Environmental Politics*, *4*(4), 76-107.
- ILO. (2014). Tackling informality in e-waste management: The potential of cooperative enterprises in the management of e-waste. Available from https://www.ilo.org/sector/Resources/publications/WCMS_315228/lang-en/index.htm
- ILO. (2015). The labour, human health and environmental dimensions of e-waste management in China in the management of e-waste. Available from https://www.ilo.org/beijing/what-we-do/publications/WCMS_375174/lang-en/index.htm
- Irwin, A., Simmons, P., & Walker, G. (1999). Faulty environments and risk reasoning: The local understanding of industrial hazards. *Environment and Planning A: Economy and Space*, *31*(7), 1311-1326.
- Islam, S., & Hossain, I. (2015). *Social justice in the globalization of production*. Basingstoke; New York: Palgrave Macmillan.
- Jacka, T. (2015). *Rural women in urban China: Gender, migration, and social change*. London; New York: Routledge.
- Jacques, M. (2012). When China rules the world: The rise of the middle kingdom and the end of the western world (2nd ed.). New York: Penguin Books.
- Jacques, P. J., & Knox, C. C. (2016). Hurricanes and hegemony: A qualitative qualysis of micro-level climate change denial discourses. *Environmental Politics*, 25(5), 831-852.
- Jampel, C. (2018). Intersections of disability justice, racial justice and environmental justice. *Environmental Sociology*, *4*(1), 122-135.
- Jiang, H. F. (2013, July 4). Guangdong guiyu dianzilaji chaijieye diaocha: du yi cheng shang (Research on the e-waste dismantling industry at Guiyu, Guangdong: The poison in a ruin). *Xinmin Weekly*. Retrieved from http://www.xinminweekly.com.cn/fengmian/2013/07/04/2650.html (In Chinese)
- Jiang, Z. M. (2002). Build a well-off society in an all-round way and create a new situation in building socialism with Chinese characteristics—Delivered at the 16th National Congress of the Communist Party of China. Retrieved from http://language.chinadaily.com.cn/news/2013-11/26/content_17132209_6.htm (In Chinese)

- Jin, J., Shen, C., Wang, Q., & Zou, Heng-fu. (2012). Decentralization in China. IDEAS Working Paper Series from RePEc. Available at http://search.proquest.com/docview/1698183285/
- Jin, Y. H. (2006). Tieguniang zaisikao— zhongguo wenhua dageming qijian de shehui xingbie yu laodong (Rethinking "iron girl"— Social gender and labour during Chinese cultural revolution), *Sociological Studies*, (1), 169-193. (In Chinese)
- Jin, Y. H. (2010). Mobile paternal authority: Change in migrant farmer families. *Social Science in China*, (4). (In Chinese)
- Jing, J. (2009). Cognition and awareness: Environmental protest in a Chinese village.
 Journal of China Agricultural University (Social Sciences Edition), 4(26), 5-15. (In Chinese)
- Jinri Guiyu. (2018, May 26). Huanbao yanda! Guiyu zhege chaijie zuofang beicha, xianchang zhuahuo 18 ren (Environmental protection is severe! A dismantling workshop in Guiyu was investigated and 18 people were arrested on the spot!). Retrieved June 23, 2018 from https://mp.weixin.qq.com/s?__biz=MzU5ODk2ODYwMw==&mid=2247488631& amp;idx=1&sn=5a5b6095460c6c5300f085ded5a980d3&source=41#wechat_r edirect (In Chinese)
- Jokinen, E. (2016). Precarious everyday agency. *European Journal of Cultural Studies*, 19(1), 85-99.
- Kachra, K. E. (2006). *The problem of agency: Foucault, feminism and the socially constructed subject* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI Number: 3236954).
- Kaijser, A. (2014). Who is marching for Pachamama? An intersectional analysis of environmental struggles in Bolivia under the government of Evo Morales (Doctoral dissertation). Lund University.
- Kaijser, A., & Kronsell, A. (2014). Climate change through the lens of intersectionality. *Environmental Politics*, *23*(3), 417-433.
- Kalan, H., & Peek, B. (2005). South African perspectives on transnational environmental justice networks. In D. N. Pellow & R. J. Brulle (Eds.), *Power, justice and the environment: A critical appraisal of the environmental justice movement* (pp. 253-63). Cambridge, MA: MIT Press.
- Kandiyoti, D. (1988). Bargaining with patriarchy. Gender & Society, 2(3), 274-290.

- Keesing, R. M., Crick, M., Frankel, B., Friedman, J., Hatch, E., Oosten, J. G., ... & Strathern, M. (1987). Anthropology as interpretive quest [and comments and reply]. *Current Anthropology*, 28(2), 161-176.
- Kim, C. J. (1999). The racial triangulation of Asian Americans. *Politics & Society*, 27(1), 105-138.
- King, D. K. (1988). Multiple jeopardy, multiple consciousness: The context of a Black feminist ideology. *Signs: Journal of Women in Culture and Society*, *14*(1), 42-72.
- Knapp, G. A. (2005). Race, class, gender: Reclaiming baggage in fast travelling theories. *European Journal of Women's Studies*, *12*(3), 249-265.
- Kompridis, N. (2016, May 19). *Discussion on "Existential-Ethical Questions"*. Paper presented at Sydney School for Critical Social Thought, Sydney.
- Krauss, C. (1993). Women and toxic waste protests: Race, class and gender as resources of resistance. *Qualitative Sociology*, *16*(3), 247-262.
- LAC, LESN, & SOMO. (2016). *The poisonous pearl*. Available from https://goodelectronics.org/the-poisonous-pearl/
- Laperrière, M., & Lépinard, E. (2016). Intersectionality as a tool for social movements: Strategies of inclusion and representation in the Québécois women's movement. *Politics*, *36*(4), 374-382.
- Larkins, M. L. (2017). *The ties that bind? The intersection of gender, femininity, and place in women's community-based environmental justice action* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI Number: 10276400).
- Larkins, M. L. (2018). Complicating communities: An intersectional approach to women's environmental justice narratives in the Rocky Mountain West. *Environmental Sociology*, *4*(1), 67-78.
- Lee, C. K. (1998). *Gender and the south China miracle: Two worlds of factory women*, Berkeley; Los Angeles; Londres: University of California Press.
- Lemke, T. (2011). Critique and experience in Foucault. *Theory, Culture & Society*, 28(4), 26-48.
- Leung, A. O., Duzgoren-Aydin, N. S., Cheung, K. C., & Wong, M. H. (2008). Heavy metals concentrations of surface dust from e-waste recycling and its human health implications in southeast China. *Environmental Science & Technology*, 42(7), 2674-2680.
- Lewis, D. (1973). Anthropology and colonialism. Current Anthropology, 14(5), 581-602.

- Li, H., & Li, Y. M. (2015, November 13). Chongfen fahui funv zai jiating wenming jianshe zhong de dute zuoyong (Fully play the unique role of women in the construction of family civilization). *Study Times*. Retrieved from http://www.women.org.cn/art/2015/5/18/art 18 72038.html (In Chinese)
- Li, Y. S., & Liu, Y. X. (2006). Shehui zhengce yu nongmingong qunti de shehui baohu (Social policy and social protection towards migrant workers). *Social Science Research*, (6). (In Chinese)
- Liang, B., & Lu, H. (2006). Conducting fieldwork in China: Observations on collecting primary data regarding crime, law, and the criminal justice system. *Journal of Contemporary Criminal Justice*, 22(2), 157-172.
- Liang, Z. (2018, May 15). Mimang yu zhuanxing: Jinling xia de "dianzi laji chaijie diyizhen" (Confusion and transformation: "The first town of e-waste dismantling" under the ban). *Jiemian News*. Retrieved from https://www.jiemian.com/article/2137533.html (In Chinese)
- Liévanos, R. S. (2015). Race, deprivation, and immigrant isolation: The spatial demography of air-toxic clusters in the continental United States. *Social Science Research*, *54*, 50-67.
- Lin, G. CS., & Yi, F. (2011). Urbanization of capital or capitalization on urban land? Land development and local public finance in urbanizing China. *Urban Geography*, 32(1), 50-79.
- Lin, J. D. (2010). Relationship between blood cadmium and red blood cell parameters in children aged 3-7 years in Guiyu area of Guangdong Province. *Journal of Shantou University Medical College*, *23*(2), 100-101. (In Chinese)
- Lin, Z. F., & Zhao, H. W. (2014). Guiyu diqu 3-6 sui ertong zhiqiguan xiaochuan huanbing qingkuang diaocha yu fabing yinsu fenxi (Investigation on the prevalence of bronchial asthma among 3-6 years old children in Guiyu area and analysis of the factors). *Jilin Medical Journal*, *35*(24), 5390-5391. (In Chinese)
- Linyz. (2011, December 12). Guanzhu dianzi laji chuli— Fute huanbao jiang dezhu Huo Xia (Focusing on e-waste disposal— the winner of Ford Environmental Price Huo Xia). *Fenghuang Wang*. Retrieved from http://auto.ifeng.com/news/market/20111221/733869.shtml (In Chinese)
- Liou, K. T. (2000). State-society relations in post-Mao Chinese economic reforms: Changes and challenges. *International Journal of Economic Development*, *2*(1), 132-154.

- Liu, C. Y. (2012). The sense of environmental justice and action orientation of the Chinese farmers, *Society*, (1), 174-196. (In Chinese)
- Liu, H. L. (2016). Huangjing zhengyi: Shengtai wenming jianshe de zhongyao weidu (Environmental justice: An important dimension in the evaluation of ecological civilization construction). *Studies on the Socialism with Chinese Characteristics*, *5*. (In Chinese)
- Liu, J. G. (2018). Jinzhi yanglaji rujing dui woguo laji fenlei de yiyi yu qishi (The meaning and implication of prohibiting foreign waste for China's waste classification).

 Resource Recycling, (3), 10-13. (In Chinese)
- Liu, J. J. (2011). Environmental justice with Chinese characteristics: Recent developments in using environmental public interest litigation to strengthen access to environmental justice. *Florida A. & M. University Law Review*, 7(2), 229-259.
- Liu, W. J., & Lin, X. L. (2014). A study on the contemporary women's status in marriage and family in Chaozhou-Shantou region, *Journal of Shandong Women's University*, (5), 37-47. (In Chinese)
- Liu, W. X. (2017). Meiguo huanjing zhengyi lilun de fazhan licheng, mubiao yanjin ji qi kunjing (The development history, goal evolution, and dilemma of American environmental justice theory). *Social Science Aboard*, (3), 58-65. (In Chinese)
- Liu, Z. (2005). Institution and inequality: The hukou system in China. *Journal of Comparative Economics*, *33*(1), 133-157.
- Lo, K. (2015). How authoritarian is the environmental governance of China?. *Environmental Science & Policy*, *54*, 152-159.
- Lora-Wainwright, A., Zhang, Y., Wu, Y., & Van Rooij, B. (2012). Learning to live with pollution: The making of environmental subjects in a Chinese industrialized village. *The China Journal*, (68), 106-124.
- Lora-Wainwright, A. (2017). *Resigned activism: Living with pollution in rural China*. Cambridge, MA: The MIT Press.
- Lu, X. Y. (Ed.). (2005). Dangdai zhongguo shehui jieceng yanjiu baogao (Research report on contemporary Chinese social stratification), Beijing: Literature of Social Science Press. (In Chinese)
- Lu, Y. (2007). Environmental civil society and governance in China. *International Journal of Environmental Studies*, 64(1), 59-69.

- Lukes, S. (2005). *Power: A radical view* (2nd ed.). Basingstoke; New York: Palgrave Macmillan.
- Lui, L. (2018). Marital power in inter-hukou families in China: An intersectionality approach. *Journal of Family Issues*, *39*(5), 1165-1190.
- Ma, C. B. (2010). Who bears the environmental burden in China— An analysis of the distribution of industrial pollution sources? *Ecological Economics*, 69(9), 1869-1876.
- Ma, C. B., & Schoolman, E. D. (n.d.). Environmental justice in China. Available from http://www.isecoeco.org/conferences/isee2012-versao3/pdf/848.pdf
- Ma, C. H. (2003). Shichanghua yu zhongguo nongcun jiating de xingbie guanxi (Marketization and gender relations of rural families in China) (Doctoral dissertation), Graduate School of Chinese Academy of Social Sciences. (In Chinese).
- MacGregor, S. (2009). A stranger silence still: The need for feminist social research on climate change. *The Sociological Review*, *57*(s2), 124-140.
- Madison, D. S. (2005). *Critical ethnography: Method, ethics, and performance*. California: Sage.
- Malin, S. A., & Ryder, S. S. (2018). Developing deeply intersectional environmental justice scholarship. *Environmental Sociology*, *4*(1), 1-7.
- Mann, S. (2011). Pioneers of U.S. ecofeminism and environmental justice. *Feminist Formations*, 23(2), 1-25.
- McCall, L. (2005). The complexity of intersectionality. *Signs: Journal of Women in Culture and Society*, 30(3), 1771-1800.
- McDonald, D. A. (2002). *Environmental justice in South Africa*. Athens, Ohio: Ohio University Press; Cape Town: University of Cape Town Press.
- McDowell, L. (1999). *Gender, identity and place: Understanding feminist geographies*. Minneapolis, MN: University of Minnesota Press.
- McKane, R. G., Satcher, L. A., Houston, S. L., & Hess, D. J. (2018). Race, class, and space: An intersectional approach to environmental justice in New York City. *Environmental Sociology*, *4*(1), 79-92.
- Mcnaughton, S. & Nowakowski, K. (2019). How China's plastic waste ban forced a global recycling reckoning. *National Geographic*. Retrieved from https://www.nationalgeographic.com/magazine/2019/06/china-plastic-waste-ban-impacting-countries-worldwide/

- Medina, J. (2013). The epistemology of resistance: Gender and racial oppression, epistemic injustice, and the social imagination. New York: Oxford University Press.
- Mehrotra, G. (2010). Toward a continuum of intersectionality theorizing for feminist social work scholarship. *Affilia: Journal of Women and Social Work*, 25(4), 417-430.
- Merchant, C. (1981). Earthcare: Women and the environment. *Environment: Science and Policy for Sustainable Development*, 23(5), 6-40.
- Mertha, A. (2009). "Fragmented authoritarianism 2.0": Political pluralization in the Chinese policy process. *The China Quarterly*, 200, 995-1012.
- Mills, C. W. (2007). White ignorance. In S. Sullivan & N. Tuana (Eds.), *Race and epistemologies of ignorance* (pp. 26-31). Albany: State University of New York Press.
- Mills, C. W. (1997). The racial contract. Ithaca, NY: Cornell University Press.
- Mills, S. (2007). Geography, gender and power. In J. W. Crampton & S. Elden (Eds.), *Space, knowledge and power: Foucault and geography*. London, UK; Burlington, VT: Ashgate Publishing.
- Minkler, M., Vásquez, V. B., Tajik, M., & Petersen, D. (2008). Promoting environmental justice through community-based participatory research: The role of community and partnership capacity. *Health Education & Behavior*, *35*(1), 119-137.
- Mohai, P., Pellow, D., & Roberts, J. T. (2009). Environmental justice. *Annual Review of Environment and Resources*, *34*, 405-430.
- Mohai, P. (2007). Equity and the environmental justice debate. *Research in Social Problems and Public Policy*, *15*, 21-49.
- Moghadam, V. (1999). Gender and globalization: Female labor and women's mobilization. *Journal of World-Systems Research*, 5(2), 366-389.
- Moosa, C. S., & Tuana, N. (2014). Mapping a research agenda concerning gender and climate change: A review of the literature. *Hypatia*, 29(3), 677-694.
- Naples, N. A., & Sachs, C. (2000). Standpoint epistemology and the uses of self-reflection in feminist ethnography: Lessons for rural sociology. *Rural Sociology*, 65(2), 194-214.
- Ngan-ling Chow, E., & Zou, Y. (2011). Globalization and locality: The gendered impact of the economic crisis on intersectionality, migration, and work in China. In E. Ngan-Ling Chow, M. T. Segal & L. Tan (Eds.), *Analyzing gender, intersectionality, and*

- *multiple inequalities: Global, transnational and local contexts* (pp. 95-120). Bingley, UK: Emerald Group Publishing Limited.
- Nie, W. (2006). Shui chengdan gengduo de fengxian? Shehui jingji diwei yu huanjing fengxian fenpei (Who takes on more risk? Social-economic status and environmental risk distribution). *Annual Review of Public Health*, 27, 3-1. (In Chinese)
- Nie, W. (2013). Shehui jingji diwei yu huanjing fengxian fenpei: Jiyu xiamen laji chuli de shizheng yanjiu (Social-economic status and environmental risk distribution: Based on the quantitative study of Xiamen waste disposal). *Journal of China University of Geosciences (Social Science Edition)*, 13(4), 45-52. (In Chinese)
- Niu, M. (2013). Fiscal Decentralization in China Revisited. *Australian Journal of Public Administration*, 72(3), 251-263.
- Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Cambridge, MA; London, UK: Harvard University Press.
- Norgaard, K. M. (2006). "We don't really want to know": Environmental justice and socially organized denial of global warming in Norway. *Organization & Environment*, 19(3), 347-370.
- Norgaard, K. M. (2011). *Living in denial: Climate change, emotions, and everyday life*. Cambridge, MA: MIT Press.
- Nygren, A., & Wayessa, G. (2018). At the intersections of multiple marginalisations: Displacements and environmental justice in Mexico and Ethiopia. *Environmental Sociology*, *4*(1), 148-161.
- O'Brien, K. J., & Li, L. (2006). *Rightful resistance in rural China*. New York: Cambridge University Press.
- Ong, A. (1991). The gender and labor politics of postmodernity. *Annual Review of Anthropology*, 20(1), 279-309.
- Orlins, S., & Guan, D. (2016). China's toxic informal e-waste recycling: Local approaches to a global environmental problem. *Journal of Cleaner Production*, *114*, 71-80.
- Pansardi, P. (2012). Power to and power over: Two distinct concepts of power?. *Journal of Political Power*, *5*(1), 73-89.
- Parker, L., & Dales, L. (2014). Introduction: The everyday agency of women in Asia. *Asian Studies Review*, 38(2), 164-167.
- Partzsch, L. (2017). 'Power with' and 'power to' in environmental politics and the transition to sustainability, *Environmental Politics*, 26(2), 193-211,

- Patil, V. (2013). From patriarchy to intersectionality: A transnational feminist assessment of how far we've really come. *Signs: Journal of Women in Culture and Society*, 38(4), 847-867.
- Pellow, D. N. (2007). Resisting global toxics: Transnational movements for environmental justice. Cambridge, MA: MIT Press.
- Pellow, D. N. (2016). Toward a critical environmental justice studies: Black Lives Matter as an environmental justice challenge. *Du Bois Review: Social Science Research on Race*, *13*(2), 221-236.
- Peng, L., Huo, X., Xu, X. J., Zheng, Y., & Qiu, B. (2005). Effects of electronic waste recycling disposing contamination on children's blood lead level. *Shantou University Medical College*, *18*, 48-50. (In Chinese)
- People's Government of Guangzhou. (2015). *Guangzhou administrative measures of social organisations* (No. 47 [2015] of the People's Government of Guangzhou). Retrieved from http://www.gd.gov.cn/zwgk/zcfgk/content/post_2531906.html
- Phoenix, A. (2006). Interrogating intersectionality: Productive ways of theorising multiple positioning. *Kvinder, Køn & Forskning*, (2-3), 21-30.
- Pieke, F. (2000). Serendipity: Reflections on fieldwork in China. In P. Dresch, W. James & D. Parkin (Eds.), *Anthropologists in a wider world: Essays on field research* (pp. 129-50). Berghahn Books.
- Pohlhaus, G. (2012). Relational knowing and epistemic injustice: Toward a theory of wilful hermeneutical ignorance. *Hypatia*, 27(4), 715-735.
- Prins, B. (2006). Narrative accounts of origins: A blind spot in the intersectional approach?. *European Journal of Women's Studies*, 13(3), 277-290.
- Pulido, L. (1996). A critical review of the methodology of environmental racism research. *Antipode*, 28(2), 142-159.
- Pulido, L. (2000). Rethinking environmental racism: White privilege and urban development in Southern California. *Annals of the Association of American Geographers*, 90(1), 12-40.
- Pulido, L., & Peña, D. (1998). Environmentalism and positionality: The early pesticide campaign of the United Farm Workers' Organizing Committee, 1965-71. *Race, Gender & Class*, 6(1), 33-50.
- Pulido, L. (2017). Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence. *Progress in Human Geography*, 41(4), 524-533.

- Pun, N. (2005a). Jieji de shiyu yu fasheng— Zhongguo dagongmei yanjiu de yizhong lilun shijiao (Class's silence and voice: A theoretical perspective in the studies on female migrant workers in China). *Open Times*, (2), 95-107. (In Chinese)
- Pun, N. (2005b). *Made in China: Women factory workers in a global workplace*. Durham, NC: Duke University Press.
- Pun, N. (2009). The making of a global dormitory labour regime. In R. Murphy (Ed.), *Labour migration and social development in contemporary China* (pp. 154-170). London; New York: Routledge.
- Qi, Y., & Lu, H. Y. (2015). Wuran, jiankang yu bupingdeng— kuayue "huanjing jiankang pinkun" xianjing (Pollution, health, and inequality— going beyond the trap of "environmental health poverty"). *Management World*, (9), 32-51. (In Chinese)
- Qiu, B., Peng, L., Xu, X. J., Lin, X., Hong, X., Guo, H., & Huo, X. (2005). Investigation of the health of electronic waste treatment workers. *Journal of Environment and Health*, 22(6), 419-421.
- Quan, R. X. (2001). Establishing China's environmental justice study models. *Georgetown International Environmental Law Review*, 14(3), 461-488.
- Rice, J. (2007). Ecological unequal exchange: Consumption, equity, and unsustainable structural relationships within the global economy. *International Journal of Comparative Sociology*, 48(1), 43-72.
- Rice, J. (2009). The transnational organisation of production and uneven environmental degradation and change in the world economy. *Journal of Comparative International Sociology*, *50*, 215-236.
- Rivers, L., Arvai, J., & Slovic, P. (2010). Beyond a simple case of black and white: Searching for the white male effect in the African-American community. *Risk Analysis: An International Journal*, 30(1), 65-77.
- Rodda, A. (1991). Women and the environment. London: Zed Books.
- Roth, J. (2013). Entangled inequalities as intersectionalities: Towards an epistemic sensibilization, *desiguALdades.net Working Paper Series No. 43*, Berlin: desiguALdades.net Research Network on Interdependent Inequalities in Latin America.
- Ruddick, S. (1995). *Maternal thinking: Toward a politics of peace*. Boston, MA: Beacon Press.
- SACOM. (2008). *The dark side of cyberspace*. Available from https://goodelectronics.org/the-dark-side-of-cyberspace/

- Said, E. (1991). The world, the text, and the critic. London: Vintage.
- Said, E. (2001). *Reflections on exile and other literary and cultural essays*. London: Granta Books.
- Salem, S. (2018). Intersectionality and its discontents: Intersectionality as traveling theory. *European Journal of Women's Studies*, *25*(4), 403-418.
- Sandler, R., & Pezzullo, P. C. (2007). Environmental justice and environmentalism: The social justice challenge to the environmental movement. Cambridge, MA: MIT Press.
- Schlosberg, D. (2004). Reconceiving environmental justice: Global movements and political theories. *Environmental Politics*, *13*(3), 517-540.
- Schlosberg, D. (2009). *Defining environmental justice: Theories, movements, and nature*. New York: Oxford University Press.
- Schlosberg, D., & Coles, R. (2016). The new environmentalism of everyday life: Sustainability, material flows and movements. *Contemporary Political Theory*, *15*(2), 160-181.
- Schoolman, E. D., & Ma, C. B. (2012). Migration, class and environmental inequality: Exposure to pollution in China's Jiangsu Province. *Ecological Economics*, 75, 140-151.
- Scott, J. C. (1990). *Domination and the arts of resistance: Hidden transcripts*. New Haven, CT: Yale University Press.
- Scott, J. W. (1992). Experience. In J. Butler & J. W. Scott (Eds.), *Feminists theorize the political* (pp. 22-40). London; New York: Routledge.
- Shen, C. S. (2017). "Dianzi laji zhidu" de lvse tuibian (The green transformation of the "e-waste capital"). *Nanfang Daily*. Retrieved from http://epaper.southcn.com/nfdaily/html/2017-08/15/content_7660317.htm (In Chinese)
- Shen, Y. (2011). China in the "post-patriarchal era": Changes in the power relationships in urban households and an analysis of the course of gender inequality in society. *Chinese Sociology & Anthropology*, 43(4), 5-23.
- Shen, Y. (2006). The social transformation and reformation of Chinese working class. *Sociological Studies*, (2), 13-36. (In Chinese)
- Shepard, P. M. (2002). Advancing environmental justice through community-based participatory research. *Environmental Health Perspectives*, *110*(Suppl 2), 139-140.

- Shi, C. L. (2018, August 6). Jiedu "Guiyu wei" xiaoshi zhimi: Zhongguo dianzi laji diyi chaijie diyizhen zhuanxingji (Interpretation of the mystery of the disappearance of "Guiyu Smell": The transformation of China's "e-waste dismantling centre").

 Nanfang Journal. Retrieved from http://news.southcn.com/nfzz/content/2018-08/06/content_182830771.htm (In Chinese)
- Shi, F. Y. (2005). Guanxi wangluo yu dangdai zhongguo jiceng shehui yundong (Relationship network and contemporary Chinese grassroots social movement), *Xuehai*, (3). (In Chinese)
- Shi, S., & Kou, T. L. (2016, March 15). Shantou Guiyu "Cancer Village": 10,000 people protest against building an incineration waste power plant. *Radio Free Asia*. Retrieved from https://www.rfa.org/mandarin/yataibaodao/huanjing/ql1-03152016101038.html
- Shriver, T. E., Messer, C. M., Whittington, J. R., & Adams, A. E. (2019). Industrial pollution and acquiescence: Living with chronic remediation. *Environmental Politics*. doi: 10.1080/09644016.2019.1654239.
- Sicotte, D. (2014). Diversity and intersectionality among environmentally burdened communities in the Philadelphia Metropolitan area, USA. *Urban Studies*, *51*(9), 1850-1870.
- Smith, D. E. (1987). *The everyday world as problematic: A feminist sociology*. Toronto: University of Toronto Press.
- Smith, J. N. (2006). Maintaining margins: The politics of ethnographic fieldwork in Chinese central Asia. *China Journal*, *56*, 131-147.
- Smith, L.T. (1999). *Decolonizing methodologies: Research and indigenous people*. London: Zed Books.
- SOMO. (2009). *Modern devices, outdated practices*. Available from https://goodelectronics.org/modern-devices-outdated-practices-2/
- Sowards, S. K. (2012). Environmental justice in international contexts: Understanding intersections for social justice in the Twenty-First Century. *Environmental Communication: A Journal of Nature and Culture*, *6*(3), 285-289.
- Spelman, E. (2007). Managing ignorance. In S. Sullivan & N. Tuana (Eds.), *Race and epistemologies of ignorance* (pp. 119-131). Albany: State University of New York Press.

- Stacey, J. (1991). Can there be a feminist ethnography?. In S. B. Gluck & D. Patai (Eds.) *Women's word: The feminist practice of oral history* (pp. 111-119). London; New York: Routledge.
- Stanley, A. (2009). Just space or spatial justice? Difference, discourse, and environmental justice. *Local Environment*, 14(10), 999-1014.
- Stanley, L., & Wise, S. (1993). *Breaking out again: Feminist ontology and epistemology* (2nd ed.). London; New York: Routledge.
- Standaert, M. (2010). China: E-waste processing poisons health, environment. *Inter Press Service*. Retrieved from http://www.ipsnews.net/2010/05/china-e-waste-processing-poisons-health-environment/
- Strolovitch, D. Z. (2006). Do interest groups represent the disadvantaged? Advocacy at the intersections of race, class, and gender. *The Journal of Politics*, 68(4), 894-910.
- Strolovitch, D. Z. (2007). *Affirmative advocacy: Race, class, and gender in interest group politics*. Chicago; London: University of Chicago Press.
- Su, Y. H. (2016). Intersectionality: A new perspective for the Chinese gender sociology. *Sociological Studies*, (4), 218-241. (In Chinese)
- Sullivan, S., & Tuana, N. (Eds.). (2007). *Race and epistemologies of ignorance*. Albany: State University of New York Press.
- Sun, D., Zhang, J. Huang, B. L., Zhang, Y. L., Xu, X. J., & Huo, X. (2012). Effect of lead and cadmium exposure on the levels of innate immune cells in preschool children. *Journal of Shantou University Medical College*, 25(4), 193-195. (In Chinese)
- Sun, X. L., & Shi, R. H. (2016). Residential segregation and community exposure risk:

 Environmental inequality in megacity. *Journal of Chinese Academy of Governance*,

 (6). (In Chinese)
- Sun, Y. M. (2008). Domestic group events and its development trends. *Journal of Jiangnan Social University*, 10(3). (In Chinese)
- Svarstad, H., & Benjaminsen, T. (2020). Reading radical environmental justice through a political ecology lens. *Geoforum 108*, 1-11.
- Szasz, A. (1994). *Ecopopulism: Toxic waste and the movement for environmental justice*. Minneapolis; London: University of Minnesota Press.
- Sze, J., & London, J. K. (2008). Environmental justice at the crossroads. *Sociology Compass*, 2(4), 1331-1354.
- Tan, S. (2004). Jiating celue, haishi geren zizhu?— Nongcun laodongli waichu juece moshi de xingbie fenxi (Family strategy or individual autonomy?— Gendered

- analysis of the decision model of rural labour migrants). *Zhejiang Academic Journal*, (5). (In Chinese)
- Tao, Y. L. (2011). Wumingzhe shengming de shi: zhongguo nvgong duoyuan zhuti de xingcheng yu kangzheng (Poetry of the life of the unknown: The formation the multiple subjects of Chinese female workers and their struggles). *Chinese Journal of Sociology*, 31(5), 226-242. (In Chinese)
- Taylor, D. E. (2000). The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist*, *43*(4), 508-580.
- Taylor, J. (2011). The intimate insider: Negotiating the ethics of friendship when doing insider research. *Qualitative Research*, 11(1), 3-22.
- Teelucksingh, C. (2007). Environmental racialization: Linking racialization to the environment in Canada. *Local Environment*, 12(6), 645-661.
- Teixeira, S. (2018). Qualitative geographic information systems (GIS): An untapped research approach for social work. *Qualitative Social Work*, 17(1), 9-23.
- Thomas, J. (1993). Doing critical ethnography. California: Sage.
- Thompson, E. P. (1966). *The making of the English working class*, New York: Vintage Books.
- Thurston, A. F., & Pasternak, B. (1983). *The social sciences and fieldwork in China: Views from the field*. Boulder, Colorado: Westview Press.
- Tillmann-Healy, L. M. (2003). Friendship as method. *Qualitative Inquiry*, 9(5), 729-749.
- Tormos, F. (2017). Intersectional solidarity. *Politics, Groups, and Identities*, 5(4), 707-720.
- Torres, G. (1993). Environmental burdens and democratic justice. *Fordham Urban Law Journal*, *21*, 431-1107.
- Tria Kerkvliet, B. J. (2009). Everyday politics in peasant societies (and ours). *The Journal of Peasant Studies*, *36*(1), 227-243.
- Tschakert, P. (2009). Digging deep for justice: A radical re-imagination of the artisanal gold mining sector in Ghana. *Antipode*, 41(4), 706-740.
- Tuana, N. (2004). Coming to understand: Orgasm and the epistemology of ignorance. *Hypatia*, 19(1), 194-232.
- Tuana, N. (2006). The speculum of ignorance: The women's health movement and epistemologies of ignorance. *Hypatia*, 21(3), 1-19.
- Uddin, N. (2011). Decolonising ethnography in the field: An anthropological account. *International Journal of Social Research Methodology*, *14*(6), 455-467.

- United Nations Environmental Programme. (2017, March 15). Women and the rising tide of environmental crime. Retrieved from https://www.unenvironment.org/news-and-stories/story/women-and-rising-tide-environmental-crime
- UNGEI. China: Background. Retrieved from http://www.ungei.org/infobycountry/china.html.
- Verloo, M. (2013). Intersectional and cross-movement politics and policies: Reflections on current practices and debates. *Signs: Journal of Women in Culture and Society*, *38*(4), 893-915.
- Vickery, J. (2018). Using an intersectional approach to advance understanding of homeless persons' vulnerability to disaster. *Environmental Sociology*, *4*(1), 136-147.
- Walker, G. (2009a). Globalizing environmental justice: The geography and politics of frame contextualization and evolution. *Global Social Policy*, 9(3), 355-382.
- Walker, G. (2009b). Beyond distribution and proximity: Exploring the multiple spatialities of environmental justice. *Antipode*, 41(4), 614-636.
- Walker, G. (2012). *Environmental justice: Concepts, evidence and politics*. London; New York: Routledge.
- Walker, K. (2008). From covert to overt: Everyday peasant politics in China and the implications for transnational agrarian movements. *Journal of Agrarian Change*, 8(2-3), 462-488.
- Wang, F., Kuehr, R., Ahlquist, D., & Li, J. (2013). *E-waste in China: A country report*. StEP Green Paper Series.
- Wang, J. L. (2013). Meiguo huanjing zhongzu zhuyi de tezheng, dui hua yingxiang ji qi yingdui (The characteristics of environmental racism, its influences towards China, and countermeasures). *Journal of China University of Geosciences (Social Sciences Edition)*, (5), 64-71. (In Chinese)
- Wang-Kaeding, H. (2018, March 6). What does Xi Jinping's new phrase "ecological civilization" mean?, *The Diplomat*. Retrieved from https://thediplomat.com/2018/03/what-does-xi-jinpings-new-phrase-ecological-civilization-mean/
- Wang, S. M. (2007). Shengcunquan, huanjingqun yu shehui paichi de dixian— Huanjing zhengyi jingyan yanjiu de shehuixue shijiao (The bottom line of the right to live, environmental right and social exclusion— A sociological perspective on the experience of environmental justice). *China Environment and Resources Law Review*. (In Chinese)

- Wang, T. Y. (2015). *Huanjing zhengyi de shuangchong weidu: fenpei yu chengren (Dual dimension of environmental justice: distribution and recognition)*. Shanghai: East China Normal University Press. (In Chinese)
- Wang, X. D. (2017). *Ba zhongguo "zhongguohua" ("Sinicizing" China)*. Shanghai: Shanghai People's Publishing House. (In Chinese)
- Wang, Y., Hu, J., Lin, W., Wang, N., Li, C., Luo, P., ... & Liu, Y. (2016). Health risk assessment of migrant workers' exposure to polychlorinated biphenyls in air and dust in an e-waste recycling area in China: Indication for a new wealth gap in environmental rights. *Environment International*, 87, 33-41.
- Wang, Y. X. (2015). The mystery revealed—Intersectionality in the black box: An analysis of female migrants' employment opportunities in urban China. *Hypatia*, 30(4), 862-880.
- Wang, Z., & Shen, Y. X. (2013, November 1). Xi Jinping tong quanguo fulian xinyijie lingdao banzi jiti tanhua (Xi Jinping talks with the new leadership team of the National Women's Federation). *Renmin Wang*. Retrieved from http://politics.people.com.cn/n/2013/1101/c1024-23397065.html (In Chinese)
- Wangyi Kanke. (2016, July 26). Kanke: Busi de dianzi laji (Insight: Immortal e-waste).

 Retrieved from

 http://news.163.com/photoview/3R710001/2186922.html#p=BPHFEMV33R71000
 1&from=tj_wide (In Chinese)
- Warren, M. R. (2001). *Dry bones rattling: Community building to revitalize American democracy*. Princeton; Oxford: Princeton University Press.
- Weber, L., & Hilfinger Messias. D. K. (2012). Mississippi front-line recovery work after Hurricane Katrina: An analysis of the intersections of gender, race, and class in advocacy, power relations, and health. *Social Science & Medicine*, 74(11), 1833-1841.
- Wenz, P. S. (1988). *Environmental justice*. Albany: State University of New York Press.
- Wetherell, M. (2013). Affect and discourse–What's the problem? From affect as excess to affective/discursive practice. *Subjectivity*, 6(4), 349-368.
- Williams, G., & Mawdsley, E. (2006). Postcolonial environmental justice: Government and governance in India. *Geoforum*, *37*(5), 660-670.
- Willis, P., & Trondman, M. (2000). Manifesto for "Ethnography". Ethnography, 1(1), 5-16.
- Winker, G., & Degele, N. (2011). Intersectionality as multi-level analysis: Dealing with social inequality. *European Journal of Women's Studies*, 18(1), 51-66.

- Wu, F. (2009). Environmental politics in China: An issue area in review. *Journal of Chinese Political Science*, *14*(4), 383-406.
- Wu, K., Xu, X., Liu, J., Guo, Y., & Huo, X. (2011). In utero exposure to polychlorinated biphenyls and reduced neonatal physiological development from Guiyu, China. *Ecotoxicology and Environmental Safety*, 74(8), 2141-2147.
- Wu, K., Xu, X., Peng, L., Liu, J., Guo, Y., & Huo, X. (2012). Association between maternal exposure to perfluorooctanoic acid (PFOA) from electronic waste recycling and neonatal health outcomes. *Environment International*, 48, 1-8.
- Wylie, A. (2003). Why standpoint matters. In R. Figueroa, S. Harding & S. G. Harding (Eds.), *Science and other cultures: Issues in philosophies of science and technology* (pp. 26-49). London; New York: Routledge.
- Xi, J. P. (2017). Secure a decisive victory in building a moderately prosperous society in all respects and strive for the great success of socialism with Chinese characteristics for a new era—Delivered at the 19th National Congress of the Communist Party of China. Retrieved from http://www.xinhuanet.com//politics/19cpcnc/2017-10/27/c_1121867529.htm (In Chinese)
- Xie, L. Z. (2016). Dangdai zhongguo de jieji huo jieceng jiegou (Class or stratification structure in contemporary China). *Shandong Social Sciences*, (3). (In Chinese)
- Xie, Y. F., & Ma, X. M. (2007). Problems and countermeasures on environmental inequality in the transboundary movements of hazardous waste. *Jiangxi Science*, (4), 438-441. (In Chinese)
- Xin, H., & Yang, J. (2014). The Struggle for survival: A case study of an environmental NGO in Zhejiang province. In Z. D. Hao & S. Y. Chen (Eds.), *Social issues in China* (pp. 281-289). New York: Springer.
- Xu, F. (2000). Women migrant workers in China's economic reform. London: Macmillan Press; New York: Sr. Martin's Press.
- Xu, M., & Kang, D. D. (2013). Huanjing zhengyi shiyu xia de shengtai wenming jianshe tanxi (Analysing the ecological civilization construction from the perspective of environmental justice). *Studies in Ideological Education*, (4). (In Chinese)
- Xu, Y. (2013). Labor non-governmental organizations in China: Mobilizing rural migrant workers. *Journal of Industrial Relations*, *55*(2), 243-259.
- Yang, G. (2005). Environmental NGOs and institutional dynamics in China. *The China Quarterly*, 181, 46-66.

- Yang, M. (2011). China's idea of "state-society" and the growth of China's experience. *Hebei Academic Journal*, (2). (In Chinese)
- Yang, Y. S. (2006, February 20). Guangdong Shantoushi Guiyu zhen: Dianzi laji zhen zoushang shuangyinglu (Guiyu Town in Shantou, Guangdong: The town of e-waste goes on a win-win road). *Renmin Wang*. Retrieved from http://politics.people.com.cn/GB/1026/4120686.html (In Chinese)
- Yao, H. (2013). The possibility of NGO autonomy during its cooperation with government: A case study of Shanghai YMCA. *Sociological Studies*, *1*. (In Chinese)
- Yin, Y. M., Zhao, W. T., Huang, T., Cheng, S. G., Zhao, Z. L., & Yu, C. C. (2018).

 Distribution characteristics and health risk assessment of heavy metals in a soil-rice system in an e-waste dismantling area. *Environmental Science*, 39(2).
- Ying, X. (2007). Grassroots mobilization and the mechanism of interest expression of the peasants group: A comparative study of four cases, *Sociological Studies*, (2), 1-23. (In Chinese)
- Young, I. M. (2011). *Justice and the politics of difference* (2nd ed.). Princeton; Oxford: Princeton University Press.
- Yu, J. R. (2009). Major types and basic characteristics of group event in today's China. *Journal of China University of Political Science and Law*, (6), 114-120. (In Chinese)
- Yu, X. (2014). *Pollution-induced contention in entrepreneurial rural China* (Doctoral dissertation). National University of Singapore.
- Yu, Z. B., & Yang, S. D. (2011). Woguo nongmingong weiquan NGO xianzhuang ji kunjing (The current situation and predicament of migrant workers' NGOs in China). Southeast Academic Research. (1). (In Chinese)
- Yuval-Davis, N. (2006). Intersectionality and feminist politics. *European Journal of Women's Studies*, 13(3), 193-209.
- Zavella, P. (2016). Contesting structural vulnerability through reproductive justice activism with Latina immigrants in California. *North American Dialogue*, *19*(1), 36-45.
- Zeng, X., Xu, X., Boezen, H. M., & Huo, X. (2016). Children with health impairments by heavy metals in an e-waste recycling area. *Chemosphere*, *148*, 408-415.
- Zerubavel, E. (2006). *The elephant in the room: Silence and denial in everyday life*. New York; Oxford: Oxford University Press.

- Zhan, X., & Tang, S. Y. (2013). Political opportunities, resource constraints and policy advocacy of environmental NGOs in China. *Public Administration*, *91*(2), 381-399.
- Zhang, C., & Gao, Q. (2014). The impact of rural-urban migration on gender relations of rural-urban migrant households in China. *Journal of Research in Gender Studies*, 4(2).
- Zhang, C. Y. (2013). *Transnationalizing intersectionality: Gender, class and heteronormativity in neoliberal China* (Doctoral dissertation). Retrieved from https://repository.asu.edu/attachments/114505/content/Zhang_asu_0010E_13245.p df.
- Zhang, J. J. (2011). A review of foreign environmental action. *Academics in China*, (9), 223-231. (In Chinese)
- Zhang, L. H. (2013). Cong xiandai renleixue dao houxiandai renleixue: Yanjin, zhuanxiang yu duilei (From modern anthropology to postmodern anthropology: Evolution, turn, and opposition), *Ethno-National Studies*, (6). (In Chinese)
- Zhao, D. X. (2006). *Lectures on social and political movements*. Beijing: Social Sciences Academic Press. (In Chinese)
- Zhao, Y. Z. (2015). Shengtai shehui zhuyi: xiangcun shiye de lishi wenhua yu shengtai yiyi (Ecological sociolism: Historical, cultural and ecological meanings of the rural perspective). *Tian Fu New Idea*, (6), 66-72. (In Chinese)
- Zheng, G. H. (2007). Shehui zhuanxing yu geti tongchu (Social transformation and individual pain). *Sociological Studies*, (2), 211-227. (In Chinese)
- Zheng, Y. N. (2016). Zhongguo jueqi: Chonggu yazhou jiazhiguan (The rise of China: Revaluating Asian values). Shanghai: People's Oriental Publishing & Media Co., Ltd. (In Chinese)
- Zheng, Y. N. (2018). Zhongguo de zhishi chongjian (The reconstruction of Chinese knowledge). Shanghai: Oriental Press. (In Chinese)
- Zhou, D. M. (2000). Wailaigong liudong yu eryuan shequ (The flow of migrant workers and the dual community), *Journal of Sun Yat-Sen University (Social Science Edition)*, (2). (In Chinese)
- Zhou, F., & Tan, M. (2017). Relationship between the central government and local governments of contemporary China (1st ed.). Springer Singapore: Springer.
- Zhou, N. (2004). Sinology or Sinologism. *Journal of Xiamen University*, (1). (In Chinese)

- Zhou, P. (2017). Gainian gongji: zhongguo zhengzhixue jiangou de guanjian (Conceptual supply: The key to the construction of Chinese political science). *Jianghan Tribune*, (11), 5-11. (In Chinese)
- Zhu, L., & Long, Y. H. (2012). Environmental justice in China: Problems and solutions. *Journal of Nanjing University (Philosophy, Humanities and Social Science)*, (1).

 (In Chinese)
- Zhuang, P. H. (2017, September 22). China's most notorious e-waste dumping ground now cleaner but poorer. *South China Morning Post*. Retrieved from https://www.scmp.com/news/china/society/article/2112226/chinas-most-notorious-e-waste-dumping-ground-now-cleaner-poorer
- Zuo, J. (2009). Rethinking family patriarchy and women's positions in presocialist China. *Journal of Marriage and Family*, 71(3), 542-5.

Appendix 1: Field Work Participants

List of local and migrant people at Guiyu interviewed and quoted (pseudonym)

Name	Gender	Age	Province	Occupation
Fei	Female	21-40	Sichuan	E-waste worker
Fu	Female	41-60	Guangdong	Village committee member
Hu	Female	41-60	Hunan	E-waste worker
Jiang	Female	41-60	Jiangxi	Former E-waster worker
Ju	Female	41-60	Sichuan	E-waste worker
Lin	Female	41-60	Hunan	E-waste worker
Liu	Female	41-60	Anhui	Individual practitioner
Min	Female	41-60	Hubei	Hotel cleaner
Nan	Female	41-60	Guangdong	Individual practitioner
Qi	Female	41-60	Guangdong	Street peddler
Qing	Female	21-40	Sichuan	Part-time worker
Song	Female	41-60	Sichuan	E-waste part-time worker
Sun	Female	41-60	Sichuan	E-waste worker
Xie	Female	41-60	Hubei	Hotel cleaner
Xing	Female	41-60	Sichuan	Individual practitioner
Yuan	Female	Over 60	Guangdong	None
Bao	Male	21-40	Guangdong	Village committee member
Bei	Male	21-40	Hubei	Former E-waste worker/
DCI				Security guard
Chuan	Male	Over 60	Sichuan	E-waste worker
Dan	Male	41-60	Guangdong	Governmental official
Dong	Male	41-60	Guangdong	Village committee member
Gong	Male	41-60	Hunan	Building worker
Gu	Male	21-40	Guangdong	Security guard
Guang	Male	21-40	Guangdong	Governmental official
Gui	Male	41-60	Anhui	Individual practitioner
ling	Male	21-40	Sichuan	Former E-waste worker/
Jing				Current security guard

Li	Male	41-60	Sichuan	Former E-waste worker/
				Current hotel security
Qiang	Male	41-60	Guangdong	Individual practitioner
Ren	Male	41-60 Sichuan	Sichuan	Former E-waste worker/
KÇII	Maic		Sichuan	Current hotel security
Shi	Male	41-60	Sichuan	E-waste worker
Wang	Male	21-40	Guangdong	Village committee member
Xu	Male	21-40	Guangdong	Elementary school principal
Zheng	Male	41-60	Guangdong	Village committee member
Zhong	Male	21-40	Guangxi	E-waste worker
Zhu	Male	41-60	Guangdong	Village committee member

List of other participants interviewed and quoted (pseudonym)

Name	Occupation
Zhao	ENGO founder
Henry	ENGO member
David	ENGO member

Appendix 2: Ethics Approvals

January 24, 2018

Dear Applicant,

Principal Investigator: Prof. Romand Coles

Student Researcher: Ye Zhang (Doctoral)

Ethics Register Number: 2017-247H

Project Title: A social and political analysis of female migrant workers in Guiyu,

Guangdong, China

Date Approved: 24/01/2018

Ethics Clearance End Date: 31/12/2018

This is to certify that the above application has been reviewed by the Australian Catholic University Human Research Ethics Committee (ACU HREC). The application has been approved for the period given above subject to submitting the approval letters to ACU HREC prior data collection.

Researchers are responsible for ensuring that all conditions of approval are adhered to, that they seek prior approval for any modifications and that they notify the HREC of any incidents or unexpected issues impacting on participants that arise in the course of their research. Researchers are also responsible for ensuring that they adhere to the requirements of the National Statement on Ethical Conduct in Human Research, the Australian Code for the Responsible Conduct of Research and the University's Code of Conduct.

Any queries relating to this application should be directed to the Ethics Secretariat (res.ethics@acu.edu.au). It is helpful if quote your ethics approval number in all communications with us.

If you require a formal approval certificate in addition to this email, please respond via reply email and one will be issued.

We wish you every success with your research.

Kind regards,

Kylie Pashley on behalf of ACU HREC Chair, Dr Nadia Crittenden

Senior Research Ethics Officer | Research Services Office of the Deputy Vice Chancellor (Research) Australian Catholic University