Uneven but not Combined Development: Rural Industrialization on the East Coast of China

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ABSTRACT

This article explains the uneven distribution of industrialized villages in China through the application of modernization theory and the theory of uneven and combined development. It adds to our understanding of China's unevenness by employing a 'bottom-up' approach, building on existing literature that focuses on national policies. We compare the economic and social consequences of industrialization in 13 villages in eastern China; these have been divided into three categories based on their level of industrialization. We demonstrate that the highest or lowest levels of industrialization either replace, or weaken, rural social contexts. However, semi-industrialized villages do not suffer from this social reformatting. Instead, 'guerrilla production' provides work opportunities for unskilled and fragmented workforces. These villages modernize while combining modern and traditional modes of production and social forms. Rural China's uneven development is therefore best described as a mosaic. In our opinion, this situation will persist for the foreseeable future. Villagers see the current social and economic circumstances as bringing benefits, meaning there is little reason to upgrade.

Keywords: China; modernization; rural industrialization; uneven and combined development; urbanization

INTRODUCTION

China has experienced an unprecedented level of development during the last 40 years; it has been rapid, but uneven. According to the World Bank, China's Gini coefficient saw the world's fastest rate of increase between 1980 and 2005 (Fan and Sun, 2013: 1). Subnational inequality leads to various problems; these include, for example, insufficient support for children and governance in rural areas (Murphy, 2009: 96–112), inadequate public services in urban areas (Zhou and Wang, 2016: 571–2), and the challenge it poses to the basic assumptions of 'socialism with Chinese characteristics'.

Since the 2000s, these problems have led the government to focus policies on alleviating economic polarization (CCTB, 2016). These efforts had some initial success in reducing regional inequality (Fan and Sun 2013: 15). But regional unevenness still exists—most notably between eastern, western, northeastern and central areas (see figure 1), and between rural and urban areas (see figure 2). Consequently, existing literature tends to focus on inter-provincial inequalities between regions (Chai, 1996:46;

Fan and Sun, 2013:2), and intra-provincial inequalities between rural and urban areas (Chen et al., 2018: 83). Intra-regional differences in rural China are under-researched.

Figure 1. Regional unevenness in China

China has four provincial groupings. 'Eastern China' contains 10 provinces: Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan. 'Central China' has 6 provinces: Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan. 'Western China' has 12 provinces: Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang, Shanxi, Gansu, Qinghai, Ningxia and Xinjiang. 'Northeast China' has 3 provinces: Liaoning, Jilin and Heilongjiang. Standard deviation is a statistical measure of dispersion obtained by extracting the square root of the mean of the squared deviations of the observed values from their mean in a frequency distribution.

Data source: National Bureau of Statistics of the People's Republic of China

Figure 2. Rural–Urban Income Gap

Data source: National Bureau of Statistics of the People's Republic of China

This article suggests that more attention should be paid to micro-units—in this case, villages.ⁱ Some villages have seen their populations decline, while others have experienced economic and demographic booms. This has led to identifiable disparities in rural China—within the same region. Below, we compare villages with different industrial levels on the east coast. We show that Chinese regional inequality has been distributed in a mosaic-like—rather than block-like—pattern in the post-reform period. Our findings thus contrast with previous studies, which tend to treat China's eastern coast as 'developed'.

Why does this inequality exist? According to the theory of uneven and combined development (U&CD), developing countries modernize unevenly, combining 'modern' and 'traditional' modes of production and social forms (Dunford and Liu, 2017: 83; Trotsky, 1936: 2–6). However, we argue that small, semi-industrialized villages exist in China's 'developed' eastern coastal areas. For the foreseeable future, these villages will not progress further towards a more uniform 'developed' status.

The dominant scholarly view is that regional inequality in China was mainly the result of development policies (Fan and Sun, 2013: 2–3). Since the 1980s, China's Tripartite Regional Development Policy has privileged coastal economies (Goodman,

2004: 318). This boosted capital investment (Fan and Sun, 2013: 2), and stimulated an export-led prosperity on the southeast coast (Chai, 1996: 57). However, the policy prioritized urban (and industrial) rather than rural (and agricultural) areas. Continued agricultural taxation depressed prices to support ailing state-owned industrial enterprises, resulting in low incomes and productivity in agricultural villages, and a human resource outflow towards the East (Chai, 1996:57).

However, the central leadership's intention was to allow growth in the East to diffuse throughout the country via a trickle-down effect (Chai, 1996: 46; Goodman, 2004: 318–19). Policies such as the campaign to 'Open Up the West' and 'The Rural Revitalization Strategy' were implemented. Both central and local governments sought to narrow regional gaps in development (Su, 2013: 93).

How, then, do we explain the persistence of unevenness, even after the implementation of these policies aimed at alleviating economic polarization? The existing literature returns to these policies to explain why this 'trickling down' did not occur. Financial aid and capital investment to less-developed regions were not effective enough (Dai, 2016: 268); there was a positive effect on their short-term economic growth, but usually little effect on regional productivity (Dai, 2016: 274). However, most research on regional inequalities, including interdisciplinary research (Wei, 2013: 17), has failed to take into account individual villagers. In our view, the mosaic-like developmental inequalities will not change for the foreseeable future, as described in Muldavin's research (1998: 290). Thus, we show that this mosaic-like development pattern is the result of a combination of 'top-down' factors (i.e., central government policies) and 'bottom-up' factors (the individual choices of rural villagers).

In the following section, we discuss our findings in relation to two theoretical approaches—modernization theory, and uneven and combined development (U&CD). After explaining our methodology, we then compare the economic and social consequences of industrialization across three categories of villages (industrialized, semi-industrialized and non-industrialized). We provide our analysis in the fourth section, where we offer three findings. In the final section, we summarize our findings and outline their theoretical relevance.

THEORETICAL APPROACHES

In this section, we will introduce two main theoretical perspectives, namely modernisation theory and its connection with Industrialization; followed by the theory of Uneven and Combined Development and how we apply this theoretical understanding in the case of China's development.

Modernization Theory and Industrialization

Modernization theory explains the transformation of countries from traditional to modern forms (Ntini, 2016: 56), across political, economic and social dimensions. These include industrialization, growth in per capita income, science and technology, bureaucratization, secularization, and urbanization. Nineteenth-century sociology set out a range of dichotomous types that distinguished between modernism and traditionalism (Bernstein, 1971: 144). Weber (1978: 514–23) characterized the Western Enlightenment model as modern and rational in the early 1900s; this was popularized by Parsons, and laid the foundation for the modernization paradigm. Lipset (1959: 72) believed that economic development drove the creation and consolidation of democracy. Rostow (1990: 4–10) argued that there were five stages of development that were shared by all states.

A critique of classical modernization theory is that it is 'Eurocentric'. There are doubts about the universal applicability of the Western developmental model (Krüger, 2009: 345), which embodied an oversimplified division between 'tradition' and 'modernity', and thus could not adequately explain the experiences of many developing countries (Cao, 2009: 9). China's development provides evidence for the limitations of Eurocentric modernization theories (Ntini, 2016: 64). Likewise, Cao argued that the Western path to modernization is not the only one (Cao, *ibid*.).

We argue that traditional and modern practices interact in the context of China's rural industrialization, where kinship networks remain important alongside modern management practices. Since business activities are embedded in society (Polanyi, 1944), we analyse the economic and social consequences of industrialization, and consider individuals and economic regulations to be embedded in ongoing interpersonal relationships (Granovetter, 1992: 4–6).

Our data groups villages according to their level of industrialization—we describe our definition and understanding of industrialization in the section covering our methodology below. Following industrialization, Fordism—characterized by the automatic assembly line, technical divisions of labour, continuous work, and the standardization of outputs (Scott, 1988: 173)—dominated from the 1920s to the 1970s in North America and Western Europe. Unskilled workers were integrated into the machinery of production; meanwhile, work tasks were fragmented and organized by Taylorist managerial strategies based on hierarchies and wages. As the Fordist paradigm became unworkable, there was a shift to Post-Fordism in the late 1970s. This entailed flexible, specialized production (Thursfield, 2017: 3–5). Labour-intensive manufacturing gave way to design-intensive and high-technology industries, as well as their associated phalanxes of input suppliers and dependent subcontractors, service functions and, most especially, business services.

However, we observed a special mode of production in China that had not been systematically analysed in the literature; we tentatively call this the 'guerrilla mode of production'. It is flexible, low-cost and does not require any value-added elements. Further discussion of this mode of production is provided below.

U&CD Theory and China

Modernization leads to the disparity of development, which then leads to the theory of uneven and combined development. U&CD theory holds that capital accumulation is uneven and combined. Trotsky (1936: 37) supposed that transition states (such as Russia) were neither converging with more developed capitalist states, nor simply stagnating. Modernized countries were integrated into the world economy; while they had achieved some degree of capitalist industrialization, they also embodied resilient, so-called 'backward' forms (Popkova et al., 2017: 130).ⁱⁱ But different modes of production existed simultaneously within particular social formations. Diverse combinations of 'advanced' and 'backward', 'new' and 'old', 'modern' and 'traditional' forms spread across economic, political and cultural dimensions, and were associated with multilinear development and geographical divergence (Dunford and Liu, 2017: 72).

Scholars of U&CD argue that uneven development occurs due to market forces. For example, modernization results in uneven regional development both among and within different countries. China also experienced disparities between the rustbelt and sunbelt, similar to the experience of the United States. Hardy clearly indicates that the world market is composed of competing and not coherent blocks, within which different driving forces (for instance political, economic and military) engage, negotiate, and confront one another (Hardy, 2017: 191). Wade (2004: 172–4) discusses the 'sticky zone'—countries and regions with continuously high levels of real income, which companies are unlikely to leave in search of lower wages. In the self-reinforcing circle

of high incomes and innovation, early innovators have an advantage over late developers, leading to disproportionate benefits and, finally, unevenness, which serves to entrench inequalities. According to Arrighi et al. (2003: 18), industrialization for most countries turned out to be an ineffective means of economic advancement.

Despite China's impressive economic development and rapid urbanization (see figure 3), a significant number of rural villages exist in China. According to official statistics, there were 2.617 million 'natural' villages in 2016.ⁱⁱⁱ In addition, a widening rural–urban gap has emerged (see figure 2) (Chen et al., 2018: 84).

Figure 3. Urbanization in China

Data source: National Bureau of Statistics of the People's Republic of China

When we consider specific cases rather than general statistics, we see that development within rural regions is more uneven than that between 'advanced' villages and small cities. Industrialization disproportionately contributes to income inequality within rural areas. In the 1980s, for instance, the real income of rural residents in Jiangsu Province continued to grow at an annual rate of 2.3% between 1984 and 1989, while real national per capita rural income did not grow at all (Scott, 1994: 373). Intraregional inequality, and the gap between eastern, central and western regions, constituted around 32–33% and 18–24% respectively of the total inequality in 2013. The situation is worse within the centre and west than in the east (Wu et al., 2017: 795). Essentially, rural villages have developed unequally.

The economic gap has induced massive migration from inland to coastal regions, the largest flow of rural-to-urban migration in the world (Zai, 2016: 456), as well as intra-rural migration. The total number of peasants working in the industrial and service sectors was 286.52 million in 2017, including 171.85 million who had left their rural hometowns for work. Among these 171.85 million migrant rural workers, 34.75 million had relocated to other rural areas rather than to cities (NBS, 2017). Following the literature, while it is clear, then, that China's development is uneven, we argue that uneven development will not follow Trotsky's law of combined development (Hardy, 2017: 191 quoting Trotsky, 2008: 4–5).

RESEARCH SETTING AND METHODOLOGY

In this section we will firstly explain our definition, and measures of, industrialization. We also provide our classification on the industrial level of our selected villages. We then provide an explanation of the study area and methodology of data collection.

Definition and Measurement of Industrialization

There are three main approaches to defining and measuring industrialization, based on economic, spatial and social factors. According to the economic approach, industrialization is a process of structural change in which the manufacturing and service sectors have an absolute advantage over agriculture (Grübler, 1994: 43). In this case, existing studies tend to estimate the degree of industrialization using the share of industrial value-added in a country's GDP (Lin et al., 2009: 342), and the employment structure (Long et al., 2009: 456). As we focus on individuals through a bottom-up approach, this article takes employment in industries as the first cluster of economic indexes, including 'the scale of employment', 'the salary level and income structure of workers', and 'the flexibility of employment'.

The economic approach is also attentive to developmental processes and stages, which can be considered the second cluster of indicators. The first stage (after agriculture) entails industrial upgrading, meaning that industrialization is measured according to the level of mechanization, automation and technical production (Huang, 2018: 87). Unlike most existing literature, which evaluates industrial upgrading on the basis of economic factors (Yu and Zhang, 2015), this article pays more attention to the influence of individuals. We use four subdivided indicators: 'main industry', 'mechanization level', 'production chain length', and 'skill requirements', which are closely related to the villagers' employment.

Industrialization can also be discussed spatially. Since industries usually gather in cities (Krugman, 1980), urbanization rates (Huang, 2018: 34) or urban population sizes (Long et al., 2009: 456) are taken as an index for industrialization. However, in this article we pay particular attention to rural industry. Bramall identified rural industrialization in China as a process of achieving manufacturing skills and capital (Bramall, 2007: 5–7). This is a typical way of analysing industrialization not only in China, but also in Asia (Felker, 2003). We are concerned with the modernization of local life, rather than where, and how, villages gain skills or investment. This leads us to use 'land and demographic transformation' (i.e. whether rural land has been

transferred to the state, and whether villagers have become classed as urban residents) and the 'scale of migration in a village' as indicators.

Third, the social structure in a village is an important aspect of industrialization, too. The dichotomy between rural and urban social structures has been described by Tönnies (2017[1988]: 15–21) and Durkheim (2014[1893]: 27–30). Villages are 'communities' with mechanical solidarity, that depend on a common livelihood and are ruled by custom. On the other hand, cities are 'societies' with organic solidarity: they depend on the division of labour and are governed by rule of law. The interpersonal relations between villagers change from being characterized as a 'community' to being a 'society' during industrialization. Therefore, we use residents' 'social network'—i.e. whether they relate to one another through kinship ties or workplace roles—as an indicator of social structure. The above indicators of industrialization are presented in table 1.

Economic Index	Employment	The Scale of Employment			
		The Salary Level and Income Structure of			
		Workers			
		The Flexibility of Employment			
	Process & Stage	Main Industry			
		Mechanization Level			
		Production Chain Length			
		Skill Requirements			
Spatial Index	Land and Demographic Transformation				
	Scale of Migration in a Village				
Social Index	Social Network				

Table 1. Rural Industrialization Index

Classification of the Villages Based on Industrialization Level

In this section, we discuss how and why we have, using the above indicators, classified the villages into three types. The necessity of dividing the villages into three types is due to the diversity of villages in rural China. Prior to the 1980s, villages in China differed only in terms of income. Some villages, with better natural resources, might have had bigger harvests. Some might have earned less, producing various goods by hand. But all of them relied mainly on agriculture, and none of them employed machine production or specialized labour in factories. But in the 1980s, rural

industrialization intensified in China, and villages became differentiated according to their level of rural industrialization, rather than agricultural development. New industrial occupations were available to villagers, while older forms of agricultural work became less economically viable.

This led to both a widening income gap and an influx of rural-to-urban migration, which we have discussed above. Finally, Township and Village Enterprises arose in the Southeast, and rural industrialization brought with it new modes of production and labour divisions. In addition to their kinship identities, villagers could be separated into employers and employees. Therefore, classifying villages on the basis of their industrialization level is the best way to explore rural China's unevenness.

We employ three categories because villages can be subdivided on the basis of their industrialization level. Semi-industrialized villages with 'backward' industries are different from agricultural villages. Yet they are also different to industrialized villages with large enterprises and big machines. The 'semi-industrialized' concept was first proposed by Nan-sheng Peng to describe the combination of hand-assembly and machine production. Compared with simple hand-assembly in family-owned facilities, industrialized market sensitivity, specification standards and product quality were superior (Peng, 2003: 98). However, while Peng studied the form of production, we focus on the village itself and the lives of villagers.

Our first category consists of 'industrialized villages'. Since the mid-1990s, rural industries have expanded the scale of their production using machines and modern methods of enterprise management. This results in spatial urbanization, and two tiers of industrialized villages. The first has higher production levels and more migrants and has completed urbanization earlier than the second tier. However, the local residents of both tiers live on salaries from factories, rental properties, or the profits of collective land rent rather than farming.

The second category consists of 'semi-industrialized' villages. These have smallscale manufacturing and offer a limited range of occupations with minimal requirements and maximum flexibility. There are farm fields in these villages, the geographical landscape of which is very different from industrialized villages. Farming and manufacturing activities are combined together. What's more, while industrialized villages experience a migrant inflow, and non-industrialized villages suffer a population loss, in semi-industrialized villages, local labour-intensive industries absorb a settled population.

The third category consists of 'non-industrialized' villages. These are villages that never industrialized; agricultural products are sold there at a price that allows for little more than supporting a household's livelihood. Cultivation is done by the family unit, rather than machines as on a commercial farm. Young and middle-aged rural residents leave these villages for cities and head to eastern China in search of better salaries, leaving their children, married women and elderly parents in the countryside (Wu and Ye, 2016: 66).

Study Area and Case Selection

We chose 13 villages, with varied levels of development, along China's most developed region—the east coast—to serve as case studies. These were composed of first- and second-tier industrialized villages, as well as semi-industrialized and non-industrialized villages (see figure 4). Each village was selected using a rational sampling method, guaranteeing that the sample is representative and covers different levels of industrialization.

Figure 4. Sample Locations

Names of the villages/towns/cities:

I1-Changan-Dongguan, I2-Gaobei-Longyan, I3- Zhuao-Taizhou, I4-Zhoushi-Kunshan, I5-Caoqiao-Xinyi, I6-Dagang-Yancheng, I7-Baigou-Gaobeidian, S1-Qiaoguan-Weifang, S2-Yaoshan-Baoding, S3-Gongshan-Huizhou, S4-Jiaowei-Putian, S5-Hangbu-Quzhou, N1-Puyang-Baoding

Cities along the east coast were selected that had an average level of economic development. Kunshan, in Jiangsu, was selected as an extreme example—essential for this study, because our aim is to capture the disparities within rural China (see figure 5). Third, an accessible town was selected from every selected city, and a standard village was chosen in the town.^{iv} Two towns were selected from Baoding, in order to prove that villages lying close to each other could fall into different categories of industrialization.

Figure 5. Distribution of Regional Gross Domestic Product

Data source: National Bureau of Statistics of the People's Republic of China. Statistics Bulletin of the National Economic and Social Development of Dongguan, Longyan, Taizhou, Kunshan, Xinyi, Yancheng, Gaobeidian, Weifang, Baoding, Huizhou, Putian, Quzhou, 2019.

Data Collection

Data was collected in a number of ways, including in-depth interviews and focusgroup discussions with various stakeholders. Questions covered the land and industries in the village, as well as the employment status, livelihood, intergenerational relations, and migration preferences of the villagers. A total of 13 villages^v were surveyed over five years (2016 to 2020 inclusively); primary data was drawn from nine villages.

We collected data for a report on urbanization for the National Development and Reform Commission,^{vi} and explored the pilot regions, Hebei and Jiangsu Province, in August of 2016. Six cities in Jiangsu, and five cities in Hebei, were investigated during the evaluation, including I₅ and I₇. We returned to Hebei and Jiangsu again in 2017, investigating I₆, S₂ and N₁. Then we stayed in S₁, in Shandong Province, for 10 days in January of 2018. In October of 2020, we visited S₃, in Guangdong Province. And in December, we researched S₄ in Fujian and S₅ in Zhejiang, conducting interviews both face-to-face in Beijing and over the phone.

Analysis of I₁, I₂, I₃ and I₄ was mainly based on secondary sources. These were verified by interviews and participant observation, and contextualized with information provided by the government, the media and other publicly available records and material.

COMPARING INDUSTRIAL OUTCOMES

In this section, we carefully compare the fieldwork data. We classified the data into three tiers, according to the villages' different levels of industrialization.

The First Tier: Industrialized Villages Focused on IT Manufacturing

The dominant industries, industrial outputs and modernization levels are diverse in industrialized villages. In 1995, a big electronics company constructed a facility in I₁. Since then, the IT industry has been dominant there. The main electronics company employs more than 20,000 workers in five factories, and always advertises for workers under 35 years of age. I₁ already had approximately 3,800 local residents, and 80,000 migrant workers, in the early 2000s.^{vii}

I₁ experienced an administrative transformation in 2004, when the villages were classified as 'urban'. After this rural-to-urban transformation, rural residents became urban residents in a statistical sense. Land that was classed as community-owned was then nationally owned, and collective enterprises became joint-stock enterprises. Villagers thus became shareholders, with residents in I₁ benefiting from share bonds. In 2004, every local villager shared 1,000 *yuan* (CNY) per month. That same year, the national average income of every resident with a rural *hukou* (residence permit) was 3,026.6 *yuan* per year.^{viii} The village industries and migrant workers that they attract are important for the residents; when the local government tried to upgrade their industrial structure in the 2010s, some of the villagers lost tens of thousands of *yuan* in rental income.^{ix}

I₄ was undeveloped until 1997,^x when 'backward' industries were encouraged to transfer there by the offer of interest-free loans. For instance, a brick and tile factory managed by a local villager turned into an electronics factory, which employed more than 300 workers in 2013. In summary, more than 60 residents were successfully supported in setting up their own companies.

Like I₁, local residents in I₄ have diverse sources of income. First, they share in the rent of 25,000 square meters of factories built by the village. Second, most of the local villagers rent rooms—received as compensation when previous residences were demolished—to migrant workers. Third, there is an abundance of employment opportunities.^{xi} Both the large populations in I₁ and I₄ live and work in a 'modern' way, being connected to each other through the division of labour, rather than through kinship.

The Second Tier: Industrialized Villages Focused on Traditional Manufacturing

The second tier also consists of industrialized villages; these are distinguished from the first tier by their surplus land, dominant industries, the scale of migrant workers, and their level of income. Unlike in I₁ and I₄, the supply of land for rural construction is still adequate in I₂, I₃, I₅, I₆ and I₇. They have been less eager to upgrade to hightechnology or capital-intensive industries, and thus have fewer employment opportunities and inward migration than in the first tier. For instance, compared with the one big company in I₁, which had 20,000 workers, an industrial park in Gaobei Town in 2015 had only 4,000 employees in 25 companies. As for the villagers, demolitions and the reshaping of rural construction and land result in large one-off payments, but these are not ongoing sources of income.^{xii} Rental income is also limited because of the smaller number of migrant workers.

Nevertheless, industrialized factories in second-tier villages provide jobs that can satisfy the employment needs of surrounding villages. One of the distinctions between industrialized and semi-industrialized villages is whether they have migrant workers, which depends on the number and size of the factories.

The other key differences between industrialized and semi-industrialized villages concern the part-time employment of the elderly and women (see table 2). Older residents are excluded in industrialized villages, because of skills requirements and time demands. The male population over 60 years of age, and women from around the age of 50, usually stay at home.^{xiii}

Semi-Industrialized Villages with Low-Skilled Factories and the Hand-Assembly of Goods

 S_1 and S_2 are semi-industrialized villages that started to industrialize in the 1950s. Beginning with collective factories, each factory in S_1 hired two or three workers during the period of analysis. Presently, four wood-panel factories, one plastics factory, one foundry and one radiator factory exist in the village.^{xiv} In S_2 , the first collective facility for producing sausage-skins was established in the 1950s. Dozens of factories were built in the following years, and most families had workshops in their homes. While S_1 uses machines, S_2 is dominated by hand-assembly.^{xv} But the factories in S_1 and S_2 are not technologically advanced. The unskilled work that features in semi-industrialized villages is one of the key characteristics differentiating them from industrialized villages.

Besides S_1 and S_2 in the north along the coast, we find another three semiindustrialized villages (S_3 , S_4 and S_5) in southeast China. S_3 is located in Huizhou, bordering Dongguan, where I_1 is located. The main industries in S_3 also include electronics. But these are very different from the electronics industries in I_1 . The socalled 'electronics factories' in S_3 are workshops in the villagers' homes, similar to the workshops in S_2 . These workshops have no machines. In fact, their business is usually a work-stage of the production in I_1 . For instance, soldering a tin point onto a mainboard is the only business for a factory in S_3 , which hired six regular workers and two parttime workers during the fieldwork period. They receive orders from big factories in nearby cities, which need to contract out some tasks during busy periods.^{xvi} Besides the electronics factories, there are also other processing factories in S₃, such as logo printing, which is also just one step in a longer production process.^{xvii} Compared with S₃, the production types are simpler in S₄ and S₅. Most of the workshops make shoes in S₄, while fruit-packing is the main work in S₅. The industries exist in family workshops, hiring a dozen fellow villagers both in S₄ and S₅.^{xviii}

The unskilled jobs of semi-industrialized villages comprise one of their defining features. In S₁, local older residents and women were excluded by the plants until the assembly lines had been built up. The division of work diminishes the difficulty of some procedures, offering opportunities for unskilled labour, which also has irregular working times. Elderly workers over 60, and women who look after children, can thus be involved in the labour market.^{xix} In S₂, villagers usually collect raw materials from factories, make the product at home, and sell them back each week.^{xx}

Likewise, in the electronics factories in S_3 , training for the workers only takes ten minutes. The machines can easily be handled by workers of all ages and genders in S_3 , S_4 and S_5 . ^{xxi} After full employment of villagers had been achieved across a wide range of age and gender groups, family income improved.^{xxii} The social effects following on from this are discussed below.

Another characteristic of semi-industrialized villages is the lower number of migrants. This is due to the limited number of jobs offered by the small factories. Each factory employs around 10–30 workers on average.^{xxiii} While none of the villages from S₁ to S₅ have suffered massive population outflows, they cannot recruit from surrounding villages. Migrant workers are excluded as a result of the economic and transition costs for outsiders.^{xxiv}

This is similar to the 'traditional community' that Tönnies (2017[1988]:15–21) described, although there are differences. First, the industries are embedded in their small-scale kinship networks. Most of the part-time workers in S₃ turned out to be the relatives of regular workers or factory owners.^{xxv} Second, the kinship network is reshaped in a modernized way under the conditions of labor division. For instance, a mother who works in her son's factory will be paid.^{xxvi} The relationship between traditional networks and the broader production chain will be discussed below.

Non-industrialized Villages that Rely on Agriculture

Although the non-industrialized villages are not the focus of this article, they comprise the majority of villages in rural China. N_1 is a traditional village without any

modern industry. Its agricultural products are corn and wheat, which are not planted on an industrial scale. Basic subsistence was the main aim of N_1 residents until the 1990s. Villagers began growing strawberries and tomatoes in greenhouses as the demand for fruit from surrounding cities increased.^{xxvii}

This led to an increase in agricultural income, but without any new job creation. Fruit and vegetable planting is organized in family units. This led to a higher family income than grain crops alone, but one that is lower than the combined salary of two workers in a developed region.

Fruit and vegetable planting in N_1 differs from the fruit industry in S_5 in two ways. First, the strawberries and tomatoes supplement corn and wheat in N_1 and the surrounding villages and are not planted on an industrial scale. Second, while the villagers in S_5 packed fruit themselves, and transported it to the final market, villagers in N_1 sold strawberries and tomatoes at the village market to middlemen at a much lower price. The income could satisfy elderly villagers, who took care of grandchildren while their parents went to work in nearby cities.^{xxviii} Table 2 lists some of the characteristics of the different types of villages.

Table 2. Comparison of the Three Types of Villages

Salaries vary according to the position held in the production lines in different factories.

Туре	Industrialized		Semi-Industrialized		Non-Industrialized
Case	First-tier: I ₁ I4	Second-tier: I2 I3 I5 I6 I7	S 1	S ₂	\mathbf{N}_1
Economic Pillar	IT manufacturing	Traditional manufacturing	Wooden panel production	Sausage skin production	Greenhouse agriculture
Mechanization	Big machine	Machine	Machine	Handicraft	None
Production Chain	The widest	Wide	Narrow	Narrowest	None
Employment Scale (Plant)	Thousands	Hundreds	Dozens	Dozens	None

Salary Level for Workers	4000–6000 CNY/month	2500–5000 CNY/month	3000– 7000 CNY/mo nth	2000–5000 CNY/month	None
Main Income Sources for Local Residents	Shares, rent, salary	Compensation, salary	Salary, harvest	Salary, harvest	Harvest
Migrant Scale	Over ten thousand	Thousands	None	None	Negative
Skill Demands	Highest	High	Lowest	Lowest	Low
Flexible Employment	None	None	Yes	Yes	None
Land Transformation	Completed	Proceeding	Beginnin g	Beginning	None
Demographic Transformation	Local urbanization	Nearby urbanization	Combine d	Combined	Migrants
Main Network of Residents	Labour division	Labour division	Kinship ties	Kinship ties	Kinship ties

THREE FEATURES DRAWN FROM THE COMPARISON

From the above discussion, we can see that semi- and non-industrialized villages have not undergone the same development process as industrialized ones. However, this finding does not completely explain why semi- and non-industrialized villages lack strong motives to industrialize further. We address this issue below.

Flexible Fordism and Guerrilla Production

According to modernization theory, Fordism entails mass, standardized production. Post-Fordist production is flexible and specialized and involves design-intensive and high-technology industries. However, we found that the allocation of labour and industrial production in semi-industrialized villages was quite flexible, although not specialized. For instance, in S₁, wood production was divided into five steps, each with its own workers. Casual labourers are required since full-time workers periodically ask for temporary leave, which is not acceptable in big Fordist factories. The situation is similar in the other four semi-industrialized cases. The informal and flexible workers in villages S₁ to S₅ are paid for each product. They choose to work in small, nearby workshops rather than big factories. Such jobs are more flexible and allow workers, especially female workers, to obtain extra income and spend time with their families.^{xxix}

This flexible employment is possible because rural workers can reduce their transaction costs in small-scale kinship networks. According to our interviewees, villagers know exactly who is unemployed at home, who is cultivating their field, and which factory lacks workers. At festival gatherings, factory workers on the same production lines communicate about which factories offer the highest wages, and which jobs are the easiest. Managers also have WeChat groups for exchanging job-related information.^{xxx}

Besides employment, production in semi-industrialized villages is also highly flexible. Their factories can be easily shut off in response to price fluctuations or environmental protection measures.^{xxxi} We use environmental protection as an example to explain the 'guerrilla mode of production'. A substantial implementation gap exists in environmental policy. We observed that factories close when pressure from the central government is high, and re-open when it relaxes. The fixed costs are very limited; cash flow is the highest cost for these factories. The lower the fixed costs are, the easier they are to avoid. The factories in villages S₁ to S₅ are able to adopt the guerrilla production mode, as none of them depend on big machines, and most of them are family workshops. In addition, they can easily call back their workers, since all of them are local villagers. In these villages, it is kinship and family ties that keep low-level industrialized production functioning. We will discuss the combination of tradition and modernization below.

Combining Tradition and Modernity During Modernization

As modernization theory explains, both tradition and modernity are composed of diversified elements that coexist with, and even supplement, each other. Industries in semi-industrialized villages combine tradition with modern modes of production. The management of plants follows an indigenous logic combined with Fordist systems (such as assembly lines and piecework payment). Temporary jobs are criticized in the literature as entailing low incomes, sexism, lack of security and so on (DuRivage, 2016: 11). But we find that workers in villages S_1 to S_5 receive the same wages for their

finished products as full-time workers. The salary for the workers may be paid twice a year. The factory owners are also willing to pay in advance if workers need to hold a wedding, for example.^{xxxii} Neither formal staff nor temporary workers sign labour contracts with the factory. When there are disputes, parties typically first seek mediation by a mutual friend instead of going to court. Someone who cheats workers will be known, and remembered, by the whole village for a long time.^{xxxiii}

Meanwhile, villages are characterized by an intensive mixture of agricultural and non-agricultural activities. Despite the industries' blurring of rural–urban boundaries, villagers always identify themselves through their kinship connections, rather than through job-based relationships. In S4, even workers who are not in real kinship relations refer to one another as though they are. And workers emphasize the emotional relationships between the managers and employees when explaining how they came to be employed in the first place, and their time spent working overtime.^{xxxiv}

Kinship network restraints not only protect casual workers, but also benefit factory owners. Unlike the large-scale migration inflow to industrialized villages, residents in semi-industrialized villages participate in long-established communities and seek long-term equilibrium. Usually, local workers seek to do managers favours, while outsiders weigh things up at each and every turn.^{xxxv}

Finally, the involvement of older villagers in rural industries affects intergenerational and family relations. Family income from agriculture cannot be divided, as the whole family plants and harvests together. However, every family member working in a factory receives their own salary. With a salary, the older villagers in semi-industrialized villages are respected by family members, rather than looked upon as deprived elderly people (which is the case in non-industrialized villages). These work opportunities improve the time-value of grandparents, enabling them to bargain when they are asked to look after their grandchildren.^{xxxvi}

In addition, women are able to have more job opportunities. An interviewee in S_3 was quite proud when she received her first bank card. After she married, she did not work until factories were established near her home. Her salary not only improved her position in the family, but also increased her confidence and social status.^{xxxvii} Even in families that can be supported entirely by the husband's salary, a separate income is important. Women no longer need to ask for extra money from their husband to buy a toy for their children, or new clothes for themselves.^{xxxviii}

The findings from our interviewees indicate that in China, as a country in the process of economic and industrial transformation, traditional social strata have been impacted by neoliberalism. According to Anagnost, Chinese social stratification is now determined by 'monetary capacity', which contrasts with the socialist understanding of 'class' (Anagnost, 2008 497-98). We argue that, especially judging from our interviewees' responses in the semi-industrialized villages, 'monetary capacity' also empowers individuals, be they elderly grandparents or housewives. The hierarchy of the traditional kinship structure has given way to a familial hierarchy which depends more on the financial capacity stemming from income. There is a very pragmatic reason for elderly villagers to be respected more, in the family, if they have monetary capacity. Many villagers were asked to sell their collective land rights, on transferring to an urban hukou, receiving a one-off lump-sum as compensation (Chuang, 2014: 662). That lumpsum compensation is usually given to their children or grandchildren, to buy apartments in the county or pay for their marriage, rather than kept by elderly villagers. xxxix Therefore, elderly villagers still need some income from the factories to gain 'sustainable respect' in the family and community.

The combination of tradition and modernization has clear social benefits for the more vulnerable residents of semi-industrialized villages. But this alone cannot explain the continued existence of 'backward' industries. Therefore, we will now turn to discuss barriers to industrialization.

Steady Semi-industrialization in an Uneven China

The above findings can advance modernization and U&CD theory by offering a view of the geographical disparities within rural China. We outline these specific contributions here. According to modernization theory (Rostow, 1990: 4–8), rural China is unevenly divided when it comes to modernization. Non-industrialized villages remain at a 'traditional' stage of social development, while semi-industrialized villages are at a transitional stage, having the 'preconditions for take-off' while also beginning to actually 'take off'. The second tier of industrialized villages remains at the 'take-off' phase, while the first tier of industrialized villages is in the 'drive to industrialization' period. But we have found that even villages which are close to one another can fall into different categories of industrialized village located in the same city, and are only 5.5 kilometres away from each other. I₁ and S₃ are an industrialized village and a

semi-industrialized village located in two adjacent cities, both with electronics industries.

Second, according to U&CD theory, these divisions remain because progress to industrialization is tough and protracted. Most of the residents in semi-industrialized villages, except young villagers aged under 30 years, lack a strong desire to move to big cities or industrialized villages. They expressed satisfaction with the jobs in their hometowns, which had adequate salaries that were similar to those of unskilled workers in more industrialized villages/cities.^{xl} Villagers preferred working in their hometowns, not only because they could take care of their families, but also because they could save more money without having to pay additional accommodation costs. Besides, life as a migrating peasant worker was usually tough, without social networks, social security, or unemployment insurance (Pun et al., 2010:145).

Although the villagers did not want to migrate to industrialized areas, they would be happy to see their hometowns become more industrialized. However, factory-owners in semi-industrialized villages lacked the capacity and willingness to transform. There are two obstacles to expansion or upgrading. First, the market for low value-added products is limited, while upgrading requires sustainable funding (Lee, 2013: 196). The owners preferred to avoid risk and remained satisfied with their current profitability.^{xli} Even though one young owner expressed admiration for the big factories, he admitted that there was little opportunity for him to upgrade to that level.^{xlii}

Moreover, becoming an industrialized village means that more and more land should be transferred from the village to the state. Individuals are deprived of land ownership in China; as Peck and Zhang explain, 'by separating usage rights from ownership, pragmatic leaders effectively legitimised the transfer of land for commercial usage in the absence of de jure privatization' (Peck and Zhang, 2013: 372 cited in Bieler and Morton, 2018: 164). Nevertheless, villages have collective ownership of land usage (Li, 2008: 282–3). Cai has explained that peasants resist the state's confiscation of their collective land ownership because of inadequate compensation (Cai, 2003: 663). In the semi-industrialized villages, the one-off payments for land transformation are much lower. An interviewee told us that 'I would rather keep my factory, which cost a lot to build. It is a waste to tear it down. I could rent it to my neighbour even if I quit because of the low price of my production.'x^{liii} Thus, while becoming an industrialized village might entail increases in the salaries of villagers over the following decade, on the other

hand, the upgrading might fail, too. Individual villagers would certainly not want to give up on their short-term benefits while waiting years for salary increases that may or may not come. Besides, our findings differ from Cai's: we show that villagers have relatively more negotiation power than was found in Cai's earlier research (Cai, 2003: 663).^{xliv}

As a result, there is little motivation or capacity for semi-industrialized villages to undergo further industrialization. Thus, the spatially uneven development within rural China is geographically distributed in a mosaic-like pattern, rather than in blocks. This mosaic-like pattern will be sustained, as a balance has been reached.

CONCLUSION

This research seeks to understand the complex course of modernization in industrializing states; it focuses on the case of China within the theoretical framework of modernization theory and U&CD theory. The investigation focuses on rural differences existing in China's eastern coastal areas, which have, to an extent, been ignored by scholars. It compares 13 villages that have been divided into three categories: two tiers of industrialized villages, along with semi-industrialized villages and non-industrialized villages. These distinctions have been made on the basis of economic and social features, allowing us to explore the consequences of different levels of industrialization.

This comparison is made to bridge the two divergent views on the consequences of industrialization. We have demonstrated that the highest or lowest levels of industrialization will either replace or weaken traditional rural social features, while semi-industrialized villages do not suffer this social dislocation. Instead, semi-industrialized villages modernize with a combination of 'modern' and 'un-modern' modes of production and social forms. Rural small-scale and labour-intensive industries give vitality to these villages by offering occupations for unskilled and part-time villagers. Conversely, rural industries are embedded in the social configuration of rural communities and are supported by flexible local labour markets. This kind of rural industry does not only exist in our 13 cases, but also in many Taobao villages, ^{xlv} which means our conclusions could explain a greater range of factors.

Three conclusions can be drawn from this comparison. First, low-skilled factories in semi-industrialized villages employ guerrilla-style production modes and flexible employment. Low-skilled factory owners benefit from kinship networks within villages, allowing them to secure temporary labour. Second, young villagers still seek to migrate to bigger cities for better marriage and work opportunities. But villagers with families showed less willingness to migrate. In semi-industrialized villages, some low-skilled factories can sustain villagers' needs and accommodate their familial responsibilities. The overall income difference between those working in the cities and those working in their home villages, according to our interviews, is not great. Third, these semiindustrialized villages will remain as such; they will contribute to the mosaic of China's rural industrialization, meaning that comprehensive industrial transformation will not fully penetrate the coastal, 'developed' areas of China. It should be noted that if there are non-industrialized pockets embedded even in these provinces, then the situation in central and western China may be even more stark. Finally, uneven development in China is due not only to the government's (top-down) policies, but also to the 'bottomup', practical considerations of local agents. As we have found, factory owners in semiindustrialized villages do not, given their limited motivation and financial ability, upgrade their factories. Therefore, different rural industrialization patterns are simultaneously maintained in different regions; it is not the case that one pattern dominates a particular region, or indeed the whole country.

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ⁱ The existing literature focuses on counties as micro-units (He et al., 2017).

ⁱⁱ Here, we use the term 'backward' in the sense employed in U&CD literature, rather than in any detractive sense.

ⁱⁱⁱ Natural villages are clustered human settlements without government structures. See:

http://www.mohurd.gov.cn/xytj/tjzljsxytjgb/tjxxtjgb/201708/t20170818_232983.html (accessed 22 December 2019).

iv These administrative units are arranged in a hierarchy in the PRC, progressing upwards from the level of 'villages', to 'towns', 'cities' and 'provinces'.

^v The cases have been designated according to their categories. Industrialized villages are marked 'I', semi-industrialized villages are marked 'S', and the non-industrialized village is marked 'N'.

^{vi}The document is available at: http://www.gov.cn/xinwen/2016-10/14/content_5119018.htm (accessed 22 December 2019).

^{vii} Data source: http://jiuban.moa.gov.cn/fwllm/jjps/200511/t20051122_499163.htm (accessed 22 December 2019).

^x The area where I₄ is located had developed in the 1980s. See Lee (2011: 6–10).

^{xi}Data source: http://kszsz.jszwfw.gov.cn/art/2018/7/25/art_159577_15960.html (accessed 22 December 2019).

xii Interview: I5A1, government staff, Jiangsu, 2 September 2016.

xiii Interviews: I2V1, Villager, *Fujian*, 7 December 2018 (on phone); I6V2, Villager, *Jiangsu*, 3 October 2017.

xiv Interview: S1A1, Village cadre, *Shandong*, 15, 17, 25 January 2018.

^{xv} Interview: S2B1, Factory-owner, *Hebei*, 29 January 2017.

^{xvi} Interview: S3B1, Factory-owner, *Guangdong*, 31 October 2020.

xvii Interview: S3B2, Factory-owner, Guangdong, 1 November 2020.

^{xviii} Interview: S4V1, Villager, *Fujian*, December 2020; S5V1, Villager, *Zhejiang*, 7 December 2020 (on phone).

xix Interview: S1V3, Worker, Shandong, 22 January 2018.

^{xx} Interview: S2V2, Worker, *Hebei*, 28 January 2017.

xxi Interview: S3V1, Villager, S3B1, Factory-owner, Guangdong, 31 October 2020. S3B2,

Factory-owner, Guangdong, 1 November 2020. S4V1, Villager, Fujian, December 2020.

S5V1, Villager, Zhejiang, 7 December 2020 (on phone).

^{xxii} Interviews: S1V1, Villager, *Shandong*, 18, 19 January 2018; S1V2, Villager, *Shandong*, 20, 21 January 2018; S1V3, S1V4, Workers, *Shandong*, 22 January 2018.

^{xxiii} Interviews: S1A2, Community accountant, *Shandong*, 16, 25 January 2018; S2B2,

Factory-owner, Hebei, 2 February 2017.

xxiv Interviews: S1B1, Factory-owner, Shandong, 24 January 2018; S2B1, Factory-owner,

Hebei, 29 January 2017. S2B2, Factory-owner, Hebei, 2 February 2017.

^{xxv} Interview: S3V3, Worker, *Guangdong*, 31 October 2020.

xxvi Interview: S2B2, Factory-owner, Hebei, 2 February 2017.

xxvii Interview: N1A1, Village cadre, *Hebei*, 6 February 2017.

xxviii Interview: N1V1–3, Villagers, *Hebei*, 15 February 2017.

^{xxix} Interviews: S4V1, Villager, *Fujian*, 17 December 2020.

xxx Interviews: S1V1, Villager, Shandong, 18, 19 January 2018; S1V2, Villager, Shandong, 20,

21 January 2018; S1V3, S1V4, Workers, *Shandong*, 22 January 2018; S2V1, Villager, S2V2, Worker, *Hebei*, 28 January 2017.

xxxi Interviews: S2B1, Factory-owner, Hebei, 29 January 2017. S4V1, Villager, Fujian, 17

December 2020. S5B1, Factory-owner, Zhejiang, 19 December 2020 (on phone).

^{xxxii} Interviews: S5B1, Factory-owner, *Zhejiang*, 19 December 2020 (on phone).

xxxiii Interviews: S1A1, village cadre, Shandong, 15, 17, 25 January 2018; S1A2, Community

accountant, *Shandong*, 16, 25 January 2018; S1A3, Community women's director, *Shandong*, 21, 22, 25 January 2018, S2D1 Factors and Link 20 January 2017

21, 23, 25 January 2018; S2B1, Factory-owner, *Hebei*, 29 January 2017.

^{xxxiv} Interview: S4V1, Villager, Fujian, 17 December 2020. See also Lin and Xiao (2020).

xxxv Interview: S1B1, Factory-owner, *Shandong*, 24 January 2018.

xxxvi Interview: S1V2, Villager, Shandong, 20, 21 January 2018.

xxxvii Interviews: S3V2, Worker, Guangdong, 31 October 2020.

xxxviii Interviews: S4V1, Villager, Fujian, 17 December 2020.

xxxix I6A1, village cadre, Jiangsu, 1 October 2017.

^{x1}For detailed income data, see table 2. Interviews: S1V3, Worker, *Shandong*, 22 January

2018. S1V4, Worker, Shandong, 22 January 2018. S2V2, Worker, Hebei, 28 January 2017.

^{xli} Interview: S1B1, Factory-owner, *Shandong*, 24 January 2018.

^{xlii} Interview: S3B1, Factory-owner, *Guangdong*, 31 October 2020.

xliii Interview: S5B1, Factory-owner, Zhejiang, 19 December 2020 (on phone).

xliv Cai's study included fieldwork carried out in 1996 and 1998. However, 1998 was a

milestone year for rural land management in China, when the 'Land Administration Law' way

^{viii} Data source: <u>http://data.stats.gov.cn/easyquery.htm?cn=C01&zb=A0A0C&sj=2004</u> (accessed 11 March 2020).

^{ix} Interviews: I1V1–2, Villager, Dongguan, 25 October 2020.

revised. This new law was implemented in 1999, establishing strict restrictions on land use right transfer.

^{xlv} 'Taobao villages' are villages reliant on the business on Taobao. The villagers produce and pack at home, selling their products online. A number of Taobao villages have appeared along the south-east coast, leading to similar consequences as in our cases.

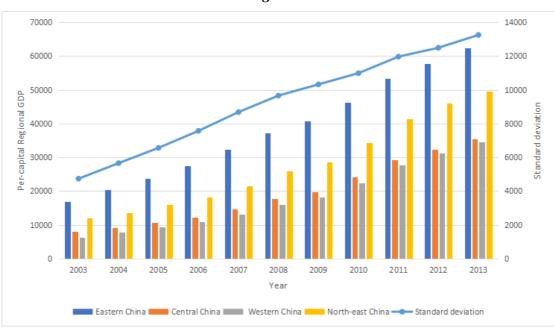


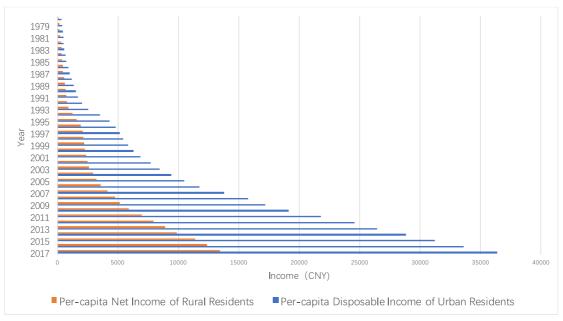
Figure 1.

Data source: National Bureau of Statistics of the People's Republic of China

China has four provincial groupings. 'Eastern China' contains 10 provinces: Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan. 'Central China' has 6 provinces: Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan. 'Western China' has 12 provinces: Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang, Shanxi, Gansu, Qinghai, Ningxia and Xinjiang. 'Northeast China' has 3 provinces: Liaoning, Jilin and Heilongjiang.

Standard deviation is a statistical measure of dispersion obtained by extracting the square root of the mean of the squared deviations of the observed values from their mean in a frequency distribution.





Data source: National Bureau of Statistics of the People's Republic of China

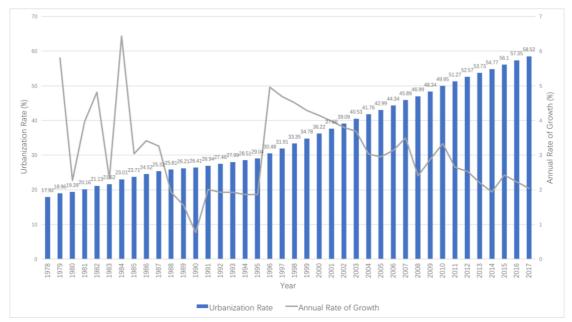
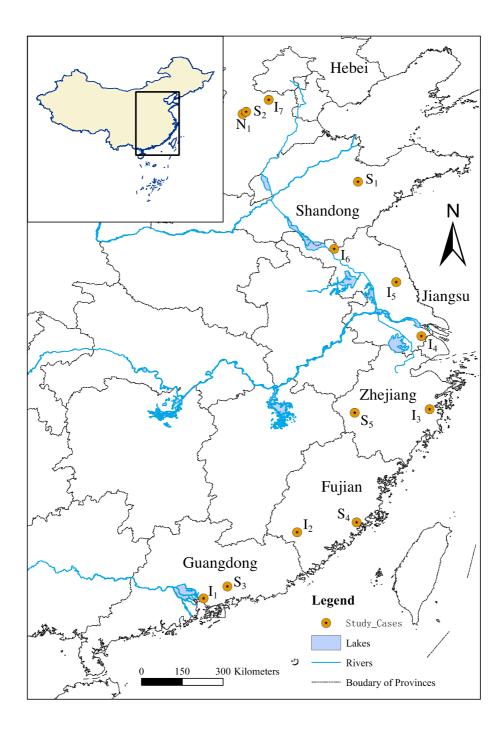


Figure 3.

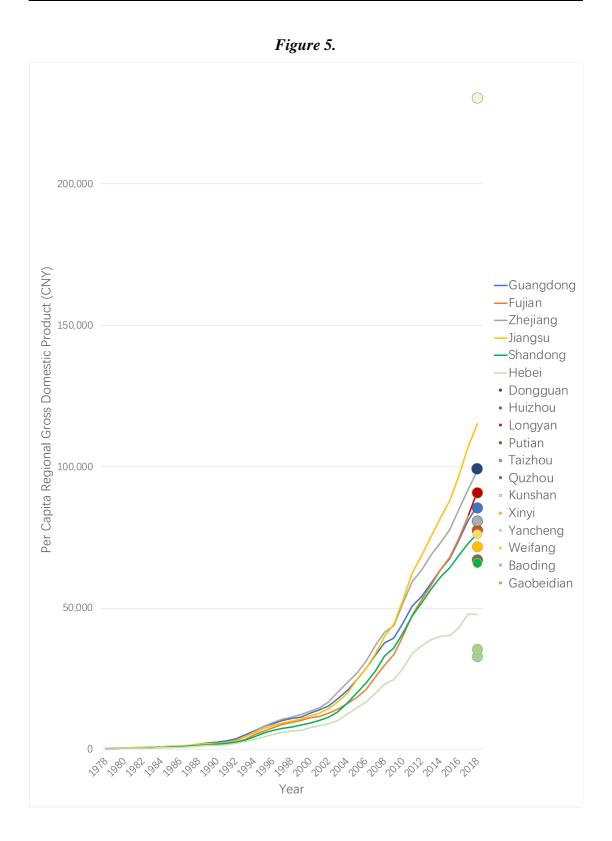
Data source: National Bureau of Statistics of the People's Republic of China

Figure 4.



Names of the villages/towns/cities:

I₁-Changan-Dongguan, I₂-Gaobei-Longyan, I₃- Zhuao-Taizhou, I₄-Zhoushi-Kunshan, I₅-Caoqiao-Xinyi, I₆-Dagang-Yancheng, I₇-Baigou-Gaobeidian, S₁-Qiaoguan-Weifang, S₂-Yaoshan-Baoding, S₃-Gongshan-Huizhou, S₄-Jiaowei-Putian, S₅-Hangbu-Quzhou, N₁-Puyang-Baoding



Data source: National Bureau of Statistics of the People's Republic of China. Statistics Bulletin of the National Economic and Social Development of Dongguan, Longyan, Taizhou, Kunshan, Xinyi, Yancheng, Gaobeidian, Weifang, Baoding, Huizhou, Putian, Quzhou, 2019.

Figure 1. Regional unevenness in China

Figure 2. Rural–Urban Income Gap

Figure 3. Urbanization in China

Figure 4. Sample Locations

Figure 5. Distribution of Regional Gross Domestic Product

Appendix

Interview data

I1T1, Scholar of Dongguan Institute of Technology, Dongguan, 19 December 2017.

- I1T2, Scholar of Tsinghua University, Dongguan, 19 December 2017.
- I1V1, Villager, Dongguan, 25 October 2020.
- I1V2, Villager, Dongguan, 26 October 2020.
- I2V1, Villager, Fujian, 7 December 2018 (on phone).
- I2A1, Town mayor, Fujian, 7 December 2018 (on phone).
- I5A1-2, Government staffs, Jiangsu, 2 September 2016.
- I6A1, Village cadre, Jiangsu, 1 October 2017.
- I6B1, Factory-owner, Jiangsu, 1 October 2017.
- I6V1, Worker, Jiangsu, 3 October 2017.
- I6V2, Villager, Jiangsu, 3 October 2017.
- I7A1-3, Government staffs, Hebei, 19 August 2016.
- S1A1, Village cadre, Shandong, 15, 17, 25 January 2018.
- S1A2, Community accountant, Shandong, 16, 25 January 2018.
- S1A3, Community women's director, Shandong, 21, 23, 25 January 2018.
- S1V1, Villager, Shandong, 18, 19 January 2018.
- S1V2, Villager, Shandong, 20, 21 January 2018.
- S1V3-4, Workers, Shandong, 22 January 2018.
- S1B1, Factory-owner, Shandong, 24 January 2018.
- S2V1, Villager, Hebei, 28 January 2017.
- S2V2, Worker, Hebei, 28 January 2017.
- S2B1, Factory-owner, Hebei, 29 January 2017.
- S2B2, Factory-owner, Hebei, 2 February 2017.
- S3V1, Villager, Guangdong, 31 October 2020.
- S3V2-3, Workers, Guangdong, 31 October 2020.
- S3B1, Factory-owner, Guangdong, 31 October 2020.
- S3B2, Factory-owner, Guangdong, 1 November 2020.
- S4V1, Villager, Fujian, 17 December 2020.
- S5V1, Villager, Zhejiang, 7 December 2020 (on phone).

S5B1, Factory-owner, Zhejiang, 19 December 2020 (on phone).

N1A1, Village cadre, *Hebei*, 6 February 2017.

N1V1-3, Villagers, Hebei, 15 February 2017.