Pushing the Urban Frontier: Mass Peasant Relocation in China

By

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To my grandparents, and my parents

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Abstract

The dissertation research focuses on the latest phase of China's urbanization, as China is now relocating millions of peasant households in rural peripheries into densely populated high-rises. I seek to explain the co-existence of two internally contradictory phenomena: the strengthening of the central state's supervision of land management, and a severe infiltration of private and speculative investment into rural peripheries when private investors are increasingly involved in land expropriation and resistance silencing. I ask: How does speculative and predatory capital find its way into the hinterland villages, when China has unprecedentedly strengthened regulations to prevent land speculation and control urban sprawl? To answer this question, I conducted institutional ethnographies in local land bureaus in five provinces in China (Sichuan, Shandong, Henan, Jiangsu, and Guangxi), and in a real estate company based in Shandong. I carried out interviews with local officials, relocated peasants, resistant households, and real estate staff members. I also studied archives in form of maps, satellite images, and government reports. I argue that, the infiltration of predatory investment capital into rural peripheries is not a neoliberal transformation, but rather the unintended consequence of a series of local responses to highly heterogeneous central policies. The local state is found to fundamentally restructure its control over land, in order to simultaneously conform to central rules, and maximize land income. More specifically, the center's reliance on digital data to carry out supervision prompts the local states to strengthen their planning function, by redirecting the supervision tools to expand urban frontier, and by reconstructing communities on an unprecedented scale to maximize land conversion quotas. In the meantime, the center's tightening control on bank loans and social unrest has induced a transfer of local government's key tasks, i.e. funding land expropriation and silencing peasant unrest, to private investors. Consequently, the remote villages in China's hinterland hitherto unaffected by urbanization face ferocious land speculation and land expropriation.

Inexperienced in land bargaining, peasant households are challenged by predatory real estate companies, who assume no responsibility in guaranteeing survival or welfare of peasant households. Finally, I discuss tightening investment entry rules, and developing counter-mapping strategies as potential efficient interventions.

Keywords: China; Urbanization; Peasant Relocation; Urban Infrastructure Funding; Farmland Protection; Nail households; Central-Local states

Chapter One. Introduction: Falling Between the Cracks

On a field trip to several villages in the rural periphery of a municipality in Shandong, I was startled by the view of isolated high-rise communities scattered across steep mountains. Those communities were hundreds of miles away from the nearest cities, and there was no trace of other urban infrastructure serving these communities, such as a hospital or a supermarket. In those peripheral mountain villages, peasants were required by local officials to demolish their spacious homes and purchase state-subsidized apartments in high-rises. In response to the increasingly strict control over land conversion by local states, and the rigid conversion quota set down for each municipality, local governments relocated peasants from remote villages into high-rises and converted their residential area into agricultural land in exchange for more conversion quotas in urban and suburban areas. The mass relocation was carried out under the banner of a state-initiated campaign called "Constructing a New Socialist Countryside," which aimed at improving living conditions of peasant populations by upgrading their constructed environment, including basic urban infrastructure and housing.

I accompanied Mr. Li, an official at the District Land Bureau, to a regular meeting in a rural town to check on the progress of peasant relocation programs in several villages. Originally slated as two-year programs, many of these programs were due to be completed last year, but progress remained far behind schedule mainly because of a lack of funding. A village cadre, Mr. Xu, had arrived a half-hour early and waited eagerly for our arrival. He had terrible news to report: the real estate developer who invested in the village's relocation program had suffered from a major crash in stock market speculation and gone bankrupt, leaving behind half-built apartment buildings in the village. More than 300 households were now living in half-destroyed houses, and another 100 households were already evicted and lived with only a meager subsidy since their houses were demolished at the beginning of the program to make room for the high-rise buildings. The half-built apartments also occupied

part of the village's farmland, making it impossible to reclaim the land. For fear of peasant unrest, Mr. Xu desperately asked, "What am I supposed to tell my fellow villagers? How is this going to end?" Since the real estate company was introduced by the township government, the cadres assumed the township officials were responsible for finding another investor. The township government acknowledged Mr. Xu's request and told him to wait patiently. Mr. Li reassured Mr. Xu that he would not be personally punished for the program delay and another investor would soon take over. However, he later told me in private that the village would probably have to wait another two or three years until the next investor showed up.

On my trip to rural villages in five provinces in China, I witnessed frequent investment flight from rural relocation programs and the disastrous effects of such flight on local peasant communities. The reasons for investment flight ranged from better investment opportunities in urban areas, major stock market crashes, speculation failure, and local policy change to accumulated loan interest due to peasant resistance to relocation. Technically any factor affecting a company's maintenance and functioning can cast major effects on local communities. The real estate companies that continued to invest in the program downsized peasant compensation, deprived local communities of land-related benefits, and profited from selling apartments to peasants whose homes were destroyed. Peasant households lost their life savings to a small apartment, which could hardly accommodate a nuclear family, while a generation of old peasants were left behind in under-maintained houses or uninhabitable senior homes.

While my village trips explored the infiltration of real estate capital into vulnerable villages and the privatization of land expropriation, my observations of China's land bureaucracy revealed another side of the story: the state's increasing efforts to regulate local land use and control land speculation. The Ministry of Land and Resources carried out

national land surveys to meticulously map the land use for each plot of land in China and relied heavily on satellite images to supervise local land use. The Chinese state also tightened bank loans on land expropriation and finally banned local government from getting bank loans for land conversion in 2016. Additionally, the state frequently cracked down on local government when peasants protested land seizures, especially when confrontations resulted in bloodshed and incurred serious casualties.

In this study of mass peasant relocation programs and the urbanization process in China's rural peripheries, I try to solve this puzzle: **How does speculative and predatory capital find its way into inland villages, changing the lives of millions of peasants, while the Chinese state has taken unprecedented action to strengthen regulations to prevent land speculation and control urban sprawl**? I argue that the specific state land regulations have triggered the fundamental restructuring of the control over land by local states, which has further brought profound changes to local communities. More specifically, the central government's reliance on digital data to carry out supervision prompts local states to strengthen planning activities by redirecting the use of supervisory tools to expand the urban frontier and reconstruct communities on an unprecedented scale to maximize land conversion quotas. In the meantime, the central government's tightening control on bank loans and social unrest has induced a change in the division of tasks with private investors now carrying out key tasks that used to be performed by the local government, i.e. funding land expropriation and silencing peasant unrest. Consequently, remote villages in China's heartland previously unaffected by urbanization have experienced ferocious land speculation and expropriation. Inexperienced in land bargaining, peasant households were faced with predatory real estate companies, which assumed no responsibility for guaranteeing the survival or welfare of peasant households.

"Falling Between the Cracks"

The local state does not challenge nor violate the central state's land regulations, but reshapes its behavior to conform with regulations while simultaneously achieving its goal of maximizing land income. In doing so, those local governments "fall between the cracks" of land regulations, thereby going unnoticed by the central state. By describing local states' land governance as "falling between cracks," this study addresses several key perspectives in studying center-local land politics in China:

1) The study does not assume a massive deregulation process due to the absence of state, nor does the study envision a national scheme orchestrated by the state to encourage accumulation or reconstruct society. Instead, the current study pays close attention to the specific goals, tactics, and technological details of state regulations, as well as examines the consequent structural changes they induced in local states. The study does not simplify the state's role as protector or exploiter of peasant households. It is rather a combination of specific paths of state regulation, and the consequent structural changes in local states, that shapes the fate of millions of peasant households in China in this newest wave of urbanization.
2) In order to slip under the radar, local states profoundly transformed behavior patterns in land governance. The local states gradually move behind the scenes. While continuing to reorganize local communities to achieve maximum land income, they outsource sensitive tasks that put them into direct contact with peasant households, such as compensation, demolition, and resistance control, passing along part of the profits of land conversion to private investors to comply with state regulations and avoid political risk. The transformation of local states generates lasting effects, causing power to be reconfigured in growth coalitions and profound changes in local communities. The nature of this transformation should be distinguished from temporary measures local states take to pass inspection by the central state, such as

exploiting regulation loopholes, deception, or manipulation of files and data. Instead of asking, "How are central regulations filtered through local structures?", the "falling between the cracks" mechanism acknowledges the flexibility of the structure of local states by thinking beyond stereotypical models.

3) Real estate developers now deeply intervene in local communities. Previously, most developers purchased land from local governments, which expropriate land from local communities. The tightening of state regulation and the transformation of local states' land governance result in the transfer of key tasks to real estate developers, who now reap profit both through real estate sales and by land expropriation by exploiting the gap between dirt cheap compensation and skyrocketed sale price of land, a profit previously monopolized by local states. Peasant households in both urban and rural settings fighting for land rights are now facing a new and powerful enemy whose strategies of deprivation and suppression are usually more hidden yet more effective compared to local government. Largely orchestrated by township governments, the land expropriation and relocation contracts signed between the village collective and real estate developers allow the latter to proclaim voluntary cooperation, thus avoiding state inspection.

Understanding China's State Regulation and State Urban Agenda

The dual land system marks a distinctive feature of China's land tenure system. While all the land in urban areas belongs to the state, all rural land is owned by village collectives. The land market was not introduced until 1988, when developers were allowed for the first time to obtain the rights to use urban land plots within a certain period by paying land-leasing charges and land use fees to the government. Before the establishment of the urban land market, land was allocated by the state to government organizations or work units free of charge.

The surge of urban redevelopment and mass land exploitation was further triggered by the tax reform in the mid-1990s. Under the previous system of fiscal contract, local governments were allowed to hand in a fixed remittance to the central state and keep all the extra tax income for themselves. Consequently, township and village enterprises flourished under keen support from local government, often generating a handsome local tax base. The new tax system, the "system of tax-sharing," was launched in 1994. Under the new system, local governments were mandated by law to hand over taxes proportional to the local total fiscal income to the central government so that the central state could get a proportional share of the growing tax income rather than a fixed remittance (Chung, 1994; Lin et al., 2005; Wong, 1997). The tightening of tax revenue necessitated local initiatives to explore alternative ways to generate income, which had given rise to the commodification of urban space and the emergence of a distinct land market. Paying meager compensation, the local government expropriated farmland from peasant households, invested in urban infrastructure, and sold the land (more precisely, the right to use the land, since all the land in urban area is owned by the state) to real estate developers. Over the last decade, income from land sales has become the most important source of fiscal revenue. For instance, it is estimated that land income contributed about 35–40 percent of the fiscal revenue available for the municipality of Guangzhou in 1994–2009, thus exceeding all other categories of fiscal revenue (Lin et al., 2015).

Scholars tend to agree that the neoliberal framework falls short of explaining the urban agenda of the Chinese state (Harvey, 2005; Ong, 2007; Lin, 2007). Although administrative and fiscal decentralization empowers the local state with stronger decision making rights and creates entrepreneurial government in the urbanization process (He and Wu, 2009), the Chinese state does not create space for markets or facilitate complete privatization and marketization as predicted by the neoliberal "roll back" model. Instead, the

state actively pursues its own economic and political agenda by deeply intervening in urbanization process. Departing from the exclusion of state intervention, scholars responding to the neoliberalist framework later developed the concept "actually existing neoliberalism" to emphasize the role of the state in creating the optimal conditions for market operation. More specifically, state institutions are actively mobilized to promote market-based regulatory arrangements, and the state strategically rescales cities on subnational or supranational levels to increase competitiveness and attract global capital (Peck and Tickell, 1994; Brenner and Theodore, 2002; Peck, 2004). This more inclusive framework also leaves out core concerns in central government's urban agenda, as Lin (2007) elaborates:

The reproduction of the urban scale in the West essentially involved a re-definition of state–market relations or a 'hollowing out' of the state in order to make room for competitive global market forces to play their role. By comparison, the stretching or containment of the urban scale in the Chinese context has been concerned less with state–market relations and more with *the maintenance of social stability and urban manageability* [my emphasis]. Even in the current era of globalization when urban re-scaling has been a part of the state's strategy of place-promotion to articulate with global market forces, concerns over social stability and the manageability of the urban population have remained of vital importance to understanding many of the state urban policies.

Thus, Chinese cities are not only the sites of capital accumulation and a competitive arena for global market forces, urbanization is also a powerful tool for the Chinese state to achieve a broader state agenda. Social stability and manageability of urban population are among the primary concerns of the state's urban agenda, and underlie multiple forms of state intervention in urbanization process. For instance, the state stretches and expands urban scale to accommodate rural exodus, while continues to restrict rural migration into large cities, achieving optimal stability maintenance. At the same time, the state also actively promotes

service activities in cities as an outlet to accommodate massive lay-offs from state-owned enterprises (Lin, 2007).

Domestic financial health and social equality are also at the top of the Chinese state's urban agenda. Harvey (2012) rightly argues that China's massive investment in urban infrastructure and unprecedented scale of urbanization were deliberately implemented by the state to absorb massive labor surplus and capital surplus generated by China's export market collapse in global financial crisis of 2007–2009. The construction of large-scale affordable housing in Chongqing also tackles inherent inequality in the urbanization process by turning market profits of state-owned enterprises toward funding the construction of affordable housing and transportation infrastructure. In this way China proposes to solve the capital surplus absorption problem at the same time as offering a way to further urbanize the rural population, and dispel popular discontent by offering reasonable housing security to the less well-off.

The current study argues that in the post-global financial crisis era, three disparate state agendas underlie Chinese central state's regulations on urbanization: farmland protection, local debt control, and social stability maintenance. These three imperatives are part of a broader political-economic agenda of the Chinese state and extend beyond the narrowly-defined urbanization process.

Farmland Protection

China is losing vast amounts of farmland to urban sprawl. The official data on farmland revealed a net loss of 3.9 million hectares for the period from 1979 to 1990, and an annual farmland loss averaged 11,000 km^2 from 1999 and 2005. In 1995, Lester Brown sounded the alarm about the Chinese State's capacity to feed an ever increasing population and potential critical food shortages (Brown, 1995). To ensure China's grain security, the central government initiated key legal changes to curtail land lost to urban construction. The

1998 Land Administration Law required that the State Council first approve any expropriation of basic agricultural land and made permits for farmland conversion subject to a general land use plan and annual quotas of land use, both of which are governed through a top-down land administration system. The Land Administration Law also required that farmland lost to non-agricultural use be replenished by an equivalent amount and quality of new farmland (the practices resemble 'no net loss' policy in the US). Equally important was the creation of a new agency in 2006 called the Supervisor of State Land (SSL) that is relatively independent from the Ministry of Land and Resources (MLR). The SSL has nine regional offices and its primary responsibility is to supervise and assess the farmland protection performance of local governments in adhering to farmland protection policies (Wu et al., 2007; Xu and Yeh, 2009; Zhong et al., 2017). The state also strengthened efforts to protect farmland by creating advanced land monitoring techniques. Some of the most salient measures include national land surveys and the application of remote sensing techniques.

Local Debt Control

The state-orchestrated massive investment in urban infrastructure in global financial crisis years rapidly revived China's economy. The urbanization efforts helped government infrastructure and real estate spending surpass foreign trade as the biggest contributor to China's growth. With limited budgets insufficient for funding land expropriation, local states were encouraged to borrow from banks to cover the massive cost of land expropriation, including compensation paid to displaced peasants, construction costs of high-rise apartments, and urban infrastructure, such as water, electricity, and gas, then return the loans after selling land on the market. While the local states frequently invested in catalyst projects, such as industrial parks, university cities, or public projects like highways and airport, the prospect of return was highly uncertain and local debt quickly accumulated. The accumulation of local debts posed a growing threat to the nation's financial health: The local

debt burdens reached a staggering ¥10.72 trillion by the end of 2010 (China's National Audit Office, 2011). According to figures leaked to the media by the China Banking Regulatory Commission, the initial tally of new loans going to the local finance platforms (investment corporations set up by local government) in 2009 amounted to ¥3.05 trillion, bringing the total balance to ¥7.38 trillion at the end of 2009, or about 17 percent of total bank lending. A subsequent clean-up operation put the balance of LFP loans at ¥9.09 trillion at the end of 2010 (Tsui, 2011). Whether the local debt would be paid ultimately hinges on the health of the local property market and the local government budget, which makes the massive scale of urbanization in China – a feature of "new state activism" – an enormous gamble by the Chinese government (Naughton, 2011). Housing speculation continued to push up apartment prices while empty towns and ghost cities emerged in China's peri-urban areas, raising the alarm of real estate bubbles and potential crisis. In 2016, the central government finally decided to prohibit bank loans on land expropriation, putting an end to the decade-long coalition between local states and banks in land expropriation.

Social Stability Maintenance

The massive land expropriation over the last decade created a population of landless peasants. The number increased at an estimated annual rate of 250,000–300,000, and this put the total number of peasants displaced between 1987 to 2010 at no fewer than 52 million (Jiang and Li, 2010). Most of the peasant households received minimal compensation compared to the lucrative land income of local states and apartment sale income of real-estate companies, and on many occasions the households were forcefully evicted from their homes. Consequently, land-related peasant protest became the major cause of social unrest in China since the 2000s, following waves of protests by laid-off workers in the 1990s. It was estimated that land disputes accounted for 65 percent of the 180,000 mass incidents in 2010 (Yu, 2005). When all other solutions are exhausted, desperate peasants use their own bodies

as moral leverage, stubbornly holding on to their old houses like nails hammered to the ground, desperate to retain their rural livelihoods (hence the name “nail households”). Their actions forced officials to choose between violence, which carries inherent political risks, and financial compromises (Hsing, 2010) The confrontation between local officials and land resisters, and the consequent forced land expropriations, often involved a large number of participants, triggered serious casualties, and were covered by the media. The central government regarded these serious confrontations a threat to social stability and its own legitimacy. Therefore, the central government increasingly intervened in local land resistance, cracking down on abusive local officials to maintain social stability (Cai, 2008).

The state’s regulations are very clearly specified and rigidly implemented, and failure to conform to regulations led to demotion, dismissal, and even arrests of local officials. However, it is instructive to note that these state regulations did not necessarily lead to the termination of local states’ urbanization agenda or reliance on land conversion, nor did those regulations necessarily provide protection to displaced peasants. Quite the contrary, the local states soon transformed the local urban agenda in such a way that farmland loss, local debt accumulation, and mass peasant protests were avoided while continuing GDP growth. The current study has discovered little evidence of state intervention when local states further extended the urban frontier, thereby exacerbating the already precarious situation of the peasantry, as long as the land projects did not incur farmland loss, local debt, or mass protests. Therefore, the state regulations on urbanization were constituted by a set of loosely interwoven yet strictly enforced mandates, and the local states tended to fit in by transforming their urban agenda.

Instead of assuming a series of fixed structures and motifs of local states and inquiring into local strategies of dodging regulations, the current study argues that the logic and behavior patterns of local states were largely transformed in their efforts to balance

economic growth and political legitimacy. The extant studies on land politics in China frequently assume a predatory local state violating the center's regulations and exploiting local communities, and generally conclude that local communities' misfortunes originate from the violation or lack of state regulations on urbanization. While the current study acknowledges the predatory nature of local states, it also pays close attention to the local states' transformation to maintain both legitimacy and land-based economic growth. The local states' impetus to transform and conform simultaneously to a juxtaposition of heterogeneous goals of environmental protection, financial health, and social stability makes it hard, if not impossible, to predict inherent logic or behavior patterns. The current study argues that we cannot assume positive effects of state regulations on local life before thoroughly examining the transformation of local states.

Transformation of Local Urban Agenda

Scholars have written extensively on the economic performance of China's local states ever since the economic reform of 1978. We can divide local development over the past 40 years into two phases by distinguishing between behavior patterns of local states. The booming township and village enterprises (TVE) marked the first wave of state-orchestrated local economic growth. After the central government launched the tax reform in the mid-1990s to claim tax income from local industries, local states gradually gave up TVEs and turned to land sales for extra budgetary income. The second wave of local development was marked by land-centered politics in which local states displaced millions of peasant households in the countryside and residents in urban areas and developed lucrative real estate programs in these residential zones, profiting from land lease and taxes. Although a major transition occurred in the development strategies of local states, it is instructive to note that the economic success of both phases is largely attributed to the local states' overwhelming and exclusive control over resources and thorough intervention in the process. The central

government set the stage for local development, largely by adjusting tax redistribution between the central and local governments and was to a large extent absent from the daily operations of local states. However, while local states continued to rely on land sales as their primary source of fiscal income, local urban development in recent years proceeded under constant state surveillance and tightening state regulations. How did local states respond to the deepening intervention from the central government in urban development? Did the consequent transformation mark a distinct phase of development?

Local government entrepreneurship underlies the impressive growth of collective rural industrial output between 1978 and 1988. Market reforms led local states to become more market-oriented, promoting the local economy and spurring an unprecedented economic growth after a long time stagnation in pre-reform years. Scholars coin concepts such as "local state corporatism" to capture the entrepreneurial nature of local states, referring to the workings of a local government that coordinates economic enterprises in its territory as if it was a diversified business corporation (Oi, 1992). Other similar concepts include "developmental state" (Blecher, 1991), "local governments as firms" (Walder, 1995), "local market socialism" (Lin, 1995), and "entrepreneurial state" (Duckett, 1998), all featuring local governments using administrative control to further the growth of TVEs.

The economic success of local states in the TVE era is largely attributed to their complete and exclusive control over local resources and their capacity to mobilize them to achieve economic growth. First, if we conceive of ownership as a bundle of rights (Demsetz, 1983), as the legal owner of TVEs, local states were able to collect ad hoc levies on enterprises to meet shortfalls in local revenue. Revenue from rural collective enterprises has been the source of funds for public services, welfare, and subsidies to other less profitable sectors, such as agriculture. TVEs as "cash registers" of local states provided strong incentives for local states to mobilize all resources to develop TVEs. Second, as the holders

of rights over TVEs, local states used all means to control the daily operation of enterprises. Among the most important of these were the selection of management personnel (contracting enterprises to individuals rather than privatizing them in order to maintain local government control), control over the allocation of scarce production inputs (which aided in securing privileged access to rationed or scarce inputs), provision of bureaucratic services (which helped with securing licenses, certification and prizes for products, and tax breaks), and control of investment and credit decisions (local officials used their personal influence to persuade bank officials to get bank loans) (Oi, 1992; Walder, 1995).

The central government launched a tax reform in the mid-1990s to address the imbalance of fiscal power between the central state and local governments, in which 75 percent of value-added tax was reassigned to the center, meaning that a large proportion of tax from TVEs was redistributed to the central government. The policy change triggered a shift by local states to look to land development as the primary source of extra-budgetary income (referred to as "land finance" by many scholars). The public ownership of land in China indicates that local states, as landowners, enjoyed a bundle of crucial land-related rights, just as they did in the previous era with their ownership of TVEs. It is widely acknowledged by scholars that local states were capable of controlling local land resources. It is useful at this point to clarify the different kinds of control exerted by local states.

Monopoly on Primary Land Market

First, local states monopolized the primary land market (Zhang, 2002; Hsing, 2010). Essentially, China's constitution stipulated that the state (central and local) retain ultimate claim over "all land in China," and the Land Management Law further stipulated that the state can requisition any land when it is in the "public interest." Since land in China either belongs to the state (in urban area) or village collectives (in rural area), local states were the only legitimate actor that could expropriate land from current users, prepare the land, and sell

it to developers. Developers then built and sold properties to users on the secondary market. Therefore, local states monopolized the profit generated from the gap between cheap compensation paid to peasant households and the skyrocketing land-sale price on the primary land market. It was also a common practice for local states to expropriate more land than temporarily needed to build one's own "land reserve" or "land banks." Since most of the land expropriation and preparation was heavily financed by bank loans, reserved land could be used as collateral. Compared with bank loans, private sector investment only accounted for a small percentage of capital and grew at a low rate (Liu et al. 2016).

Planning and Zoning Right

Second, local states have long enjoyed the right to plan and zone to redevelop urban landscapes and to increase land sale income and property values. These large-scale urban projects greatly improved urban infrastructure and increased the competitiveness of cities in attracting domestic and global capital, but they also resulted in the massive displacement of previous residents. Scholars have recorded widespread land development in Guangzhou for the purpose of hosting mega projects such as the 2010 Asian Games (Lin et al., 2015) and the gentrification and redevelopment of its old neighborhood (Shin, 2016); urban renewal plans, new CBD construction, and development of land-mark real-estate programs such as Xintiandi in Shanghai (Zhang, 2002; Yang and Chang, 2006; Jiang, Waley, and Gonzalez, 2016); and city center reconstruction in inland cities such as Kunming (Wu and Waley, 2018). The local states acted as the primary planner of these redevelopment projects by strategically using the limited annual land conversion quota allocated by the central government and coordinating the land conversion requirements of multiple projects. The local states also set the schedule for land expropriation to match the timeline of redevelopment plans and made key decisions on the location of relocation sites.

Allocation and Coordination of Resources

Local states oversaw the allocation and coordination of key resources, often by bending market rules. It was observed that in the primary land market, where local states leased land to private developers, closed-door negotiation accounted for the largest share of all trades, and the negotiation price was often far below market price. Another means of conveyance, "listing," gave great flexibility to local states for their control over land conveyance by leasing land to designated developers and at a designated price (Lin et al., 2015). Both practices greatly reduced the transparency of land market transactions. Consequently, developers had to actively compete for favorable treatment by local states in order to win development rights. Local states were also found to move resources between different sectors, specifically using profits from land sales to subsidize industrial investments. Most cities in China "raced to bottom" in industrial land leasing so as to attract investments and businesses, which boosted local economies and increased the tax base (Tao et al., 2010). Consequently, local states often leased industrial land at prices far below land expropriation cost and used profits from land sales to cover up the potential loss (Liu et al., 2016).

The central government was largely absent from the aforementioned process. While it is well acknowledged that central state's tax policies spurred the development of both TVE and land finance by providing fiscal incentives to pursue extra-budgetary income, few observations were made on the center's intervention in the operations of local states. Although the center did carry out routine inspections, it was relatively easy to fake numbers in government reports and "muddle through" annual inspections from upper-level government (Zhou et al., 2013). However, the current study found that the surveillance from central government greatly intensified in the last decade, having profound influence on the daily operations of local states. The satellite images reflecting changes to any plot of land deterred local states from illegal land conversion, the constant surveillance on the issuance of bank loans cut local states off from its major source of funding, and the crackdowns on local

states for mass protests prevented local states from exploiting extreme measures in land expropriations. How did local states respond to those interventions? Did state regulations diminish the control of local states over land resources? Did local states consequently slow down the pace of urbanization?

Interestingly, I observed that local states did not slow down, but expanded the urban agenda. At the same time, this study also unraveled a changed pattern of governance over land resources: local states intensified control over land planning and zoning while passing along some of its monopoly over primary land market to private developers. These fundamental changes allowed local states to steer away from regulatory violations while maintaining fiscal income from land sales and taxes. More precisely, as is shown in Chapter Two, to comply with farmland protection regulations, local states relocated peasant households residing in rural peripheries to high-rise apartments, reclaiming their residential area in exchange for land conversion quotas in the urban core or urban fringe where land conversion was far more lucrative than in the rural fringe. Under the central state's tightening farmland protection policies, increasing population density has become an innovative way for local states to increase the area of land available for commercial and real estate activities while still observing national farmland protection policy (Ong, 2014). My fieldwork revealed that the complicated quota exchange and relocation planning were made possible by newly developed farmland sciences and technical tools, such as satellite images, soil maps, and GIS, which were, ironically, developed originally as surveillance tools of the central government. Strengthened by a series of technical developments, local states meticulously used planning and zoning as tools to maximize land conversion quota by piling up villages and reducing the apartment size – and living space – of relocated peasants.

Chapter Three documents the major transition in the urban infrastructure funding model. This occurred when local states were gradually cut off from bank loans by state

regulations, which for decades was the primary source of funding for land expropriations. While the central government encouraged bank loans for its unprecedented infrastructure investment plans right after the Global Financial Crisis, its worries about accumulated local debt, speculative bubbles, and financial health in general grew in post crisis years, resulting in a reversed lending policy that tightened and eventually banned bank loans for land expropriation. The farmland protection regulations prompted local states to expand relocation programs into rural peripheries to coordinate land use at a greater geographical scale, resulting in the urgent need for land expropriation funding. Rather than postponing urban agendas, or relying on the fledgling municipal bond market, local states outsourced land expropriation to private developers and shared the profits from land sales with them. Chapter Three compares relocation programs funded by local states through bank loans and those funded by private real estate developers and concludes that the local communities were further deprived of rights and benefits as a result of the privatization of funding. The outsourcing of the land expropriation process was followed by another major transition: the peasant households who resisted eviction and relocation were confronted no longer by state agencies, but real estate developers and their helpers.

Uneven and Diversified Playing Field of Land Resistance

Long battles have been fought between landless peasants and local states. According to the Beijing-based scholar, Yu Jiangrong (2005), land grabs and forced evictions have replaced excessive tax burdens and compulsory birth control measures as the primary causes of protests since the 2000s. Scholars have written extensively on strategies taken by both sides. Scholars have noticed that peasant households, as marginal actors, are able to challenge the existing political order by working their way through the cracks of the political structure. As is well known, the authoritarian regime is internally fragmented both vertically (between the central and local states) and horizontally (between different bureaus at the same level of

government). Consequently, marginal social actors manage to wriggle their way into the policy-making process and even influence outcomes, mainly because they have understood and accepted the general rules of the game of policy-making under the rubric of "fragmented authoritarianism" (Mertha, 2009). Specifically, O'Brien and Li identify the rising of "Rightful Resistance" in rural China: recognizing that state power is internally fragmented, peasant households diligently search for and exploit the gaps between central state's rights rhetoric and the local states' poor implementation and mobilize support from the wider public to hold the state accountable (O'Brien and Li, 2006). On the other side of the battlefield, grassroots officials are reported to deploy multiple tactics to "depoliticize" the resistance by steering controversies away from political values and the power structure and turning them into manageable and instrumental bargains between local government and resisters (Lee and Zhang, 2013). Specifically, Chuang (2014) argues that local officials depoliticize rural resistance to land expropriation by incorporating rural residents into urban citizenship.

In this research, I aimed to invite new perspectives beyond the previous state–society divide to examine land resistance that occurs when developers increasingly take over land expropriations in urban and rural area. Chapter Four shows that the intensified gaze of the central government on social protests and the excessive use of violence by local states prompted local states to transfer the actual practice of land expropriation to private developers. Focusing on an individualized form of land resistance, nail-household resistance (peasant households who resisted eviction and held on to their old homes like nails hammered to the ground), Chapter Four points out that the experiences of nail-household resisters in urban and in rural areas were further diversified by the direct participation of private developers in land expropriation process. In the urban core, real estate titans bankrolled populist politics of village cadres, hired highly professional private securities to carry out "zero-casualty" demolition, and crushed peasants mentally and physically by

extending their waiting time. In rural peripheries, I witnessed quite a different story: multiple fly-by-night companies rushed to seize speculative opportunities, but most of them were later bankrupted by nail-household resistance, the consequent prolongation of relocation programs, and accumulated bank loans.

It is very difficult to gauge and compare the successfulness of nail households in urban and rural China. While real estate titans were more efficient in crushing land resistance compared to fly-by-night companies, the rural resisters were not necessarily better off. Unable to pay back bank loans, real estate developers left behind half-built apartments, which irrevocably occupied farmlands, and half-destroyed houses, many of which were no longer inhabitable. The investment flight and bankruptcy left a trail of despair in China's countryside.

An Overview of Field sites

The dissertation study was carried out in five different field sites: River county in Sichuan Province, Wood county in Henan province, Iris county in Shandong province, Bamboo county in Guangxi province, and Orchid county in Jiangsu Province. Mass peasant relocation programs took place in each of the field sites. However, those five sites varied greatly in geographical locations, social economic conditions, and land policy innovations.

River county locates in the northern part of a major municipality, C city in Sichuan, about 25 kilometers to the urban core. This suburban district is known for its strong industrial base in steel and mechanics production. The per capita GDP of River county in year 2016 amounted to 91,661 RMB. As an important metropolitan city in South-East China, C city is also a hub for progressive land policies. It was the experimental sites for mass relocation programs before it was approved by the central state and expanded all over China.

Wood is a hinterland county in Henan provinces, located in central China's Yellow River Valley. Henan is a major crop production area in China, yet the mechanization of

agricultural remains undeveloped. The per capita GDP of Wood county in year 2016 was 27,138 RMB. Desperate to expand its tax base, the county becomes increasingly progressive in land conversion policies in the last decade, and is eager to mechanize agriculture and expand industrial base at the same time by launching massive peasant relocation programs.

Iris county locates in the eastern suburb of a major city in Shangdong Province. The county is home to a renowned university, an international airport, and several industrial parks. The per capita GDP of Iris County in year 2016 was 77,571 RMB. While industries thrive in northern part of the county, the economic growth in southern mountainous area is a real challenge, where the land resources are sparsely distributed, and industrial base is weak.

Bamboo is a county located in one of the most impoverished cities in Guangxi Province. With most of its population working in agriculture, the per capita GDP of Bamboo county in year 2016 was as low as 25,804 RMB. The land policy in Guangxi province is the most conservative among the five provinces sampled in this study. The primary land market is still largely monopolized by the local states, and not yet opened to private investors.

Orchid county in Jiangsu Province was home to the first wave township and village enterprises in the 1980s. The per capita GDP of Orchid county in year 2016 was as high as 146,488 RMB. Orchid is known for its innovative industries such as photovoltaics power and biotechnology. The area went through waves of land expropriation in the last three decades. Highly urbanized, the county has very little farmland left in its territory.

An Ethnography of Local States and Real Estate Developers

In 2011, my second year in graduate school as a student of sociology at Peking University, I joined a research program on peasant relocation in C city, Sichuan. When I sat by the table in a conference room in a rural district land bureau to meet with local officials, I was startled by two facts. First, the officials talked numbers and numbers alone: How many acres were reclaimed, how many were used to construct high-rises to relocate peasants, how

many quotas were generated in the process, which could be traded with urban district, and then finally how much profits could be expected. Second, the officials constantly talked about "saving" farmland from the "uneconomic" land use of peasant housing to justify mass peasant relocation. In this interview with officials that afternoon, I could not help but recall my interview with a female peasant the previous day. A woman in her fifties stared outside of her window and sighed, telling me that she had not been able to step out of her apartment on the fifth floor and have a walk for two years because of her bad leg and that she missed her daily trips to her leased land to tend to her crops. "I still felt like I was useful back then, despite my lameness," she explained. How, I asked myself, could local state institutions reduce people's lives and feelings to sheer numbers on land use maps, and on what grounds was the peasants' land use and lifestyle "uneconomic"?

These questions prompted me to apply for summer internships in the same land bureau in 2013, 2014 and 2016. I spent most of my time in the office observing the daily operations of local bureaucrats. I talked to officials and the staff of land bureaus and followed them on their field trips to villages and construction sites. I observed the production, circulation, revision, and sometimes destroying of multiple maps and government reports. I also attended meetings with higher-level officials and other bureaus and negotiations with private real estate developers. In my second week as an intern, I made it clear to the bureau that I was trying to study the urbanization process from inside the institution. Much to my surprise, people did not shut me out. As I could tell from our daily interaction, land bureaucrats had their own doubts about the real effects of their work on local communities since many of their extended families lived in villages and were negatively affected by relocation programs. But at the same time, bureaucrats seemed to constantly reaffirm their commitment by repeating the discourse of greening and legitimacy: the planning tools they used efficiently transformed the local villages into modern and environmentally-friendly,

modern communities. Transformation came with pain, but that was inevitable. I was an interesting distraction from daily work, and people seemed to welcome the opportunity to talk about their doubts, convictions, or simply details of their jobs. Most of the bureaucrats very openly discussed their work and allowed me to follow them around. I was also allowed to access most of the documents and maps in the office, hence I was able to conduct archival analysis of all the relocation programs in the past three years. After following bureaucrats around on their field trips, I also returned to conduct my own interviews with peasant households, township officials, and village cadres. I concluded my fieldwork by helping bureaucrats present numbers and maps in an effort to legitimize peasant relocation programs to another group of graduate students in the same conference room where the journey began.

During my fieldwork in Sichuan, I took a keen interest in bio-politics, a process that turns vivid lives into abstract numbers and maps which then facilitate governance. But in the meantime, I gradually realized that the seemingly objective production of data and maps was driven by a power dynamic between the central government and local states. The integration of the most remote villages into the urbanization process was the innovative response of local states to the central government's tightening regulation on farmland protection, and data and maps were meticulously used to reconstruct local communities while legitimizing relocation. As the research in Sichuan spanned four years, I was also able to observe a major transition in the field: the infiltration of private real estate developers in land expropriation. Although few scholars have written on this topic in academic world, the transition was easily felt in the field. At the time, there were clear signs that borrowing policies were tightening, negotiation between land bureaus and developers was increasing, the presence of real estate field staff in construction sites was growing, and relocated peasants in real estate developers funded programs bitterly complained. I came to realize that when added together, the response of local states to multiple central policies tended to be detrimental to local communities. When

local states extended urban frontiers to rural peripheries in response to the central state's farmland protection regulations, and privatized project funding mechanisms in response to state's financial regulations, local communities in rural peripheries suffered greatly and became even more vulnerable. While most of the scholars working on China's urbanization focused on urban cores or urban peripheries, the plight in rural peripheries remained largely unexamined.

Later, I extended my ethnographic observation into other regions in China and repeated my work in River county in four district land bureaus. To observe relocation programs in rural peripheries, I conducted my fieldwork in geographically and economically marginal areas: Wood in Henan province, Iris in Shandong province, Bamboo in Guangxi province, and Orchid in Jiangsu Province. Except for Orchid, which had a strong industrial base regardless of its low ranking of GDP in Jiangsu province, the three other three districts heavily relied on agriculture as income source and had an overall low level of urbanization. The field sites varied greatly in social and economic status, with the lowest GDP in Bamboo (¥15.72 billion in 2015), and the highest in Orchid (¥66.92 billion in 2015). Mass peasant relocation was witnessed in each of the field sites, and the transition from bank loans to real estate funds was observed in all the field sites except for Bamboo, largely due to Guangxi's conservative land policy that still denied private investment access to primary land market at the time of this research. I found that under the dual pressure of farmland protection and shrinking bank loans, most of the local states adopted the same strategies: extending urban frontiers and privatizing land expropriation, with the plight repeating itself in many villages.

During my field work in rural towns, another phenomenon drew my attention: resistance by nail households. As a highly individualized form of resistance, nail households in China attracted international attention and were already extensively reported by media in China and abroad. What I found new in nail household resistance was the significant role of

real estate developers as repressors, whereas in existing studies it was almost taken for granted that the relocated peasants were challenging and fighting local states. At first, I met very briefly with real estate staff in negotiations and on construction sites and was only able to collect anecdotes from interviews with local officials and peasant households. A great opportunity arose when a Shangdong-based real estate titan, Mr. Liu, heard from my parents– his college friends – that I was interested in the role of real estate developers in peasant relocation, and he invited me to carry out ethnographic observation in his enterprise. While I continued my fieldwork in other cities, I travelled every other month to the real estate firm's headquarters and spent one to two weeks following up on several relocation programs underway. I followed field staff on their field trips to visit nail households and construction teams, and I also attended negotiation meetings with local officials. Akin to my fieldwork in land bureaus, I returned and revisited peasant households after field trips and listened to their side of the story. I gradually came to realize that the strategies of private developers were far more effective in silencing resistance compared to those of the local states and outsourcing resistance control to real estate developers kept the local states safe under the central state's intensive surveillance on violent repression of social protests.

The ethnography inside local states and real estate enterprises shed light upon ignored facts, and working simultaneously from both inside and outside did not only facilitate triangulation, but also offered new perspectives. However, both local officials and peasant households were suspicious of my research. My identity as a sociology graduate student and my sympathy towards peasants raised constant doubts that I would use my insider knowledge to expose the wrongdoing of land bureau officials. In the meantime, my close affiliation with the local land bureau and real estate developers undermined my credibility in the eyes of peasant households. The constant identity switch between "Us and Them" also turned out to be a difficult task, and I often found myself caught in battles between different parties. One

afternoon when I accompanied real estate field staff on a field trip, a conflict broke out, the staff fled the scene, and I was surrounded by a couple of nail household resisters. The resisters understood I was a graduate student, but insisted that I should not leave until each of them finished their stories so I could have a complete record. I talked to each of them, played with their kids, and tried to use my knowledge on state land policies to make suggestions. Consequently, I was one hour late for dinner with the real estate chairman, Mr. Liu. I rushed into a shopping mall, also owned by Mr. Liu, and on my way to the restaurant, I saw advertisements covering the hallway showing high-end apartment high-rises, which would be built right on the disputed land I visited this afternoon. Mr. Liu was waiting for me in front of a glass window overseeing the city, and his wife and son greeted me warmly. I did not tell them about the conflict for fear of any harsh move towards those resisters. When lobsters were served, I realized that I hadn't had time to wash my hands. I wondered why there was dirt in my nails, and suddenly remembered that I crawled under a car to appease a furious resister, who threw himself under the parked car of the one of the members of the field staff to stop them from leaving and intended to beat them up. For a second, the identity shift lagged and the fine dining restaurant suddenly felt unreal. The moment of uncertainty soon passed. I quietly cleaned my hands on a dinner napkin and started to work on my lobster.

Chapter Two. Farmland Protection, Mass Relocation, and Green Governmentality in China

The comparative performances of different political regimes in responding to environmental challenges have long attracted scholarly attention (Josephson 2004; Purdy 2010). The absolute advantage of democratic regimes was recently challenged by a group of scholars who claimed that environmental governance under authoritarian regimes is more effective since limited freedom compels individuals to obey sustainable policies, and also because a relatively autonomous central state disempowers social actors who might tend to block environmental protection for greater economic gains (Beeson 2010; Shearman and Smith 2007; Wells 2007). As an emerging theory largely based on the performance of China and other East and Southeast Asian countries, "environmental authoritarianism" (Beeson 2010), defined as a non-participatory approach to policy-making and implementation, has been discussed as a prescriptive model of how countries should effectively respond to deepening environmental degradation and as a descriptive model of how countries are likely to respond to such degradation (Gilley 2012).

At the core of this model is the ideal coalition forged between science and power. Based on the Singapore experience, the environmental authoritarianism model predicts that technocrats and scientists constitute the most reliable allies of the state, and that the environmental regime is reinforced by the application of modern science and technology (Shearman and Smith 2007).

What the model fails to account for, however, is that fact that China has witnessed an increasing amount of unexpected failures and unintended consequences since it took an environmental turn over the course of the last decade and began to focus much more intensely on environmental restoration and ecological protection. The state clean air campaign closes nonpolluting small businesses and prohibits coal heating in rural households. The eco-cities

projects expel millions of migrant workers from cities, instead of properly addressing issues like improving the living standards of urban dwellers living in poverty (especially migrant workers) and renewable resources. Similarly, the state's farmland protection regime displaces peasant households nationwide from their homes. What explains the social failure of an authoritarian regime that dedicates itself to portraying itself as a green state? Why does the intensive state supervision fail to address broader social needs?

This article tries to unravel the puzzle by studying farmland protection in China, and by specifically examining the dialectical relationships between power and science in the process. It is well known that central government and local states in China have different interests in farmland protection: over the last decade, the central government has been dedicated to protecting the farmland reservoir from the threat of urban sprawl by controlling land conversion quotas allocated to local states. Nonetheless, local states have been reluctant to embrace the policy, since land sales and land conversions continue to constitute the primary source of local fiscal income. The article asks two key questions: How is scientific knowledge of farmland produced in this contested field of power? How does science then serve as a tool of governance?

Drawing insights from the post-structural strands of political ecology (Ferguson, 1990; Escobar, 1996), the article delves into the production of farmland data, provides a detailed description of data concealment and manipulation, and the central-local conflicts that underlie the process. Using a "governmentality approach" (Foucault, 1991), the article further contends that, farmland data was used by local government to construct alternative discourses of "truth", by scapegoating peasant households and legitimating mass relocation. Farmland science and technology were further applied by local government to maximize land income by systematically restructuring local communities in relocation programs, completely deviating from the original goal of farmland protection. Consequently, the particular process of farmland

science production and application enabled local states to actively pursue strategies of policy "track-shifting", defined as a behavior pattern that results in replacing the original task of protecting farmland with the ostensibly similar but substantially different project of mass peasant relocation.

The Chinese State's Farmland Protection Regime

In 1995, Lester Brown sounded the alarm about the Chinese state's capacity to feed an ever increasing population and potential critical food shortages (Brown 1995). The official data on farmland revealed a net loss of 3.9 million hectares for the period from 1979 to 1990 (Ash and Edmonds 1998). It was estimated that agricultural restructuring, construction, and natural hazards accounted for 62 per cent, 21 per cent, and 17 per cent, respectively, of the total land loss for the 1986–95 period. Further worsening the situation, since the 1950s the newly-reclaimed, low-grade farmland in fragile environmental frontier regions has never been able to compensate for fertile land lost in the southeastern part of the country where the multiple cropping index and population density are high (Ho and Lin 2003). Faced with rapidly decreasing farmland coupled with shortages of other principal natural resources (such as water and energy) – both the result of and constraint to China's explosive urban development, there has been a salient shift to "green" Chinese policy making by focusing intensely on environmental restoration and ecological protection (Ho 2006; Kolas 2014).

The booming land related social unrest in China is another crucial reason underlying China's "green shift" to protect farmland and restrict urban sprawl. For two decades, land sales and other income from land transactions have become the primary source of fiscal revenue of local states in China. Taking advantages of the dual-land system in China (rural land is collectively owned and cannot be transferred or sold by individual peasant households), local states evict peasants from their homes and sell land to the highest bidders in auctions. Between

1980 and 2003, somewhere between 50 and 66 million Chinese peasants lost all or part of their farmland and houses. The total amount of collective land appropriated by the local and central state agencies totaled 100 million mu, or 13 percent of China's total cultivable land (Yu, 2006; Wang, 2007). Dissatisfied with meager compensation and realizing the enormous windfall monopolized by local states, peasant households launched multiple forms of resistance to protest their loss in the urbanization process. It is estimated that since 2005, land loss has become the leading cause of protest in rural China (Yu, 2005). The accelerating land related unrest posted threat to China's social stability, consequently the central government was eager to take urban sprawl under control.

The central government initiated key legal and institutional changes in personnel and resource allocation to address rampant local disobedience in land conversion actions, aiming to curtail land lost to urban construction. For instance, the 1998 Land Administration Law required that the State Council first approve any expropriation of basic agricultural land and made permits for farmland conversion subject to a general land use plan and annual quotas of land use, both of which are governed through a top-down land administration system. The Land Administration Law also required that farmland lost to non-agricultural use be replenished by an equivalent amount and quality of new farmland (the practices resemble "no net loss" policy in the US). In 2003, the State Council required the establishment of a "hierarchical land management system" for all governments below the provincial level. In order to minimize intervention from local governments, key cadres of local land bureaus must be appointed by a superior land bureau rather than by local governments. Equally important was the creation of a new agency in 2006 called the Supervisor of State Land that is relatively independent from the Ministry of Land and Resources. The Supervisor of State Land (SSL) has nine regional offices and its primary responsibility is to supervise and assess the farmland protection

performance of local governments in adhering to farmland protection policies (Wu, Xu and Yeh 2007; Xu and Yeh 2009; Zhong, Mitchell, Scott, Huang, Li and Lu 2017).

Apart from the changes in the legal and institutional structures related to farmland protection, the Chinese state strengthened efforts to protect farmland by creating advanced land monitoring techniques. Some of the most salient measures include national land surveys and the application of remote sensing techniques. The Ministry of Land and Resources (MLR) conducted two national land surveys, completed in 1996 and 2009, respectively, and thoroughly coded the area, category, location, and ownership of every plot of farmland. The MLR also initiated annual land monitoring based on remote sensing in 2000 and supervised the land use changes in 66 major cities. The MLR expanded the coverage of satellite image-based inspection to 86 cities in 2008 and to 172 cities in 2009. Since 2010, the system has covered all the county-level jurisdictions in mainland China. The satellite image-based land monitoring system, yizhangtu ("one whole picture"), calculated land use change from satellite images to use as reference, and then they determined the legitimacy of those changes by checking the land conversion permit documents. The MLR provided local land bureaus with satellite images, and the local bureaus were responsible for redressing any illegal land conversion revealed by the land monitoring system. To ensure the credibility of this monitoring process, both MLR and SSL carried out selective audits of local bureaus on a regular basis (Zhong, Huang, Ye and Scott 2014; Zhong, Mitchell, Scott, Huang, Li, and Lu 2017).

Despite its efforts to protect farmland, the Chinese state failed to deliver desirable results. Scholars continued to report an acceleration of land expansion for construction and development, as well as increases in farmland pollution, rural land grabs, and illegal land conversion by local growth coalitions, including local officials, business investors, and even local farmers anxious for off-farming employment (Chen 2007; Liu, Liu and Qi 2015; Wang and Scott 2008). More importantly, although the official statistics show a nationwide decline

of farmland loss in the recent decade (Liu, Liu, and Qi 2015; Zhong, Mitchell, Scott, Huang, Li, and Lu 2017), it is argued that the decrease is achieved mainly through quota manipulations by local governments (for example, the transfer of development rights between rural and urban areas), rather than decreasing land conversions, and that the consequent environmental and social impacts include forced displacement of peasants and accelerated soil degradation (Chien, 2015). How do we explain China's failure to protect its farmland resources and land right of peasants despite the state's consistent legislation and regulation efforts, let alone its massive expenditure in land monitoring?

After an overview of methodology and a brief literature review, I examine the production of farmland knowledge through land surveys and persistent local state resistance in the process, against the background of central-local state tensions within the bureaucratic system. The second part of the paper focuses on local states' "track-shifting" strategies and further points out that the transformative tactics of local states eventually exacerbate the delicate plights of peasant households.

Methodology

The material for this article is derived primarily from ethnographic research conducted in Sichuan in 2013, 2014, and 2016, and in four other provinces (Shandong, Henan, Jiangsu, and Guangzhou) in 2016. Specifically, as an intern, I observed the daily work of technocrats in six local land bureaus, which included mapping, measuring, and document drafting. I also conducted 44 in-depth interviews with 22 village heads and villagers in 10 villages and 16 government officials in five land bureaus (some subjects were interviewed more than once). I joined a research team from Peking University in carrying out a household survey focused on the life transitions of peasant households after relocation in C city, Sichuan. I also interviewed

key officials in the MLR and SSL, and I drew on online and paper documentation drafted by the MLR and other relevant agencies.

The existing studies on China's green governmentality are mostly carried out in peripheral areas, such as Inner Mongolia and Tibetan Plateau (See Williams, 2000; Yeh, 2009; Kolas, 2014), and features the central-peripheral divide. Acknowledging significance of the periphery, the current study also seeks to extend the geographic scope of research into the "center", i.e. urban and peri-urban area. Additionally, the six local land bureaus sampled in this study are located in counties with various socio-economic conditions, different level of urbanization, and accordingly, disparate degree of fiscal reliance on land income, thus reflect a comprehensive picture of the production and application of scientific knowledge in China's bureaucratic system.

The production of scientific knowledge: a mission impossible?

The post-structural strands of political ecology (e.g. Escobar 1995; Ferguson 1990) view the social production of knowledge as an integrated part of power and rule, devote great attention to rhetorical and discursive strategies that are critical to creating the knowledge and discourses of "development", as well as uncovering how subsequent interventions facilitated by such discourses alter the lives of marginalized inhabitants. Rather than an innocent endeavor, the "development" discourse refigures and reimagines certain places as sites in need of intervention. Drawing on the insights from those studies, scholars further link the concept of "development" to the global trend of "greening"(e.g., Goldman 2001; Rutherford 2007), and critiques of environmental crisis narratives (Fairhead and Leach 2003; Leach and Fairhead 2000). Both Williams (1997, 2002) and Yeh (2005, 2009) write on Chinese state's effort to protect grassland in marginalized Western China. Williams (1997, 2000) carefully examines the production of scientific discourse on grassland degradation and reveals the self-legitimizing

logic of state practices, which simultaneously scapegoat common rural people. Reflecting upon the state's tactics of sorting citizens into different categories of worth, Yeh (2005, 2009) argues that classification creates new forms of subjectivity and eventually legitimizes state intervention in marginalized areas.

Acknowledging the entangled and generative relationships between power and knowledge production, the current study steps away from the power-powerless dichotomy, to examine the production of knowledge in a contesting field of power. While the central state is putting increasing efforts in farmland protection, local states have invested interests in land expropriation and conversion. A great challenge thus emerges: How could the central government rely on local government to collect and produce farmland data, which would later be used to monitor the local government? Is this a mission impossible?

The application of scientific knowledge: governmentality and legibility

The local governments' ongoing efforts to apply farmland knowledge and technology to reconstructing local communities, and maximizing land income indicate a form of "governmentality" (Foucault 1991). Foucault described a historical shift away from sovereignty, practices of conquering and defending a highly volatile and fragile territory, to governmentality, which measures, intervenes, and rearranges things and men within the state's territory to produce the greatest possible quantity of wealth, to provide sufficient means of subsistence to its people, and to enable the population to multiply. Statistics took the place of brutal force and became the most important tool of governance. The state would rely on this emerging science to reveal a series of variables of its population and territory, such as climate, irrigation, fertility, famine, epidemics, death, etc., and to pursue the correct manner of disposing things so as to optimize the health and wealth of the state and its people. As a "science of the state", statistics revealed that population had its own regularities, its own rate of death

and diseases, and its own cycles. Another new science- political economy- was a knowledge of all the processes related to population, and revealed multiple relations between population, territory and wealth. Guided by those new forms of knowledge, the state was able to intervene the population process, for instance, with campaigns to reduce mortality, to promote marriages and vaccinations, to stimulate birth rates, or to direct a flow of population into certain regions and activities, and to achieve multiple aims of the state.

Besides population, and more relevant to the local governments' efforts in spatial reconstruction, political geography and cartographic studies have expand the scope of scholarship on governmentality by incorporating territory as another important object of governmentality, further drawing attention to what James C. Scott (1998) has termed "legibility". Legibility, in this view, is a matter of inscribing territory with basic systems of geographical reference, allowing knowledge about populations, resources, or activities to be indexed to specific locations and making territory readable (Hannah 2009). Geologic surveys (Braun 2000), federal censuses (Hannah 2001), house-numbering, and standardized street addresses (Rose-Redwood 2008) are all modern technologies that facilitate territorial governance.

The current paper adds complexity to the recent literature on governmentality by showing that, farmland science and technology as tools of governance, were originally applied by central government to supervise the behavior of local agents, but eventually became powerful devices of local states in reorganizing local communities. In doing so, the current study resonates with Foucault's (1991; 2009) more nuanced understanding of power: power is not possessed or held, but rather circulates in the social body and breaks through the binary between those who govern and those who are governed. Local states, seen as engaging actors, intentionally transform the extant discourse and knowledge of farmland protection to their own

advantage, consequently challenging the power of the state, and restructuring local communities.

Farmland Science: National Land Surveys and Local State Resistance

The collection of land data is at the forefront of China's farmland protection regime, as it conducts baselines to gauge progress or identify violations to guide subsequent state interventions. Beginning in the 1980s, the Chinese state has made a tremendous effort to collect farmland data, systematically mapping the quantity and quality of land plots within the national territory. The sheer size of the territory made it necessary to outsource this data collection effort to local technocrats in land bureaus. However, the central state experienced severe difficulties collecting data from local land bureaus. Since the income from land conversion and land sales has become the single most important source of fiscal revenue for local governments in the last two decades (Lin 2010; Tsui 2011), local states, prompted by the immense benefit from farmland conversion, have tended to conceal and manipulate data on farmland quantity and quality.

A frustrated history of data collection

Under the order of State Council, the first national land survey was launched in 1984 and ended in 1996. With a limited budget and rudimentary computer technology, the survey took more than a decade. The result turned out to be a combination of low-quality satellite images covering a limited area and non-compatible maps hand-drawn by local bureaucrats. Of particular importance was that most localities did not submit original copies of the land survey to the state; instead, they only reported rough estimates of the total number of farmland within local territory. Consequently, the state had little knowledge about the concrete area, ownership, category, and location of lands. At the time of the first National Land Survey, agricultural taxes were levied on the basis of potential food production; thus, evading the agricultural tax may have been one incentive behind under-reporting and withholding land information (Chien

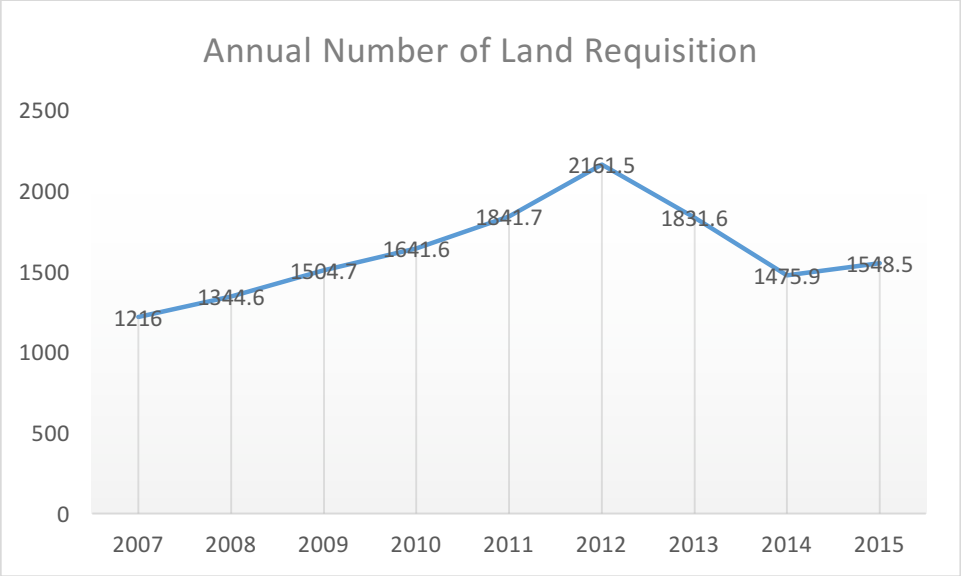
2015; Smil 1999). However, reluctance to disclosing local data must also be understood against the general background of tax reform in mid-1990s and the consequent development of local land markets. Under the previous system of fiscal contract, local governments were allowed to hand in a fixed remittance to the central state and keep all the extra tax income for themselves. Consequently, township and village enterprises flourished under keen support from local government, often generating a handsome local tax base. The new tax system, the 'system of tax-sharing', was launched in 1994. Under the new system, local governments are mandated by law to hand over to the central government taxes proportional to local total fiscal income so that the central state can get a proportional share of the growing tax income rather than a fixed remittance (Chuang 1994; Lin, Li, Yang and Hu 2005; Wong 1997). The tightening of tax revenue has necessitated local initiatives to explore alternative ways to generate income, which has given rise to the commodification of the urban space and the emergence of a distinct land market. Paying meager compensation, the local government expropriated farmland from peasant households, invested in urban infrastructure, and sold the land to real estate developers. As land conversion became the single most important source of local fiscal income when the 'no net loss' policy was launched by the MLR in 1998, the local governments were reluctant to reveal detailed information from their land survey to the central state. By concealing the data, localities could easily use tricks to over-report newly-reclaimed farmland and under-report land conversion, thereby reducing reclamation costs because no concrete original data was available to the MLR.

The second national land survey was completed in 2009, resulting in accurate satellite images of major municipal (with a scale of 1:500) and rural areas (with a scale of 1:10,000). However, the surveillance function of the satellite images is effective only when the land topography, ownership, and conversion records are known to the user, so that land changes can be detected from the air. With much improved surveillance technology compared to the first

national land survey, the central government was still unable to persuade local land bureaus to project the concrete position and area of newly-reclaimed land onto the 2009 land map. While the local bureau calculated newly-reclaimed land based on their unrevealed data source, the MLR was still incapable of calculating actual farmland loss.

A closer look at the timeline reveals that the 2008–10 global financial crisis frustrated the Chinese state's data collection efforts. The leverage of local governments was greatly increased when the Chinese state launched a 4 trillion RMB infrastructure program to stimulate local growth in response to the global financial crisis. China witnessed a drastic expansion in bank credit. New bank credit leapt up to 20 per cent of GDP in 2009, and a vast amount of loans poured into urban infrastructure investment, accounting for nearly 40 per cent, as infrastructure construction accelerated (Naughton 2011; Tsui 2011). Critical here is that land conversion lay at the core of this infrastructure investment-driven paradigm, as an increasing volume of land supply was necessary for the stimulus package. The amount of land requisitioned by the local governments for urban construction increased steadily through the crisis years and peaking in 2012. Although it slowly decreased afterwards, it still remains above the pre-crisis level (Fig. 1). Consequently, the central government could not exploit the threat of annual land quota reduction to deter local violations in the crisis years, as economic growth would have been affected if land conversion was held in check by the strict implementation of state policy. As long as local governments delivered the expected economic recovery, they were not held accountable for their illegal conducts in land management.

Fig 2.1. Annual Number of Land Requisitions during the Global Financial Crisis



Note: Unit: k^2
Source: National Bureau of Statistics of the People's Republic of China, 2008–2016 Yearbook

Land data collection as a contending field of power

After recounting the central government's frustrated data collection efforts, this section delves into the daily operations of the local land bureaucrats to unravel the concrete process of data production. The process was marked by rounds of conflicts and compromises, in which the central states constantly aimed to set up firm baselines and rules, while local states made multiple attempts to carve out more space for autonomy and control. Consequently, the central state had successfully launched rules to regulate and firmly control the quantity of farmland, while more complicated issues such as farmland quality and fund management remained under the radar.

Over-reporting farmlands: Field ridges and highway Soybeans

Some common tricks were widely used by local technocrats in land bureaus to over-report newly-reclaimed land, often by reporting plots of non-agricultural land ("fake

farmland") as newly-reclaimed farmland. The most common "fake farmland" were field ridges. As part of traditional practices, many peasants leave the land directly adjacent to a neighbor's plot uncultivated in order to mark the boundaries of their contracted plot, and to allow passage. As visible markers, the field ridges were normally 30-40 centimeters wide but were never cultivated. However, the field ridges constituted most of the reported "newly-reclaimed land". A local land bureau, Mr Chen told me:

> "Next time when you are in the archive room, try to compare the columns of 'field ridges' in earlier land surveys and the 'newly reclaimed farmland' in recent reclamation reports. You will find that they are exactly the same, with identical decimal digits. Do you understand what I am trying to tell you?"
>
> I answered: "that 'newly reclaimed farmland' was fake- it was actually field ridges."
>
> "That's Right". He further explained, "It a game of numbers. Field ridges are markers of territory between farmland plots, not farmland. Even if we actually flatten field ridges and reclaim the land, peasants would rebuild ridges to mark one's own land—no one would actually grow crops on those field ridges. Recently the Ministry came to realize those common tricks, and I heard that it was asking local bureaus to show the **exact locations** of reclaimed land on maps and later on satellite images. When seen from air, those reclaimed land should be in the shape of large plots, **not in stripes**, like field ridges. That would be a whole lot of trouble for us. " (Fieldnotes, July, 2014)

There were other audacious deceiving tactics to over-report reclaimed land. In June of 2013, right before annual satellite inspection, the provincial highway and several other main roads in S County in the province of Jiangsu were suddenly covered with soil. During the night, trucks pulled soil from construction sites and poured it on the highway, and soybeans were later planted on these new fields. Within a week, the sprouts pushed up the earth, and the highway looked like farmland from above. The satellite images reported satisfactory progress of reclamation, until journalists exposed the trick. Similar stories took place in the provinces of Jiangsu, Shandong, Hubei, and Fujian. Local states disguised factories, construction sites, highways, and industrial parks as newly-reclaimed farmland to deceive satellites (Xinjingbao 2014).

It did not take the Ministry of Land and Resources long to figure out the tricks and take actions to terminate them. From November 2014, Mr. Chen and several land bureaucrats in

county land bureaus were summoned several times to the Ministry to project newly reclaimed land onto a detailed map generated from the second national survey. When having lunch with me in the middle of a busy working day in a restaurant near the Ministry, Chen explained the recent moves of the central state:

> "I have already matched 19 land reclamation projects this year onto the 2009 survey map in November, and this current one is the last one. So now, all the loopholes are sealed. When you are asked to mark specific reclaimed land plots on an existing and detailed map, there is no way that you can pass field ridges or a highway off as newly reclaimed land, because people would know from the 2009 survey map that it is a field ridge or a highway! Of course there are some complications—land bureaus use different software to mark land, and when transferring data into the Ministry's digital system, errors are inevitable. For now, an error rate between 10% to 15% is tolerated. Anyway, the Ministry is really serious this time, and you can see colleagues from all the other counties here, all summoned to Beijing to do the same thing-Sealing the loopholes." (fieldnotes, January 2015)

The Myth of "The Original Copy"

Instead of passing fake plots off as reclaimed farmlands, land bureaucrats sometimes went straight to the root to solve the trouble, by systematically changing figures in original records to match the current needs.

During summer 2013, before a work team was sent down by provincial government to examine farmland reclamation projects, I was assigned a task of helping a land bureaucrat to check the land data in land reclamation projects in the past few years against the original 1996 land survey. We went down to the archive room in the basement where copies of land surveys and land reclamation project records were kept, pulled out relevant records, and compared them to the 1996 hand-written land survey. Of the ten projects we examined that morning, four showed discrepancies between the land reclamation programs and the 1996 land survey record. The bureaucrat told me to make a list of those discrepancies so that we can "get the numbers right". Naturally, I began to copy figures from the original 1996 surveys, expecting that the reports on reclamation projects in the following years would be later revised to match the original record. The bureaucrat interrupted my work and told me I had put down the wrong

numbers- I should record the numbers from the reclamation reports in the following years. To my utterly surprise, he explained: "It's the other way around. We revise the 1996 survey to match the reclamation projects—it's the only way to make the newly reclaimed farmland number look right." In the following week, I witnessed the land bureaucrats got rid of the original copy, purchased vintage papers on Taobao, and revised and reprinted the "original record" at a local printing facility. Indeed, the original copies were remade so many times to accommodate the current needs of land conversion that the first copy was often nowhere to be found. I was not even sure the copy in the archive room that day was original. As the bureaucrat stated when I questioned his conducts: "There is no such thing as 'the original copy'" (fieldnote, July 23, 2013).

The audacious misconducts were also put to the end in 2015 when The Ministry shifted its base map from rudimentary 1996 land surveys, which were not recorded by the Ministry, to more advanced and systematically recorded 2009 land survey. Since all the data was by then entered into a national land database supervised by the Ministry, it was almost impossible to revise and fake the original records. However, it is crucial to note that the transition took almost six years to complete since the completion of the 2009 national land survey, due to compromises made by central state in Financial Crisis years. Many local bureaus seized this last opportunity by exchanging the faked reclamation numbers for land conversion quota and use up the quota for upgrading urban infrastructure (according to the "no net loss" policy, local states were eligible to convert farmland to non-agricultural use as long as the same amount of farmland was reclaimed in its territory). A senior land bureaucrat showed deep regrets for failing to seize the chance:

> "The transition took years. We were not asked to shift to the new database years after the second land survey was completed. Many provinces took this opportunity to exchange reclamation number for land conversion quota and then use up the quota for urban construction. Of course their reclamation records were faked, everyone knew that. We knew it, the central state also knew it. But Sichuan Province made really slow moves—when the loose ends were tied up by the ministry recently, massive land

> conversion quota remained unused in Sichuan. Since everyone knows that the reclamation records were faked, those conversion quotas are now suspended—We can no longer use them in urban construction. How awful is that!" (Interview, January 2015)

The Satellite Images and The Work Teams

The central state actively used two tactics to supervise the land management of local states: the satellite images and the work teams. Satellite images directly reflected detailed information on the ground, and enabled Supervisor of State Land's major regional offices to launch remote supervision on every local land bureau. The central and provincial governments also sent out work teams on regular bases. The work teams often consisted of officials from a different municipality, who had no local ties and were trained to detect false records. However, neither tools were as effective as they seemed.

On a weekend in early October 2016, the heads of nine regional offices affiliated with the Supervisor of State Land gathered with officials from the Land Surveying and Planning Bureau for a conference in Nanjing. The theme of the conference was 'routinizing land monitoring', as the MLR was getting ready to increase the frequency of national satellite monitoring from two to three times a year to detect illegal land conversion. The Supervisor of State Land would have more accurate satellite images to work on when its regional offices carried out routine inspections on local land bureaus. One of the thorniest issues discussed at the conference concerned the quality of reclaimed land. Unlike the quantity of newly-reclaimed land, which could be verified and then monitored by the satellite images, land quality could not be measured by satellites. To minimize the reclamation cost, local land bureaus often conveniently reclaimed large plots of wasteland in sparsely populated areas. The quality of the newly-reclaimed lands turned out to be low and the lands soon became idle, since peasants were deterred from cultivating by long hours of commuting.

The head of the South-west supervisor office bitterly complained that:

> "The local land bureaus conform to a set of rules concerning farmland quantities and categories- since the information clearly showed on satellite images, and the local bureaus would not and could not challenge the satellites. But a lot of information does not show up on satellite images. The most important information missing here is the quality of those land proclaimed to be reclaimed--we all know too well that those could be wastelands. The only data source on reclaimed land quality now was self-generated reports by local land bureaus, and the data was neither sufficient nor accurate. (Fieldnotes, Oct 2016)

The inspection carried out by work teams was burdened with other considerations than truth-digging. In 2014, RIVER county land bureau went through meticulous inspections by a work team sent by provincial government. The work team spent three months in the county, and refused to have private conversations with local land bureaus, or be entertained by feasts or other arrangements. The work team went through archives of land reclamation and conversion projects of the past five years, and had pointed out false conducts buried in documents. Several colleagues in the office I worked texted me to complain about working overtime for three months to prepare documents for inspections. The work team finally concluded their inspection at the end of the year. Despite several minor violations, the county bureau successfully showed conformity to most of state rules. One local bureaucrat later commented:

> "They (the work team members) were good at pointing out tiny misconducts, but left out the really serious ones. Two roads were found to be built 100 m and 300 m shorter than planned, and one large plot of reclaimed farmland was found to be overlapped with another reclaimed plot of the neighboring county. There are definitely canny manipulations in land bidding and auction process, which surely violated state rules: in many cases the land bureau picked the winners, instead of going through standard public bidding and auction procedure. But those multi-million land conversion programs are too large to fall, since the urbanization process would be severely affected if those misconducts were found and addressed. No one could afford that. So the team just sticks to the surface and leaves those real issues untouched." (Interview, January 2015)

What we see here is not only a "compromised" state project, but also a complicated process of contestation. While the current study acknowledges that state interventions are often times compromised in practice (Yeh, 2009; Kolas, 2014), the study aims to locate the farmland

data production against the contesting field of power between central and local government. Instead of a failure of state effort, the data production process well demonstrates a reproduction of power relationships between the central and the local. The local maneuvers to defy state inspection and data collection were tacitly approved or tolerated temporarily in some cases, and completely banned in others. Consequently, a specific aspect of farmland management was greatly emphasized and meticulously inspected, i.e. the quantity of farmlands, whereas other conducts of local bureaus, including neglect of farmland quality, and manipulation in land bidding process, were largely ignored and continued to take place.

The "Green Local State"

Not only does the farmland protection regime fail to address key issues beyond farmland quantity, it has also caused unintended negative social consequences—the massive peasant relocation projects all over China. Under the banner of farmland protection, local states in China are forcing millions of peasant households to leave their spacious houses and relocate into densely-populated high-rises. How does this unexpected turn take place?

Local states in China are increasingly confronted with dilemmas when they are expected to achieve the two contradictory goals of economic growth and farmland protection, and the careers of local officials depend on fulfilling both. While data concealment and discrete manipulation keep land conversion unblocked and secure local economic growth, those mischiefs convey negative images of local officials and potentially hurt their chances of promotion. The current study reveals innovative strategies of local bureaucrats when faced with contradictory goals: "track-shifting". The local states replace farmland protection policy by a different set of practices with professedly similar goals. The tactics allow local states to portray themselves as "green states", but at the same time pursue economic growth through land conversion. The policy track-shifting is achieved by constructing alternative discourses, and

systematically reconstruct local communities. Specifically, rather than attributing farmland loss to rampant land conversion, local states construct a finely-tuned rhetoric based on data, and blame peasant households for occupying disproportional amount of farmland. The advanced technologies promoted by the central state to supervise local land management was used by local bureaucrats to carry out accurate calculation, planning and zoning, to maximize population density in the rural peripheries. Consequently, millions of peasant households are displaced in the process of building "green local states" in China. Ethnographic observation clearly revealed that land technocrats in local land bureaus were co-opted by local governments and actively produced the green discourse. After all, the wage of local government officials to a large degree depended on local land conversion. While the last section shows how scientific fact (data and maps) was produced in a contested field of power, this section unravels unexpected consequence of state surveillance when local states take advantage of farmland science, reconstruct local communities, and achieve counter-control.

Creating New Discourses: Blame Shifting and Scapegoating

Scholars working on development have long realized the rhetorical and ideological powers of modern science and technologies, and their consequent ability to reimagine – and even remake – non-Western societies. By making territory legible through maps, various kinds of modern technology not only facilitate state intervention, but they also initiate epistemological shifts. Scott (1998) rightly notes that the maps "did not successfully represent the actual activities of the society they depicted, nor were they intended to; they represented only that slice of it that interested the official observer … they would enable much of the reality they depicted to be remade" (Scott 1998: 3). Scholars have recorded how transnational organizations such as the World Bank exported neoliberalism by sending Northern experts to targeted countries to redefine their territories and thus legitimize intervention. For instance, the

World Bank Country Report on Lesotho greatly distorted the country's reality, constituting an image of Lesotho as a "less developed country", in order to set up a target for intervention (Ferguson 1990). Similarly, the World Bank and its partners initiated and financed environmental studies targeting resource-based populations in the forested mountains of the Mekong, accounting for them and their environments in new discourse of ecological improvement, and compelling them to participate in the new neoliberal process of eco-government (Goldman 2001). Similarly, the Chinese state employs highly unreliable data to legitimize environmental interventions through large-scale projects in Western China (Yeh 2009). Like transnational organizations and nation states, this study shows that subnational actors are also capable of exploiting science and technologies as tools for discourse construction, and subnational discourses can effectively counterbalance the state discourse.

Since 2008, China's local states have actively lobbied the central state for approval of mass peasant relocation programs as a way to address farmland loss. The local government would build high-rise apartment blocks and relocate peasant households from spacious country houses into high-density apartments, and then reclaim the original living spaces as farmland. The extra quotas (the area of reclaimed land minus the area of land used to build apartment blocks) can then be used legally to convert an equal amount of farmland into industrial or commercial use in the urban area. Instead of reclaiming wasteland, the relocation programs make up the land loss by displacing peasants and reclaiming their original living space. Various negative externalities of those relocation programs have already been reported by scholars, including but not limited to forced displacement of peasants, disruption of rural social organizations, and lack of property rights in new accommodations (see Chien 2015). Despite these implications, relocation programs kept expanding nationwide over the last decade: In 2006, five provinces became the experimental sites of peasant relocation programs, and another 19 provinces were authorized by the MLR to launch relocation programs in year 2009. By the

end of 2013, a total of 29 provinces had participated in the program. How did local states justify the mass peasant relocation programs? The framing of the relocation programs reveals an intense effort to shift blame, in which technocrats in local land bureaus attributed the food security crisis to unproductive farming and the inefficient use of rural space, as the living spaces of rural households provide almost twice the amount of space for each family member as do newly-constructed apartments. Relocation programs then corrected these deficiencies through the provision of such modernized apartments and the mechanization of farming.

Since relocation programs are approved on a case-by-case basis by provincial governments, experts in local land bureaus actively produced large volumes of files to legitimize local programs. The government reports I collected from five land bureaus on 77 relocation programs show a similar pattern. A typical report reads as below:

> "Section Two. On the necessity of launching relocation programs: …The land in PT village was contracted to individual households after the reform launched in 1979. Since land was divided into small patches, mechanization of farming is severely hindered, and farming is not efficient. It is therefore necessary to relocate peasant households into high-rises, retake their contracted lands to promote modern agriculture on a large scale… the majority of the young generation of peasants in the village has become migrant workers, leaving behind hollow houses which occupied land and prevented optimal land use… The uneconomic housing is another pressing problem: an average household in this village occupies 215.1 square meters of land. The problem should be immediately addressed by reclaiming the current residential area… 13.23 hectares of land would be reclaimed in the relocation program. The high-rises built for relocated peasants would occupy 6.63 hectares of land, and the rest (6.6 hectares) would qualify for land conversion quotas, which would be used to develop industrial parks in urban core.
>
> Section Three. Infrastructure problems. The village lacks basic irrigation system.There are only three hand dug water wells, which could hardly fulfill daily needs of villagers. Part of the land and water in the village was polluted by underdeveloped garbage disposal and sewage systems…
>
> Section Five. Sanitation Problems. Villagers kept an unhealthy habit of keeping poultry in the backyard, which could lead to bird flu and other infectious diseases…" (Reports on land relocation program in PT village, Henan Province. Fieldnotes. April 2016)

Almost all reports ended with an assertion that relocation programs would facilitate optimal land planning, improve land quality and finally contribute to farmland protection. The data collected from the second national survey was used strategically to confirm "the

uneconomic and backward lifestyles" of the peasants, to contrast village life and modernized life, and to legitimize the intervention from local states.

My coworkers in River County Land Bureau told me several times that I should not spend so much time examining government reports, because "[t]here is nothing in them", and further stated that, "When we wrote them, we pulled out the same template and filled in data from land surveys. Haven't you noticed that the sentences are exactly the same in different reports?" The monolithic discourse obscured the idiosyncrasies of different villages and categorized them as univocally backwards and primitive.

The interviews with villagers reveal another logic that is missing from numbers and maps. On a cold winter morning, I joined an official, Ms. Li, in the Bamboo county land bureau in the Guangxi province, on a field trip to a remote village to promote high-rise apartments. The village was a one-hour drive from the county center and known for frequent flooding during rainy season. Ms. Li expected a quick and smooth relocation since major floods destroyed many homes in the last two decades and continued to pose a threat to the community. However, upon arrival, we realized that instead of tearing down houses and purchasing apartments, many peasant households were busy expanding and renovating their old houses. Mr. Yang was occupied with construction work in his yard when a village head approached him and introduced the county official. He explained to us that he was expanding the original house to accommodate his three sons and their families during this upcoming Spring Festival, using remittances sent back by two of them who were working in cities. Ms. Li enthusiastically promoted the apartment buildings located on the other side of the village, explaining that the apartments were "modern, equipped with water and electricity, even porcelain floor tiles", and cost just as much as he was spending on the construction project now. With a bitter smile, Mr. Yang refused by telling Ms. Li that those apartments were too fancy for most local peasant households:

> My sons are only returning for festivals these days, but eventually, they will need to come back to the village, and they all need a place to live. We need three homes for three families, not a single apartment. Not to mention that the addition is actually cheaper than a single apartment, since my brothers help me and I save on labor. No, we don't need porcelain floor tiles; I'd rather buy food with that money (fieldnote, December 9, 2016).

Frustrated by refusals from several households, Ms. Li later bitterly complained to me that the "sneaky" peasants must be hiding real incomes and their backward thinking held them back from making the correct move. However, after talking to several other households, I was convinced that that government reports failed to address the real needs of the peasant community. I found that the "empty houses" in reports were periodically occupied by the owners. This tendency mirrors the profoundly unsettled identity of a migrant worker. Although migrant workers lived and worked in urban areas, they retained multiple ties with peasant communities, returning for holidays, festivals, and life events. Country life was not only a vacation, but rather, in the words of the peasants, it was "the root" one would hold on to throughout their lives. Given this dual life, it was reasonable, even applaudable, to spend a year's savings to renovate one's village house, although the house was only occupied for a limited time each year. Beyond identity crisis, the deep rooted urban–rural gap sustained by the decades-old house registration system underpinned the unwillingness of peasant households to forsake their village houses, as the majority of migrant workers were incapable of permanently staying in cities (see Hu, Xu and Chen 2011; Zhu 2007). The migrant workers, while living in cities, generally did not have the same access to health insurance, job opportunities, and social security as local urban dwellers. The land was worth keeping even if farming did not generate high income, since it enabled migrant workers to support themselves when laid off or too old to work. The rural infrastructure and village houses were primitive, but they offered a place to live when one could not afford to buy or rent an apartment in a surging urban housing market. The free allocation of land has also long since been considered the core benefit of membership in rural collectives: as offspring came of age, they were entitled

to a free plot of land allocated by the village collective to build their own houses. Accordingly, despite its fine-tuned discourse, the relocation program uprooted migrant workers from rural communities, demolished their safety net, and deprived future generation peasants of their membership right to land as collective property.

It is instructive at this point to examine the real effects of those relocation programs. Do they deliver the optimal social and environmental outcomes predicted in official reports? The author joined a research team from Peking University conducting a household survey with the aim of tracing social and economic changes after relocations. The effects of the relocation and modernization efforts were upsetting, as is the case with so many other large social schemes. The collaborative study randomly sampled 277 plots of farmland from relocated and soon-to-be relocated households in RIVER County. Due to the increasing commute time after relocation, 36 per cent of the farmland was already leased to agribusinesses. While the county government took pride in its ability to attract agribusinesses in this new venture, the proclaimed aims of modernizing agriculture and creating local jobs was not achieved. The survey showed 24.4 per cent of the farmland leased to agribusinesses lay idle, whereas lands still contracted to peasant households were all cultivated. Interviews with local government officials later revealed that many agribusinesses sought more lucrative businesses than growing crops. They built luxurious villas on the farmland to attract weekenders from the cities, rather than mechanizing farmland and increasing yields, as predicted under the development rubric. Moreover, those agribusinesses hired less than 6 per cent of the total workforce, failing again to create jobs or transform the local economy as claimed.

Redirecting Technologies: Restructuring Local Communities

A closer look into the implementation of relocation programs reveals a series of strategies explored by local states to maximize profits. Local states were not only capable of

exploiting farmland science and technology to construct a parallel discourse, but they were also adept at redirecting scientific tools to increase legibility, and consequently restructure local communities. The real promise of those relocation programs so enthusiastically pursued by local states was the extra land conversion quotas generated from relocations, since reclaimed living space translated into land conversion quotas near or in the cities. The geographic information system (GIS), remote sensing technologies, and monitoring technologies, originally aimed at supervising the conduct of local states, were all transformed into efficient tools of the local government and enabled a series of local strategies with the ultimate aim of maximizing land quotas generated from relocation programs.

Targeting

The relocation programs were deeply driven by the thirst for extra quotas; consequently, they tended to target specific peasant households while routinely ignoring the demands of those households with a need to relocate. In mountain villages I have visited, peasant households suffered from frequent threats of mudslides over the summer, and farming in such areas was unrewarding since arable farmland in mountainous areas was scattered, fragile, and susceptible to erosion. Mountain villagers and their contracted farmland were in fact precisely the ideal targets imagined in the official logic of relocation programs, since the mountain villagers were in urgent need of better housing and soil improvement. In practice, however, local governments avoided mountain villages since the land quotas generated from those difficult and extreme programs were in general lower than better-off villages. Due to limited economic resources in mountain villages, the whole extended peasant family was often found living in a house less than 100 square meters. Hence, the living space was restricted, while the demand on housing was multiplied, which translated into higher construction costs and fewer land quotas. The data

from the second land survey facilitated the rigorous calculation of program budget, and the targeting of villages with spacious layouts. As confirmed by a deputy town mayor:

> We put together data from the land survey and did some math. The decisive factors are the number of household members registered under the current house and the area of their living space. The cost of every mu of land quotas turns out to be approximately 400,000 RMB in lowland villages, and the number raised to 600,000 RMB in mountain villages. You could see the difference (fieldnote, April 30, 2016).

The key, from the point of view of the county head, is that the villages selected for relocation should be spread out enough to make the project economically rewarding. This meant avoiding the mountain villages that genuinely needed government intervention to get access to better resources.

Grouping

After local land bureaus targeted specific villages, in several cases they relocated peasants from different villages and grouped them into the same apartment block to maximize the population density in the newly built apartments and minimize the program cost. In River County , this first took place in 2013. An apartment block was planned to accommodate 568 peasants, with an average living space of 50 square meters per person. This was considerably higher than the minimum living space regulated by the central state (25 m^2). When project planning was on the verge of completion, officials in land bureau were informed by the county government to adjust the floor plan to take in another 990 peasants. Cartographers and managers protested at first, but their discontent was dismissed by the county government. The technocrats spent the next few weeks measuring, calculating, and redesigning. By the time the planning was accomplished, the average living space was driven down to the minimum of 25 m^2. While carrying out their jobs, land technocrats speculated the reason behind the change. At first, several of them told me it must be a trick by the relocated village to get extra government subsidized apartments by over-reporting the population to the county government. The village

collective would lease those apartments and collect rent. It only became clear after several months that the county government was moving peasants from another village into those apartments. “I have never seen this before,” a land bureau official commented and further stated, “Villages were piled up and dumped into apartment blocks. The county government was really desperate to save on quota and construction costs” (Fieldnote, August 15, 2013).

The meticulous mapping and calculations based on the data collected in the second national land survey enabled local land technocrats to maximize land quota outputs and fulfill the central government’s requirement on minimum living space. However, it constituted a double denial of the rights of peasant households. Not only were the peasants of those two villages deprived of the right to reside on original collective land, but they were denied the right to control the distribution of land quotas. Notwithstanding the vast amount of land quotas generated from both villages, the living space allotted to peasant households was scaled down to the bare minimum.

The grouping strategy also did not take into account the social particularities within and between villages, and rather marked them as homogenous spaces on the map. In Z County, Henan, a single-lineage, small village fiercely refused to move to the assigned apartment blocks, which would have put them directly next to peasant households from a multi-lineage village. From the point of a land bureau official, the numbers added up right. However, the animosity between the two villages had lasted for several generations, and hostility was very difficult, if not impossible, to measure quantitatively and translate into figures.

Conclusion

In this study, the unexpected consequences of China’s farmland protection regime were explained by delving into the highly contested process of production and application of farmland science, against China’s fragmented bureaucratic backdrop. The innovative strategies

of local states in production, manipulation, and application of farmland science further our understandings of the nature and the limit of China's progressive farmland protection regime, which features consistent legislation and regulation efforts, and massive expenditure in land monitoring.

The study contributes to the literature of post-structural strands of political ecology by delving into the social production of knowledge in a highly contesting field of power. It is argued that the farmland science and knowledge do not merely serve as efficient tools of governance for the central state, but are better viewed as a constant reproduction of power contestation between the central and the local, which leads to a set of highly contingent and unpredictable consequences: while the farmland quantity is meticulously supervised and regulated, local misconducts of faking farmland quality, and illegal land transaction manage to stay under the radar. By engaging with the "governmentality" perspective, this study also shows how farmland technologies as legitimate supervision tools are used by local states to reconstruct local societies. Consequently, the application of farmland science and technology in China neither efficiently protects farmland, nor safeguards the land right of peasant households, but ends up causing large scale negative social consequences.

China's farmland protection regime is thus at the same time strict and loose. The state relies on satellite images, GIS and other techniques to meticulously track and supervise local states' efforts in farmland conversion, and violations caught by the surveillance system resulted in serious sanctions on local officials and crackdowns upon local states. However, the state's over-reliance on data and other "scientific facts" to supervise local agents has resulted in a myopia that ignored the real plight of peasant households. The state tacitly approved local states' practices of protecting farmland by pushing further urban frontiers into remote villages, rather than curbing already rampant urban sprawls, which was the original goal of farmland protection. The decreased number of annual farmland conversion in China is not achieved by

restraining local land grabs, but rather by further expanding land expropriation and relocating peasants into high-rises.

By examining the twists and turns in production and application of farmland science, the study calls attention to the highly unpredictable social consequences of state's farmland policy. Ironically, the fate of millions of peasant households living in remote villages long-ignored in speculative urbanization was drastically changed for the worse by the local states' innovative strategy of mass peasant relocation, in response to the state's farmland protection policy. To address the precarious living condition of peasant households, it is crucial that the state goes beyond its narrow focus on farmland data and regulates local states' predatory conducts in reconstructing local communities.

It is also instructive to note that "counter-mapping" practices or other local strategies are still largely absent in my observations. Scholars argue that local people may produce an alternative dialogue and exert control directly by making their own maps or entrust a representative of their choice, such as a local NGO, to perform the task (Peluso, 1995); radical art and political groups can also make maps to challenge the official cartographies (Pinder, 1996); local residents were also found to destroy and resist the use of tools such as pillars to coordinate official land measurement (Hull, 2012). However, the punishment for challenging, or ignoring official maps and records was very harsh in relocation programs I studied: when relocated peasant households in a village failed to bribe land bureaus to measure their current house, they were compensated according to the record of their old houses registered in the 1990s, which were often much smaller than their current dwellings. Consequently, peasant households who ignored official mapping practices ended up in more crowded apartments. However, the NGOs and local residents should not be discouraged from recording and mapping local states' targeting and grouping strategies and their real effects on relocated households, and seeking for legal and legislative protections from the state.

Chapter Three. Pushing the Urban Frontiers: Infrastructure Funding and Local Growth Coalition in China's Relocation Programs

Introduction

Over the last decade, China has witnessed a sea of change in its countryside as millions of acres of farmland have been devoured by urban sprawls. After two decades of export-oriented industry growth, China finds its new impetus for growth in urbanization and, more precisely, in converting agricultural land into non-agricultural use, selling the right to use the converted land on the private market, and pocketing the windfall (Harvey, 2012; Lin et al., 2015). The income from land conversion and land sale has become the single most important fiscal revenue of local governments (Lin, 2010; Tsui, 2011). Consequently, the arable land in the countryside has shrunk rapidly in the past two decades as an increasing amount of farmland has been expropriated by local governments to develop industrial parks and real estate. From 1996 to 2006, China's farmland reservoir dropped from 1.95 billion mu to 1.827 billion mu. The speed of at which farmland is disappearing poses a threat to China's food security and raises concerns about strategic safety. At the Fourth Session of the Tenth National People's Congress held in the spring of 2006, the central government set a red line at 1.8 billion mu and forbade any further encroachment on farmland, but tension between GDP growth and food security was further exacerbated during the global financial crisis in 2007–2008. In response to the financial crisis, the Chinese government launched the 4 trillion RMB (586 billion USD) planned infrastructure program. The stimulus package was successful, as the economy responded quickly and a clear growth recovery was evident by mid-2009; however, as large urban infrastructure programs featured in the stimulus package

drove high demand for land, the loss of farmland has increased in the last decade and China has been constantly approaching the red line set in 2006.

The central government addressed the dilemma between economic growth and environmental protection by further pushing the urban frontier on an unprecedented scale. Taking advantage of the collective ownership of rural land, the Chinese government launched a master plan of "sustainable growth". A mass relocation of peasants marked the new phase of China's urbanization and became widespread in China's countryside guided by a general idea of balancing the agricultural land lost in the urbanized core with agricultural land gains in the rural periphery (*zengjianguagou*). The overarching idea was that township-level governments in rural areas would build concentrated blocks of low-rises or high-rises and relocate peasants from their scattered and spacious village houses into those apartments. The reclaimed, former living spaces of peasant households (*zhaijidi*) qualified as land quotas (the permit to convert agricultural land into non-agricultural use), which would be bought back by the county-level government at a fixed price. With those new quotas filling up the long-empty quota reservoir, the county-level government would then convert an equal amount of agricultural land near the urban core to commercial building or urban infrastructure.

The mass peasant relocation program was also claimed to be a new mechanism of social welfare. The fiscal revenue generated from land transactions in the urban core was expected to fund the investment in relocation programs. For the peasant households, loss of their spacious houses would be compensated by apartments with a minimum living space of 30 square meters per capita and with improved infrastructure (e.g., electricity, water, and gas). At the same time, unlike the ferocious land acquisitions (*tudizhengshou*) in which the contracted land (*chengbaodi*) as means of production was taken from peasants in suburban area, the relocation program in the countryside only reclaimed the original living space while keeping the rights of peasants to use contracted land intact.

China's countryside witnessed a proliferation of relocation programs in the last decade. In 2006, five provinces became the "experimental sites" (*shidian*) of the new policy. In 2008–2009, another 14 provinces joined the list. The relocation program expanded all over China in 2013 when the Ministry of Land and Resources (MLR) approved the participation of 29 provinces in the program. By 2011, a total 730,000 mu (120,268 acres) of quotas were generated from the relocation program. The number skyrocketed in 2013, when a record 900,000 mu (148,263 acres) of quotas were sanctioned by the MLR and the number remained the same in the years that followed (Sina, 2013).

In presenting the detailed process of how relocation programs function, the paper sheds light on the latest phase of urbanization in China in which the State has pushed its urban frontiers not only into suburban villages, but also into remote mountain villages. The paper proceeds as follows: after a brief review of the current literature on urban infrastructure funding and growth coalitions in China, the paper narrows in on the fundamental changes that took place in both domains. The paper's principal empirical focus is on the comparison between government-funded programs and private investment-funded programs in two counties with respect to the types of changes to the growth coalition and the effects on peasant households. The paper concludes with a warning about the failure to provide peasants with the benefits they were promised and the huge risks transferred from local government and private investors to peasant households.

The material for this chapter is derived primarily from archival research and interviews conducted in Sichuan in 2013, 2014, and 2016, and in four other provinces (Shandong, Henan, Jiangsu, and Guangxi) in 2016. Specifically, I studied the records of 77 relocation programs kept in local land bureaus. I then located towns and villages where the programs were implemented and interviewed key players in past and current programs. In total I carried out 44 in-depth interviews with 22 village heads and villagers in 10 villages

and 16 government officials in five land bureaus (some individuals were interviewed more than once). I was also offered the opportunity to observe an ongoing relocation program from inside a real-estate company, and I was able to audit the negotiations between the real estate company and the local government, as well as carry out five in-depth interviews with the chairman and the program managers of the company. Finally, I also reviewed electronic (online) and physical documents drafted by the MLR and other relevant agencies.

Infrastructure funding and the growth coalition in the Chinese context

The growth machine theory emphasizes the division between use value and exchange value of land and views cities as growth machines that can increase aggregate rents and trap related wealth for those in the right position to benefit. Local political, economic, landholding, and other elites cooperate to achieve the goal of growth regardless of how split they might be on other issues (Logan and Molotch, 1987). Although the theory has been criticized for being insensitive to scale (Wood, 2004), isolating cities from wider economic and political forces (Jessop et al., 1999), and being US-centric (Harding, 1994), growth machine theory tends to be seen as appropriate for the analysis of mechanisms in a wider urban context.

In recent years, growth machine theory has greatly appealed to scholars writing on China's urbanization process, as the share of land premiums skyrocketed and became the major source of fiscal revenue for local government and pro-growth local government forms coalition with real estate developers at the cost of local peasants. Real estate developers accumulated massive wealth from the surging prices of houses in major cities over the last two decades, whereas peasant households were denied access to the windfall from land transactions. Several specific institutional arrangements set the stage for the current mode of urbanization: first, in the 1994 tax-sharing agreement, the central government agreed to hand over land premiums to local governments while increasing its hold on several other major

local tax sources. This change in tax policy has fundamentally shifted the local government's primary tax source from local industries to land transfers (*tudichurangjin*) and other land-related fees. Second, the cadre evaluation and promotion system links the promotion of local officials to their performance in pushing forward urbanization during their short term in office (Wang, 2013). The dual land system in China also permits the enormous windfall derived by local government. Unlike urban land, rural land in China can only be sold after being requisitioned by the local government. The Land Management Law identifies village collectives, rather than peasant households, as the owners of rural land. Therefore, individual households can neither sell the land when they want to nor receive compensation according to market value, as the village collective often holds little negotiation power in comparison to the local government. The local government is able to make profits thanks to the gap between the compensation payments and the market value of land when sold to real estate developers (Lin and Ho, 2005; Tsui, 2011).

Despite the similarities between local coalitions in the western and the Chinese context, the Chinese local growth machine is characterized by the local government's continued predominance. Scholars working on the growth coalition framework tend to agree that the local government plays a leadership role in China's land development. As a "power broker" (Hsing, 2010), the local government occupies the center of a network that connects powerful players benefiting from local growth. It seems that the district government plays a central role in more urbanized areas like, for instance, in mega-projects in Shanghai (Yang & Chang, 2007; Zhang, 2002, 2005), whereas township governments lead the pro-growth coalition in the countryside (Hsing, 2010). The dominance of the local government over other players in the growth coalition can be attributed to its monopoly on land sales and land use. Under China's current land law, the local government is the only legitimate primary developer and sole supplier who requisitions and transforms rural land into state land by

providing basic infrastructure, and is entitled to lease lands to the highest bidder at market rates and in doing so make significant windfall profits. The real estate developers are not allowed to purchase land from individual peasant households, and must compete with each other to win the favor of the local government and to secure the development right over a plot of land, and later transform the land into office buildings, apartment blocks, or shopping centers. The local government also hold sway over the land planning to optimize local development. Unlike the biding procedure of commercial land, the land planned for industrial use is often leased at a negotiation price (often far below the market price) to attract competitive industrial projects and further a generate tax base and job opportunities, and boost housing need (Yue et al., 2013). In other words, the subsidized negotiation price is made possible by the profits generated from the commercial land transactions (Liu et al., 2016). It is crucial to note that the unique and powerful role of the local government is associated with heavy responsibilities. As the sole primary land developer, the local government is endowed with the duties of providing basic urban infrastructure by connecting the roads, water supply, electricity and gas. It is also responsible for constructing apartment blocks, relocating peasants, and reclaiming the original living spaces.

Considering the massive amount of capital involved in the primary land development, the leadership role of the local government is to a large degree supported by the unique funding model of urban infrastructure in China, which differs from that of most cities in Western countries (Liu et al., 2016). Local governments in the US can derive much of their financing from property taxes, municipal bonds, special taxes on redevelopment areas, and development fees levied on new projects (Peterson and Annez, 2007). In the United Kingdom, the institutional investors in urban infrastructure include trusts, insurance companies, and pension funds, which invest directly in bricks and mortar or indirectly in companies that own real estate portfolios or the mortgage-backed debt securities

(Christophers, 2011). Although the situation in developing countries varies substantially, local property taxes dominate the revenue structure and loan financing tends to be a minor source (Wu, 2010). Using a unique model, cities in China fund urbanization mainly through land transactions and bank loans. Many local governments began to set up shareholder companies in the late 1990s. This was triggered by the central government's demand to separate local government units from their profit-making operations (Qian, 2007; Hsing, 2010). As the transactions between local government and banks are highly restricted by the central government, these local government shareholder companies (also called "arms-length" companies, or "local financing platforms"), greatly facilitate loans from banks in which requisitioned land is used as collateral (Tsui, 2011). With the support of bank loans, the local government further transforms "immature land" into "mature land" by investing in urban infrastructure and relocating peasants, and puts the land on the secondary market for sale (*gongdi*). China witnessed a fourteen-fold increase in the amount of loans between 1998 and 2009, which routinely accounts for one-third or more of total urban infrastructure investment. In the crisis year of 2009, the share jumped to nearly 40% as infrastructure construction accelerated (Tsui, 2011). On the other hand, income from land transactions is used to improve urban infrastructure, and this is commonly referred to as "using land to breed land development" (Yeh, 2005; Xu et al., 2009). It is estimated that around 80% of the land windfall was spent on compensation for land requisition, land development, and urban infrastructure construction (Tsui, 2011). As the only legitimate agency of rural land requisition, the local government takes on the responsibility of negotiating bank loans and channeling land income back into urban infrastructure.

Does this infrastructure funding model continue to function in the latest phase of China's urbanization? Is the local government still capable of dominating the land development process? The current study confirms that the local government is still a key

player in the local growth coalition in the relocation programs. The relocation programs are organized around land and growth, with the township government occupying a central role in household compensation, land reclamation, and apartment construction, thus functioning as a nexus between different levels of bureaucracies while striking deals with multiple industrial projects. However, the paper also points to a new trend underlying the current urbanization process: the increasing participation of private investors in funding urban infrastructure in relocation programs. In the section that follows, the paper will describe in detail the change in urban infrastructure funding models, and the resulting power reshuffle in growth coalitions.

New Challenges in Funding the relocation program: private investors come to rescue

As the Chinese State expands the urbanization process into peripheries, the local government is facing a set of new challenges in infrastructure funding. In the first place, the continued reliance over decades on bank loans has caused alarm within both the central and local government, consequently, the sustainability of the current funding model is called into doubt. The accumulation of local debts poses a growing threat to the nation's financial health. The local debt burdens reached a staggering 10.72 trillion RMB by the end of 2010 (China's National Audit Office, 2011). According to figures leaked to the media by the China Banking Regulatory Commission, the initial tally of new loans going to the shareholder companies established by local governments in 2009 amounted to 3.05 trillion RMB, bringing the total balance to 7.38 trillion RMB at the end of 2009, or about 17% of total bank lending. A subsequent clean-up operation put the balance of LFP loans at 9.09 trillion RMB at the end of 2010 (Tsui, 2011). Whether the local debt will be paid ultimately hinges on the health of the local property market and the local government budget, which makes the massive scale of urbanization in China, as a facet of the "new state activism," an enormous gamble by the

Chinese government (Naughton, 2011). Secondly, the relocation programs provide unprecedented opportunities for impoverished rural counties to acquire extra land conversion quotas to boom local economy, since the impoverished counties have little chance to compete with their wealthy counterparts in obtaining annual allocated land quotas distributed by the county government. However, the undeveloped banking structure in those counties falls short of financing the relocation programs. Unlike their counterparts in urbanized area, local government in less developed rural peripheries could not form convenient ties with banks, and their capacity to fund relocation through bank loans is severely compromised.

Confronted either by the enormous pressure of local debt crisis or undeveloped banking system, and an extending urban frontier that demands millions of investments in land requisition, the local governments in several provinces started to experiment with bringing in private investment, which the MLR tacitly approved. The current research shows a heterogeneous timeline across different localities in launching investment experiments. As a pioneer city in land policy experiments, a major city in Sichuan had spent nearly 6 billion RMB by the end of 2010 on land requisition in relocation programs and other land reclamation projects. In 2009, county governments in this city began to set up local policies to bring in private investment for land requisition. The similar efforts were found in counties in Henan and Shandong provinces in 2010. The other two provinces end up on the other side of the axis: Guangxi province continued to adopt a conservative policy until 2016, prohibiting private sectors from investing in land requisition. As a highly urbanized province, the fiscal income of Jiangsu ranked among the highest in China. With very few relocation programs launched in its ever shrinking rural area, Jiangsu province covered the cost of land requisition solely by fiscal revenue and did not need to bring in private investment.

One of the most important conclusions we can draw from the data collected from the 77 relocation programs across five provinces is that there has been a steady increase of

private investment in land requisition programs, while, on the other hand, the local government has retreated from investment (See fig.1 and fig. 2). While only 16 provinces were endowed with the privilege to experiment with relocation programs prior to 2012, local governments in other provinces eagerly jumped on the bandwagon and launched relocation programs without the approval of the MLR. The drastic decrease in 2011–2012 in both government and private investment was caused by the Decree of State Council #47 (State Council, 2010), which ordered the suspension of ongoing relocation programs until they were carefully inspected by the MLR. The number of relocation programs resumed in 2013 after the ban was lifted and the relocation programs were officially approved in most provinces in China. While the absolute number and investment amount matched its previous level, the composition of investment changed remarkably. In 2009, the private sector was only investing in 25% of the programs; however, by 2013, it was investing in 100% of the programs. Private investment not only expanded in terms of the absolute number of programs funded, but also in the proportion of funding. Private investment in 2009 made up only 26.7% of the total investment with a total of 219.12 million RMB, but by 2013, it had reached 100% with a total investment of 565.52 million RMB.

In the following section, by comparing relocation programs that were implemented before and after private investors took over in two counties, the paper examines a series of changes brought by this fundamental change in the funding model. The two counties examined by the current study differ drastically in geographic location, tax bases, industrial structure, and economic development in general, but both went through a process of private investor takeover, and a series of similar changes which followed the shift in funding model, revealing the prevalence and profoundness of the current phenomenon.

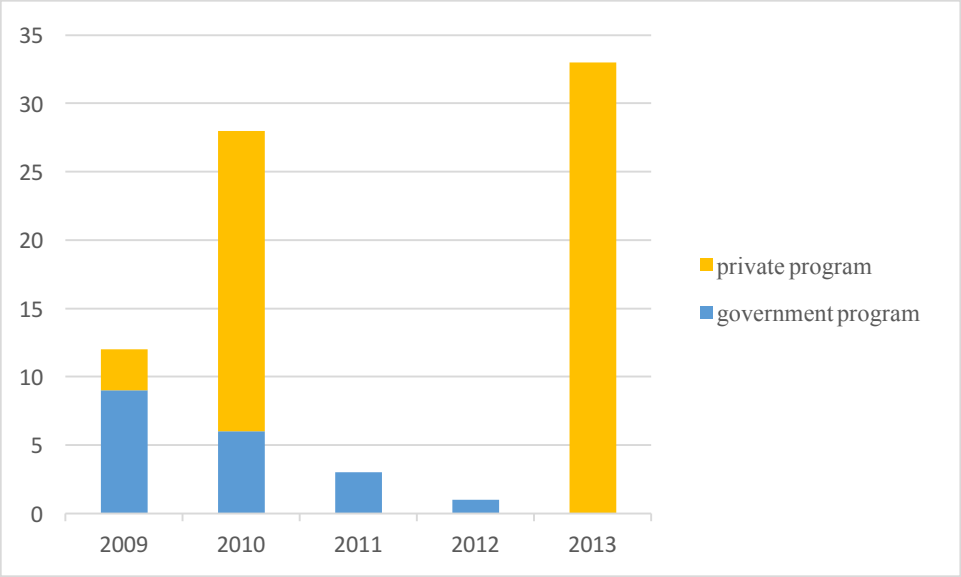


Fig. 3.1. Programs Invested by Local Government and Private Sectors 2009-2013

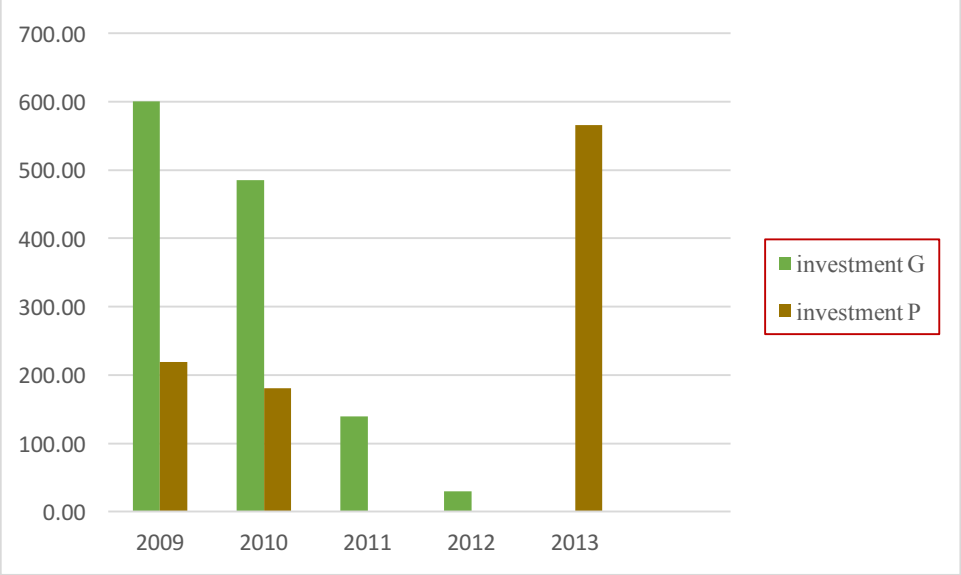


Fig. 3.2. Investment Amount by Local government and Private sectors 2009-2013 (million RMB)

River county: disappearing land lease and shrinking compensation package

Sichuan is among the first provinces selected as experimental sites for the peasant relocation program. C city initiated local relocation programs as early as 2004, even before the practice was officially authorized by the central government (Interview, July 31, 2014). Located at the outskirts of this major city, RIVER County is known for its industrial base –

the county was established in 1960 to administer the operations of major Fertilizer Plants and Iron and Steel Plants – and has hosted more than 2,200 industrial companies in its industrial parks.

Since substantial land was needed to develop industrial parks within its territory, RIVER County greatly welcomed the relocation programs. Beginning in 2008, the county launched massive peasant relocation programs with an average investment of 361.35 million RMB. Most of the investment was in the form of bank loans borrowed by shareholder companies using requisitioned land as collateral. An ever increasing amount of loans were needed for relocation programs in remote villages as well as for land requisitions near the urban core. As such, the number and amount of outstanding local loans continued to soar over the last decade. Until 2008, the outstanding loans of all financial institutions was less than 7.62 billion RMB. However, this number steadily increased over the last decade, reaching 17.21 billion RMB in 2016 (RIVER County Statistics Bureau, 2014, 2017). To reduce the burden of massive local debt, RIVER County began to look for private investment to finance the land requisition process. It is instructive at this point to compare the relocation programs before and after the shift to private investment.

RIVER County launched three massive peasant relocation programs in 2008 and 2009. A total of 3,292 peasant households was relocated (11,012 individuals), and 2,145 mu of their origin living ground (*zhaijidi*) was reclaimed to fill the farmland reservoir. In the process, 1,498 mu of quotas were generated and most of them were allocated for industrial and commercial use. The total investment reached 1.08 billion RMB, and only a very small amount – 9.84 million RMB (less than 1% of the total investment) – came directly from fiscal revenue. The rest of the investment was borrowed through the RH Company, a shareholder company established by the RIVER County government to get around the ban on direct government loans from banks.

The compensation package was relatively generous, though it still fell far beneath the market land price. The compensation for brick houses was set at 240 RMB/m^2 and the cost of a new apartment was on average 232 RMB/m^2. As rural houses were usually more spacious than urban apartments, the apartments often turned out to be free of charge and the peasant households ended up with extra monetary compensation. In one of the three programs, the total compensation fee paid to the peasant households by the county government reached 55.82 million RMB, whereas the peasant households paid 33.32 million RMB in total to the county government for the new apartments, leaving 18,200 RMB of extra monetary income per household (RIVER Land Bureau, 2014).

In 2012, HS, a real estate company, became the RIVER county's partner and invested more than 200 million RMB over four years in a relocation program in XF village, which relocated 528 peasant households and generated 507 mu of land quotas. A series of arrangements were made between the county government and HS to attract investment from the real estate company. According to the state regulations, collective land can only be leased by rural collectives, and only with consent from majority of the households. However, 53.9 mu of the collective land original allocated for constructing apartment blocks was leased infinitely to businesses by HS, with a land transaction fee as high as 450,000RMB/mu. The income was pocketed by HS company and not shared with the local community to whom the land belonged. While the local government did not only tacitly approve this deal, it also facilitated the transaction by changing the zoning from collective apartments to commercial use (Interview, August 9, 2013; Interview, July 28, 2016). Empty spaces for commercial use occupied the ground floor of almost every apartment building during my first visit to the local community in 2013, and most of them were leased out by the time of my second visit in 2016. The shops thrived on the business from the local community and contributed to the

local tax base, whereas the lucrative land transaction fee was reaped by the real estate company instead of local households.

HS further enhanced its leverage over the local government by showing interest in potentially investing in another relocation program in JB village. The promise to invest more in the future and the threat to withdraw current capital together worked together to enhance HS's negotiation power over the township government. The company justified its encroachment upon benefits theoretically belonging to the peasant households by arguing that future investment depended upon profits from the current program. To exert pressure on the local government, representatives from HS frequently complained to township government officials and to the Land Bureau about the unexpected increase in infrastructure-related expenses ("We spent more than ten million on electricity alone!") and the declining market of land sales ("No one is buying the land, we are losing money"). While it was clearly stated in the contract between HS and the township government that the company would shoulder these risks, the promise to deliver further investment has prompted deeper compromises on the part of the local government. A deputy secretary of a township party committee further explained: "HS needed the money back from their investment in the current program and we have to help them (in getting money). Otherwise it would have nothing to invest in the JB village program, and we need their investment" (Interview, July 28, 2016) Consequently, the township government continued to ignore the land lease seizure, while the land bureau facilitated the zoning change to facilitate the transaction. To increase the incentives and encourage investment, the local government offered stable profit margins to reduce the potential risk to HS in the second relocation program.

The second relocation program in which HS invested was the JB village relocation program, which relocated 793 peasant households and generated 328.7 mu of land quotas. The JB relocation program is still in process and the expected amount of investment is 138.39

million RMB. The compensation to peasant households in the current JB relocation program is considerably less than in the previously described government-financed programs. One of the major changes compared to government invested programs was that a return of investment as high as 15% was added to the program cost as a result of the negotiations between the township government and HS. To secure an apartment, peasant households also had to pay a down payment of 10,000 RMB before the construction of apartments began. In other words, the township government safeguarded the company's profits and released the pressure on its capital flow by transferring the burden to individual peasant households. Although the county government offered subsidies of 4,604 RMB per person, peasant households were still charged 10,980 RMB per person to move in to apartments with an average size of 35m^2 per person, or 5,080 RMB per person if the household agreed to downsize the apartment by 5m^2 for each family member (Interview, July 28, 2016). These additional incentives proved to be successful for securing investment. When asked about the decision to invest in JB village, a manager from HS explained:

> For the first time we will have a clear idea about the return of investment before the program begins. We normally have to wait until the program concluded, then you realized that the number was messy and the interest was uncertain. We need not worry about that now. Also, the down payment, which amounted to about 5% of the total investment, certainly helped to release some pressure. (Interview, July 28, 2016)

The JB village relocation program also marked a worrisome retreat of both county and township government from previous responsibilities. The investment contract was signed between the JB village collective and HS, and the local government had no responsibility to bail out the program if it failed to carry out its obligations as a result of, for example, capital chain rupture or any other causes. Neither the county government nor the township government was obliged to take over the program under such circumstances, and the peasant households were supposed to take on this risk. When asked about the drastic decrease of

compensation and the potential risk in current programs, the deputy township committee secretary justified the change this way:

> The period of government-sponsored programs has passed. We (officials) have to accept it, and so do the peasants. Oh, yes, there are a lot of complaints about the decreased package…That's why we have to emphasize the idea of 'modernized peasants' in our work. The peasants now live in apartments, and they are modern peasants, so they should play a big part in the game. The main actor in the relocation program is no longer the government, but the households. They are the main actors now, so they have to pay for the bill and shoulder the risk. (Interview, July 28, 2016)

The changes in relocation programs in RIVER County represents a significant example of a shift in urban infrastructure investment in China's countryside. The local government negotiated with private companies to attract private investment in land requisition, thereby trying to avoid accumulating loans while expanding the tax base. This was frequently at the cost of local peasant households. The compensation package was greatly reduced to safeguard the interests of the investor and the illicit encroachment on land leases was tacitly approved by the local government and later legitimized by zoning changes. Last but not least, the risk associated with the program were shifted from the local government to peasant households.

Wood: Apartments with limited property rights and under-maintained homes

Located in the eastern part of Henan Province, Wood County is one of the major grain producing areas in China. Agriculture is the greatest contributor to the local economy, and the GDP per capita was 18,039 RMB in 2016 (Wood Statistic Bureau, 2017), which is just a fifth of the GDP per capita in RIVER County. Eager to expand the local tax base, the county government approved and developed several industrial parks. For example, the "Countryside E-commerce" (*nongcundianshang*) industrial park occupied 168 mu land and attracted businesses such as Alibaba, which was trying to extend its sales beyond urban cores and into remote villages. The push from the local government to attract more businesses and industries translated into intense land requisitions in suburbs. The relocation programs carried

out in remote villages came to the rescue when the annual quota of land requisitions in suburbs was exhausted. However, the underdeveloped local banking system severely restricted the county's capacity to fund mega relocation programs, and the county eventually turned to private investment for help.

Henan province was officially approved by MLR to join the relocation program experimental sites alongside another 18 provinces in 2009. Similar to the case of RIVER County, relocation programs in Wood County can be divided into two phases: from 2009–2010, when most of the relocation programs were launched and the local government was the investor, and from 2011 forward when the local government invited the private sector to participate in the programs. The first phase was marked by a high degree of initiative on the part of village collectives, and relatively reasonable prices of new houses, whereas the second phase was characterized by high-priced apartments, impoverished peasant households, and under-maintained houses. In the following paragraphs, I examine and compare the processes by which those two phases unraveled.

Lacking access to bank loans, the capacity of the Wood County government to invest in the reclamation of households' original living space and basic infrastructure in new communities has been limited by its meager fiscal income comparative to its large population base. Since the local government cannot afford to invest in apartment buildings, peasant households were told to build their new houses by themselves on a designated plot of land already equipped with basic urban infrastructure services (i.e., water, electricity, and gas). In the relocation program launched in PT village in 2010, the county government invested 8.18 million RMB for land reclamation and infrastructure construction, while an estimated 20.88 million RMB was spent on the construction of houses and was paid for by households without any government subsidies (out-of-pocket costs) (Project Proposal, PT village, Wood County, July 2010). Although peasant households were not given any compensation, most of

the villagers willingly accepted the offer and the transition to new communities was relatively smooth. The self-built houses were uniformly designed two-story single family homes with an average size of 198m^2, which usually housed an extended family of three generations and gave each member their own bedroom. According to a survey in the community of 198 households, the average spent on the new houses was approximately 70,000 RMB. When interviewed, one local peasant put it this way:

> The plot assigned to us was spacious. We got to build this two-story house with a front yard. We could still keep our chickens and ducks in the yard. It's way better than living in those high-rise apartments like peasants in other places. Basically nothing in life changed except that the house was more spacious and modernized, with running water, gas and all that…And it is not that expensive because we got to use the bricks and other materials from our old house. After all it's one third of the price of commercial housing. (Interview, May 24, 2016)

The village collectives were actively involved in the government-led and self-constructed relocation programs. The new community created by the PT Village relocation program was planned along the provincial highway and occupied 40 mu of farmland located in the northern part of another village, Geng Village. Rather than buying the land from Geng Village, and consequently pushing up the prices of new houses, the PT Village collective successfully negotiated a land swap with Geng Village, which was not going to agree to losing its farmland. Geng Village permitted housing construction on the farmland in its territory on the condition that the PT Village would return a slightly larger plot of farmland (120% of the original size) to Geng Village after its original living space was reclaimed. The PT Village collective was also entitled to agree on the land use with the community. For instance, it leased 16 mu of collective land to a garment factory, which brought in jobs for the residents that offered a monthly wage of 2,000-3,000 RMB.

Beginning in 2012, Wood County launched several mega-programs that aimed to relocate 10,000 peasants into a single community. The expansion in program scale was in part due to the local government's urgent need for extra land quotas to develop industrial

parks, since a large amount of land quotas would be generated after the living spaces of thousands of households were claimed. Local cadres were also behind the relocation program boom, as they saw the expansion of the programs as a pathway to "political achievement" (*zhengji*), which could lead to a promotion. A change to the cadre evaluation system began to link the career trajectories of local cadres to how well they launched relocation programs during their short terms in office. Beginning in 2012, Wood County launched bimonthly inter-county competitions in construction speed and scale of the new communities, and those competitions were widespread in Henan province (Interview, May 19, 2016; Interview, May 24, 2016). According to Wood County government records, each township was required to generate a minimum of 200 mu land quotas each year, and the promotion of local cadres would not be considered unless the target was met (Wood County Land Bureau, July 4, 2012).

The fiscal income of Wood County was too meager to fund even the most basic urban infrastructure in those mega-programs, and the shareholder companies, or the "local financing platforms," were not sufficiently developed to assist. Meanwhile, to maximize the quotas generated from the program, the local government stopped permitting self-constructed single-family houses and decided that peasant households would be relocated into six-story high-rise apartments instead. Since neither the local government nor the peasant households were capable of funding the construction of multi-story apartments, the local government turned to private investors for help. The private investment came with a price, and one of the major setbacks was that the investors demanded the apartments be sold to peasant households at market price as commercial apartments. A local real-estate company, Ace Real Estate, acquired collective land free of charge from the township government to build multi-story apartment buildings. The cost price was approximately 650 RMB/m^2 and the retail price was set at 1,000 RMB/m^2, indicating a net profit of 37,800 RMB from each apartment sold. This

proposal was in fact illegal, since no commercial buildings were allowed to be built on rural collective land and sold at market price according to the state's zoning regulations. However, the local government went along with it without providing any matching funds to the peasant households. Consequently, compared to the government invested programs, the price of the new dwelling tripled (1,000 RMB/m^2) while the size halved (108m^2), and the peasant households were forced to purchase "limited property rights apartments" (*xiaochanquanfang*) at a market price but with no legal title. When asked about the original plan of the program, the county head lamented the empty promises made by Ace Real Estate:

> The company promised to contribute a portion of the apartment sale to help the peasants with moving and relocating. Now it complained about insufficient apartment sales and bankruptcy. Apparently it is not going to give back any money to the peasants. (Interview, May 24, 2016)

The sale of new apartments was not promising due to their high price and limited property rights, and the new communities became "ghost towns" with extravagant spatial design and vacant playgrounds (a kindergarten was built into the community). While most of the apartments remained empty, the spacious squares were used by peasants as grain-sunning ground. The conditions in the original community was even more worrisome. To facilitate the demolition of original houses and to urge the peasant households to move into new apartments, the local government banned the local residents from constructing new houses or renovating the original homes. In interviews, villagers complained about a village head infamous for installing surveillance monitors on each house to prevent house construction and renovation, and that he even installed monitors on hen-houses (Interview, May 23, 2016). The situation worsened in some of the villages when the water supply was cut off. When I visited SL Village, where a program to relocate 10,000 peasants was launched in 2013, most of the houses had not been repaired for more than three years, and several of the brick houses already had tilted foundations, and therefore had become too dangerous to inhabit, despite the fact that families were occupying them.

When we look into the effects of relocation funded by private sector investment across different generations, it was usually the old generation who suffered the most in the process. While cultural taboos in rural areas forbade wives from living under the same roof as her father-in-law, the downsized apartment raised serious problems in daily life. The spacious self-constructed single-family homes in government-funded programs easily accommodated three generations, whereas a second apartment was needed upon marriage for the program financed by the private sector. However, most households could not afford another 100,000 RMB apartment. As a solution, the county government had constructed homes for senior citizens to relocate the old peasants. The solution was not welcomed by local residents not only because it went against the filial piety in Confucian philosophy, which still dominated the rural area and advocated daily service to one's parents, but also because the homes for senior citizens were often not habitable. Due to the lack of government investment, the senior homes I visited in two villages were not equipped with heating facilities in the winter and were affected by flood waters that were knee-deep in the spring. Consequently, the elders were often found residing in under-maintained houses after spending their life savings to purchase an apartment for their families.

Another salient setback was the passive involvement of village collectives in private sector-financed programs, and the village heads had little initiative compared to their counterparts in government-financed programs. Instead of participating in the negotiations and fighting for compensation, the village heads were told by the township government to keep their heads down and act as "model villagers," by moving into new apartments and sending their parents to live in senior homes. In SL Village, the village party secretary showed me the remainder of his original house, and a severely tilted small house nearby.

> My 94-year-old father lived inside that tilted house. The township government officials demanded that 'I take the lead' [daitou] as a party secretary to tear down my own house and send my own old father into senior homes so that other villagers would follow. But there was no way he could live in the senior

> home. You have seen it yourself…it was simply not possible to live there. (Interview, May 26, 2016)

Reflections on funding model change and growth coalition shifts

The above analysis draws comparisons between the government-financed and private-sector-financed relocation programs in two counties and the implications of the funding models are discussed for both sites. The well-off RIVER County turned to private investment in an effort to reduce the burden of accumulating local debt, whereas in Wood County, the lack of fiscal and financial resources compelled the local government to seek private investors. The enormous investment required by land requisition in increasingly expanding relocation programs in the countryside has driven most counties in the current study, wealthy or poor, to rely on private investment. Extending beyond the fundamental changes of the two counties discussed above, this section draws on observations of relocation programs in all other cities in the study and highlights the following issues that require the attention of policymakers:

First, the role of private investors in relocation programs are often multifaceted. Both HS and Ace Real Estate participated in the process as investor-rentiers. While the private investment was supposed to fill the gap created by the absence of infrastructure funds in government-initiated relocation programs, the private investors went ahead and appropriated the lease or ownership of properties in the rural communities, and made a fortune out of it. Among the 24 privately-financed relocation programs whose investment sources were known, only three were investment companies, while all the other 21 programs were led by local, regional or national real estate companies. It is crucial to note that the dual land system in China no longer protected the countryside from land speculations in urban core. The expansion of private investment from state-owned to collective-owned land had accelerated land liquidation and speculation in remote villages. These widely existing illegal transactions

were even more worrisome compared to the practices in urban cores due to the fact that collective land was allocated to private investors for free or a meager price to build apartments, which later benefited the investors exclusively while costing peasant households their life savings.

Second, the township government had lost its dominating role in the local growth coalition to private investors by making enormous compromises requested by the latter. In almost every site included in this study, the land transaction fee in the urban core was turned over to the county government, whereas the township government was responsible for land requisition and infrastructure construction involved in the process. The funds were disbursed either through fiscal transfer, or through roundabout bank loans through shareholder companies (see Fig. 3.3). When the county government stopped, or was incapable of funding the relocation programs through bank loans, while still prodding the township government to expand relocation programs either to gain political achievement or for land quotas, the township government was compelled to rely on private investment (see Fig. 3.4). Consequently, in order to attract private investment, the township government did not only frequently lease collective land to investor-rentiers for free (instead of going through the Tender, Auction, and Listing process required under state regulation), but also tacitly permitted the investor-rentiers to further compromise the benefits to individual households.

In several cases in the study, the real estate developers strategically exploited relocation programs and coerced township governments to offer them more incentives. Apart from using future investment as leverage and making empty promises, the real estate developers also threatened the local government with multi-stage rolling development plan and/or a potential withdrawal of capital. As the investment often reached several hundred million yuans for the whole program, most real estate developers preferred to divide the programs into multiple stages and reap the interests of one block before investing in the next,

thus minimizing pressure on the chain of capital. However, the multi-stage development plan frequently transformed into an exit route, as the developers could easily leave behind half-built apartments when more lucrative investment opportunities opened up elsewhere without suffering from sunk costs. In SH town, Shangdong, the previous real estate developer left behind half-built apartment buildings after the first stage of construction was completed two years ago. When the current developer expressed interest in another multi-stage investment plan, the township government, in an effort to negotiate a one-stage plan, immediately turned over 50 mu of free land from its precious annually allocated land quotas, to add an additional 7.5 million RMB to the margin of profit.

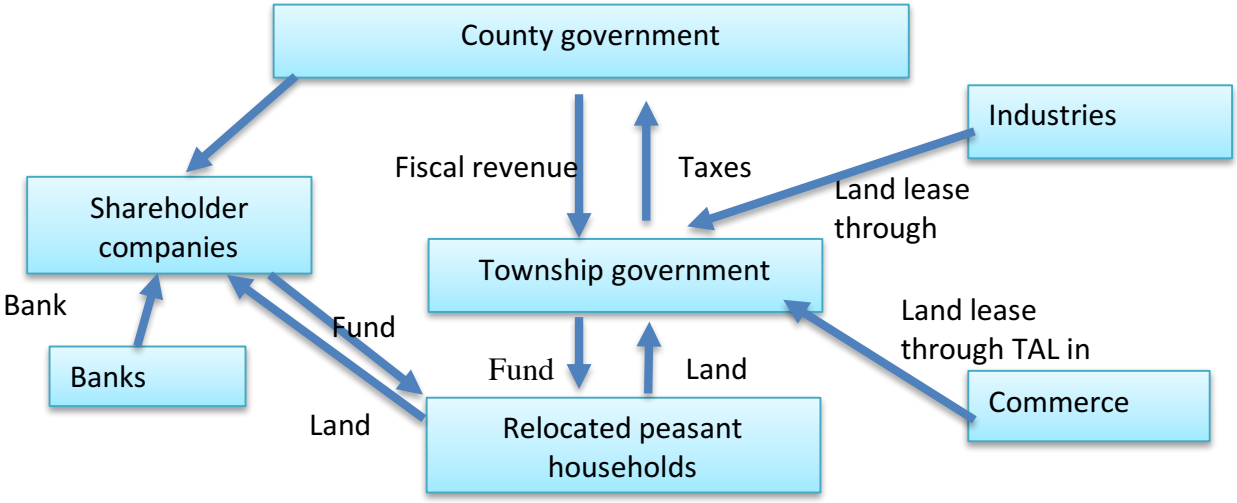


Fig. 3.3. Funding Model and Growth Coalition in Government Invested Relocation Programs

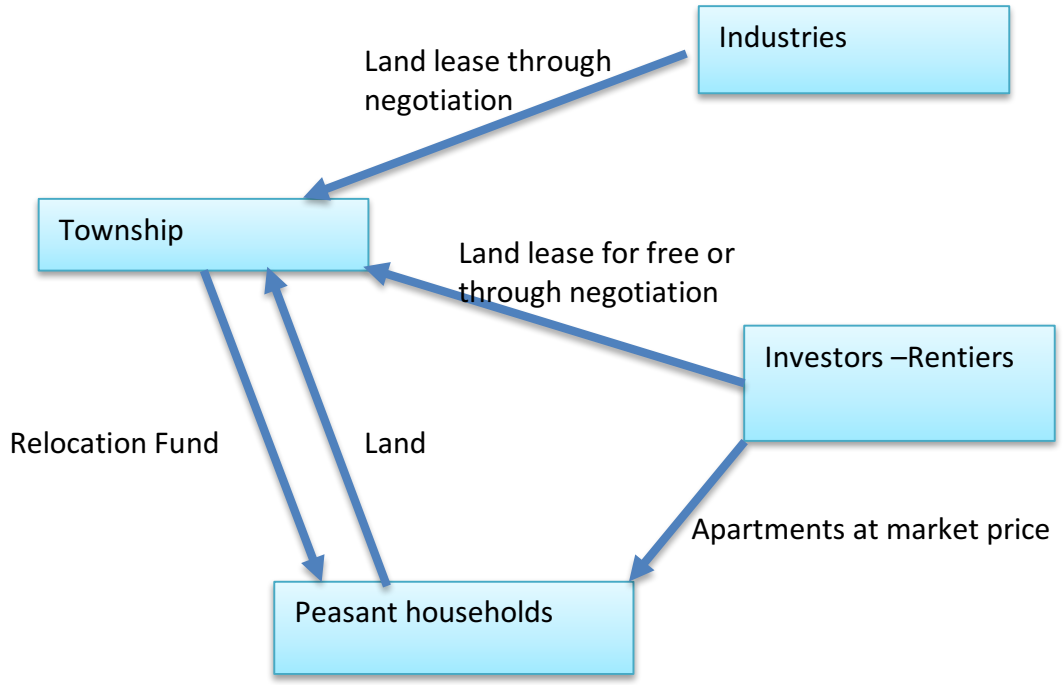


Fig. 3.4. Funding model and Growth Coalition in Private Sector Invested Relocation Programs

Third, the study calls attention to the exacerbation of conditions of peasant households in relocation programs. Previous studies on land requisition and land development in suburbs emphasized the gap between the lucrative land transaction fee pocketed by the local government, the enormous income from secondary land development reaped by the real estate developers, and the meager compensation paid to the peasant households whose land was requisitioned. As most peasant households who lost their land to land development programs in suburbs or the urban core were compensated with free apartments, it seldom occurred to scholars or public that the basic necessities of peasant households, such as dwellings, would be compromised. It is therefore crucial to bring to light the experiences of peasants in peripheries far away from cities who lived in senior homes or under-maintained homes due to the lack of economic means after the funding model shift. Apart from shrinking compensation packages and surging apartment prices, capital chain ruptures and the consequent construction delay, as well as capital flee, have resulted in

serious harm to peasant households. In two relocation programs in Iris County, Shandong, in order to accelerate the return of profit to investors, the township government tore down the original homes of peasant households while the construction of new apartments was still underway. Peasant households had to leave their original communities and rented housing using government subsidies, and their situation took a turn for the worse when the investors' capital chain ruptured. The peasants in both programs were left stuck in rented homes for four and six years respectively, with dim hope of owning their own homes again (Interviews March 30, 2016 and April 13, 2016). Another worrisome phenomenon lies in the enormous loss of village collectives in the process of carrying out relocation programs. While, to a large extent, the dual-land system in China prohibited peasant households from enjoying the same benefits from land development as urban residents, it nevertheless provided basic assurances to peasant households in form of collective land as a common good that was equally shared among village members. For instance, a free plot of collective land would be assigned to a son or daughter when s/he reached 18 years of age, and the collected rent would be shared by village members when collective land was leased out to factories. In the current relocation programs, however, in exchange for apartment buildings financed by the private sector, the collectives were forced to surrender basic guarantees to the investors. In some cases, land as a collective good eventually turned into collective risk when the households were forced to shoulder the possibility of capital chain rupture, capital flight, and delayed construction.

Conclusion

Inspired by the literature on urban infrastructure funding and growth coalitions in China, this paper sought to bridge the two topics by delving into the transition from government to private sector investment in relocation programs and the consequences for local growth coalitions. The paper has shown that instead of a unanimous and constant cooperation between local government and private sectors often assumed by the growth

coalition literature ("elites cooperate to achieve the goal of growth, no matter how split they might be on other issues"), the particular funding model of the program had a profound influence upon the power reshuffle between actors within the coalition, as well as the actual effects of the programs. While the current study limits its scope to the relocation programs carried out in the countryside, future studies could further testify the link in land development in suburban area and urban cores in Chinese cities.

It is hoped that the discussion above would add clarity to the nature of local growth coalition in a shifting infrastructure funding context, and the consequent precarious condition of peasant households in the relocation programs. As China is now standing at a pivotal crossroads that may well determine the welfare of millions of peasant households involved in relocation programs, it is the conclusion of this paper that the debt burden and social risk of those state-oriented and investment-driven paradigm of development were not diminished but simply transferred to the already vulnerable population, specifically, through the transition into private investment in infrastructure funding.

Chapter Four. Powerful Outsiders, Location Dynamics: Silencing Land Resistance in China

When the bulldozers finally arrived to tear down Mr. Wang's two-story rural house, Mr. Wang decided to put up his final defense. Located in the heart of the burgeoning central business district (CBD) in a coastal city, Mr. Wang's house, among 20 other houses, was surrounded by newly developed office buildings. While most villagers had given up their land and old houses in exchange for apartments in nearby communities, Mr. Wang and some of his fellow resisters were not satisfied with the compensation and refused to move. After stubbornly residing in a half-destroyed "nail house"[1] with his wife for 12 years, Mr. Wang poured gasoline around the house, left a gas tank inside, ignited the gasoline, and then climbed on the roof and waited for the explosion. But the story did not end as he expected. Two highly skilled "demolition team members" quickly dragged him down off the roof, while their teammates efficiently put out the fire and used bulldozers to flatten the house. It was the tenth "nail house" the team had demolished that morning, and the first nine had taken them less than an hour.

In a village in Wood, Henan, Mr. He, already 94 years old, lives in a shabby house with a tilted foundation. The village was far away from existing urban infrastructure and the land was too cheap to become a target for land development projects, but Mr. He was still told by the township government to evacuate his house. Under the banner of "farmland protection" and "constructing a new socialist countryside," local states in China accused peasants of their "uneconomic" housing,[2] demolished their homes, urged them to purchase an apartment in high-rise blocks, and reclaimed the original living ground for agricultural use. For Mr. He, the reason

[1] Land resisters holding onto their old homes are called "nail households" in China, as they firmly refuse to be evicted like nails hammered to the ground.
[2] In discourse of local bureaucrats, "uneconomic" is used to refer to houses that are considered to use space inefficiently, as they are typically spacious and are located on large tracts of land.

he refused to move was quite straight-forward: after the family paid their life-savings to purchase an apartment for Mr. He's newly-wed grandson, he was left with no resources for relocation. However, much to his surprise, five years after receiving an eviction notice, no serious effort from any party had been made to have him removed from his current house. The village head's attempt to persuade him to move appeared more a formality, and the township government could not even afford to hire a local demolition team to assist with the family's removal. With his sons and grandsons working away from home in cities most of the time, 94-year-old Mr. He could hardly defend himself and his house from demolition. But lucky for him, the hands of local officials seemed tied.

Introduction

Current discussions of land politics in China largely focus on land resistance in the urban core and urban periphery. Revolving around the state–society divide, the existing studies emphasize the authoritarian state's power to silence resistance, as well as the tactics deployed by local officials to undermine contention. The current article aims to turn the attention to the rural half of story (as in the story of Mr. He) and to the behind-the-scenes actors in land-related confrontations: the private investors, like those who orchestrated the final raid and tore down Mr. Wang's house. As the main funders of China's rapid urbanization, real estate companies are deeply involved in China's land politics; however, their role as suppressors of land resistance remains unexamined. The social consequences of land resistance are inherently multiplied when real estate developers engage in measures to control such resistance, and the consequences of land resistance are significantly different for the rural periphery than the urban core.

In post-global financial crisis era, due to the tightening of policies on bank loans by the central government, local states increasingly relied on real estate developers to fund land requisition processes, which used to be monopolized by local governments and funded by

government-borrowed bank loans in both urban and rural areas. Local states used to profit from cheap compensation fees paid to displaced households and also the high prices for land on the real estate market when the land was sold to real estate developers. When real estate developers began financing relocation projects, they also started to share profits previously monopolized by local states. It is instructive to note, however, that urban and rural land development projects attract different kinds of investors. In urban core and urban fringe zones, real estate developers benefit handsomely, exploiting the gap between meager compensation paid to peasants and the growing sale price of land on the real estate market. In other cases, real estate developers pay the cost of land expropriation in return for the right to develop the land. Consequently, the deal between developers and local states allows developers to drastically cut the cost of development by bypassing the land tendering and bidding process. Due to the relatively high cost of compensation and relocation, real estate titans constitute the major players in land expropriation in urban areas. In China's vast countryside, the state initiated the process of "constructing a new socialist countryside." "Farmland protection" campaigns created opportunities for local governments to liquidate the long-dormant rural land and for local officials to accomplish great political achievements by "modernizing the backward countryside." Initially the stated goals of these campaigns were to economize land use, mechanize agriculture, and promote better living conditions for peasants, but later they were turned into mass peasant relocation programs by local states. Blaming peasant households for their "uneconomic occupation of land," local states relocate millions of peasant households from their spacious houses into high-rise apartments and change the zoning from residential to industrial to increase the local tax base, or simply to create a vision of a modernized socialist countryside. While real estate developers in urban areas give out free apartments and reap the benefits from selling high-priced land, rural land is not as valuable and real estate developers who have invested in land expropriation in rural areas make their profit by selling apartments

to relocated peasants. Accordingly, the meager profit in rural land expropriation programs tends to attract fly-by-night companies, often set up by locals for the purpose of taking advantage of the current tide of rural land liquidation.

Today, land-based grievances provoke most of China's popular protests. When all other solutions are exhausted, desperate peasants use their own bodies as moral leverage, stubbornly holding on to their old houses like nails hammered to the ground and desperate to retain their rural livelihoods. While all nail households fight for fair compensation, their reasons for resisting vary. Near urban areas, many households put up fierce fights, since relocation cuts off their only source of income: many "urban villagers" build multi-story houses on their plots, renting rooms to migrant workers and office staffs, or opening small businesses on the ground floor (as in the story of Mr. Wang). In peripheral rural towns, peasants may become nail households because they cannot afford the apartments they are offered. While the spacious old house easily accommodates the whole extended family (a second floor will be built when sons get married), the apartment is far too tiny to hold more than one generation. After helping their offspring purchase apartments, the older generation is often left behind in half-destroyed houses with no other place to live (as in the story of Mr. He).

This article aims to expand the current discussion on land resistance and control outside China's bureaucratic system by paying special attention to the confrontation between real estate developers and nail-household resisters. The article also seeks to deepen the understanding of variations of resistance control in different locations by comparing different control strategies deployed by local government and real estate developers in urban core and transformed rural periphery.

Real Estate Developers: The Invisible Hand

Previous studies on rural resistance in China tend to proceed along the state–society divide and focus exclusively on state actors as both the target and suppressor of resistance.

Scholars have noticed that, as marginal actors, peasant households are able to challenge the existing political order by working their way through the cracks of the political structure. The authoritarian regime is internally fragmented both vertically (between central and local states), and horizontally (between different bureaus at the same level of government) (Lieberthal and Oksenberg, 1988). Consequently, marginal social actors manage to wriggle their way into the policy-making process and even help influence outcomes, mainly because they have understood and accepted the general rules of the game of policy making under the rubric of "fragmented authoritarianism" (Mertha, 2009). Specifically, O'Brien and Li (2006) identify the rising of "Rightful Resistance" in rural China: recognizing that state power is internally fragmented, peasant households diligently search for and exploit the gaps between the central state's rights discourse and the local state's poor implementation as well as mobilize support from the wider public to hold the state accountable. Challenged by resisters, grassroots officials are reported to deploy multiple tactics to "depoliticize" the resistance by steering contention away from political values and the power structure, and turning such controversies into manageable and instrumental deals between local government and resisters (Lee and Zhang, 2013). Specifically, Chuang (2014) argues that local officials depoliticize rural resistance to land expropriation by incorporating rural residents into the urban citizenship.

Local states' monopoly of the primary land market underlies the conflicts between land resisters and the local states. China's constitution stipulates that the state (central and local) retain ultimate control over "all land in China," and the Land Management Law further stipulates that the state can requisition any land when it is in the "public interest." Since land in China either belongs to the state (in urban areas) or village collectives (in rural areas), local states have been the only legitimate actors to expropriate land from current users, prepare the land, and sell it to developers, and then developers built and sold properties to users via the secondary market. Therefore, local states monopolized the profit generated from the gap

between cheap compensation paid to peasant households and the skyrocketing selling price of land on the primary land market. It was also a common practice for local states to expropriate more land than temporarily needed to build one's own "land reserve" or "land banks." Since most of the land expropriation and preparation were heavily financed by bank loans, reserved land could be used as collateral. Compared with bank loans, private sector investment only accounted for a small percentage of capital and grew at a low rate (Liu et al., 2016).

While local states often legitimated land expropriation under the banner of "public interest," the term was vaguely defined to include massive urban redevelopment for commercial purposes. Accordingly, local residents organized street protests or individualized resistance (for instance, nail-household resistance) to fight for their right to land use or compensation. Local governments became the primary target in land politics, while "stability maintenance" and muting land resistance became an integral part of the daily work of local officials.

However, multiple evidence suggests that the monopoly by local states of the primary land market is being shattered. Most importantly, the Chinese state has gradually cut off bank loans as the primary funding source of land expropriation, prompting local governments to turn to real estate developers for help. This sharp turn in policy should be understood against the background of the Global Financial Crisis. China had successfully reversed the economic recession in crisis years by massively investing in urban infrastructure. Releasing a ¥4 trillion economic stimulus plan, the central government encouraged local states to borrow from banks and launch massive urban projects. Over the last two decades, local states have already borrowed extensively from banks to fund land expropriation, and this practice was further intensified by the stimulus plan: local states used bank loans to compensate peasants, construct new apartments for relocation, and land reclamation. China witnesses a fourteen-fold increase in the amount of loans between 1998 and 2009, routinely accounting for one-third or more of

total urban infrastructure investment. In the crisis year of 2009, the share jumped to nearly 40 percent as infrastructure construction accelerated (Tsui, 2001: 695). The accumulation of local debts poses a growing threat to the nation's financial health. The local debt burden reached a staggering ¥10.72 trillion by the end of 2010 (China's National Audit Office, 2011). Eager to control the accumulative local debt, the Chinese state has been reversing its previous policies and tightening bank lending in recent years. Beginning in 2016, the central government completely prohibited bank loans for land expropriation (Ministry of Finance, 2016). Such fundamental changes in financial policies resulted in a gradual infiltration of real estate developers into the land expropriation process.

Private real estate developers were found to participate actively in each phase of land expropriation by raising funds for redevelopment projects, negotiating removal price with local government, removing residents, and purchasing or building apartment buildings for relocated households (Yang and Chang, 2007; Jiang, Waley and Gonzalez, 2015). On many occasions, real estate developers took over the role of violent demolishers and came face-to-face with nail-house resisters. Little is known, however, about the tactics of real estate developers in land resistance control and the challenges they encounter in the process. How do real estate developers control resistance directly and indirectly through local government? Do those tactics vary in urban and rural settings? What is the efficacy of control in different locations?

Nail Houses: From Urban Core to Rural Peripheries

For two decades, land sales and other income from land transactions have become the primary source of fiscal revenue of local states in China. Taking advantages of the dual-land system in China (rural land is collectively owned and cannot be transferred or sold by individual peasant households), local states evict peasants from their homes and sell land to the highest bidders in auctions. Between 1980 and 2003, somewhere between 50 and 66 million Chinese peasants lost all or part of their farmland and houses. The total amount of collective

land appropriated by the local and central state agencies totaled 100 million mu, or 13 percent of China's total cultivable land (Yu, 2006; Wang, 2007). Dissatisfied with meager compensation and realizing the enormous windfall monopolized by local states, peasant households launched multiple forms of resistance to protest their loss in the urbanization process. It is estimated that since 2005, land loss has become the leading cause of protest in rural China (Yu, 2005).

In peri-urban areas in Beijing, Shenzhen, and other metropolitan areas, villagers in "urban villages" are able to resist relocation and develop "small property housing" (illegal houses violating urban zoning) to accommodate migrant workers, thereby carving out a small slice of the real estate interests by creating an informal housing market (Hsing, 2010; Wong and Liu, 2012). In other cases, villagers facing relocation launch mass petitions to send to upper-level government and manage to pressure the local government to pay more reasonable compensation (O'Brien and Lee, 2006). When all other attempts fail, peasants are left with the last resort of using their own bodies to guard their land and homes. As the expression of "nail houses" suggest, those households tenaciously hold on to their houses, like nails hammered into a tight spot. Since the houses cannot be torn down without harming residents occupying them, the nail households force officials to choose between violence, which might bring political risks, and compromises on compensation.

So far, the research on nail households has largely focused on resisters in urban core or peri-urban areas. The nail-house resisters (such as the most famous case of Wu Ping and her husband Yang Wu in Chongqing) apply media-savvy tactics aimed at winning public support, successfully placing pressure on both developers and the local government, and walk away with reasonable compensation after negotiation (Hess, 2010). There is also a growing awareness of property rights among nail-house resisters, as the nail households manage to seek help from netizens online and hold the government accountable for fulfilling the property rights

of resisters (Erie, 2012). Occupying strategic locations, the resistance of nail houses could efficiently delay the schedule of the developers, prompting the developers to compromise and raise compensation (Hsing, 2010).

It is instructive to point out at this moment that the local states in China have been constantly pushing the urban frontier forward in the last decade, and capital is drawn to rural peripheries further away from urban cores. While real estate tycoons compete for land in the central business district in the urban core, the cheap land in peri-urban areas attracts catalyst projects (e.g., industrial parks and university cities) or public projects (e.g., highways and airports) with highly uncertain prospects on return (Hsing, 2010). The most remote villages in rural peripheries are also going through dramatic changes under the current wave of urbanization. Under the banner of "farmland protection" and "constructing a new socialist countryside," local states claimed that relocating peasants into dense high-rises would efficiently transform uneconomic use of rural land and backwards rural lifestyles. The social engineering of "letting peasants go upstairs" does not only boost local officials' political achievements, but also offers great opportunities for real estate developers. Given that most villages in rural peripheries lack an industrial base and urban infrastructure, the chance of attracting catalyst projects is dim. But the strong desire to own a "modernized" apartment, especially among younger generation peasants, creates a real estate surge in rural peripheries. In a well-orchestrated relocation, township government, backed by real estate developers and assisted by village heads, evict peasant households after paying a standard demolition compensation regulated by the central state. The peasant households will then purchase apartments in newly built high-rises with a state-subsidized rate that is far below market value. However, the plan often goes sour when local fiscal resources are too meager to pay proper compensation or provide housing subsidies, or when the developers have more ambitious plans and raise apartment prices. Under such circumstances, the rural periphery witnesses

widespread forced evictions and relocations, and an increasing tide of nail-house resistance. First introduced in the State Council's 2006 11th Five-Year Plan, the "new socialist countryside" campaign-authorized land expropriations have now become the fastest growing form of land expropriation in China (Chuang, 2014).

Hsing (2010) rightly points out that peasant resistance in rural peripheries is fundamentally different from peasant resistance in rural areas, as location determine the scope and scale of resources the peasants have at their disposal when facing land grabs. Well-connected to the metropolitan center, villages in urban core or peri-urban areas pool their contract lands together to build industrial estates, develop township and village enterprises, or lease land out to outside investors. They also experienced small-scare land appropriations by state units and the urban government as early as the 1970s. The accumulative experience in interacting with state over land issues proved helpful in bargaining with local government for reasonable compensation in the current phase of rapid urbanization. Hsing (2010) concludes that, compared with agriculture-based villages in the rural fringe, villages in urban areas are more likely to succeed in defending their homes from demolition, and in the cases of demolition, nail houses in urban areas are usually better off than their rural counterparts.

What this argument ignores, however, is the fact that nail houses in rural peripheries have less ferocious rivals with far less resources than their urban counterparts. Therefore, the comparison between urban and rural nail-house resistance would not be complete unless we take into consideration the conditions of their suppressors. When the Chinese state shifted the focus of its development strategy from rural to urban areas in the 1990s, with its heavy investment in state-owned enterprise and urbanization, rural villages experienced shrinking access to bank loans, tightening political controls, and declining self-governance (Huang, 2008). Consequently, local officials in peripheral rural towns and villages are equipped with very meager fiscal and political resources when dealing with land grievance and nail-house

resistance. Meanwhile, rural land projects tend to attract highly risky private investors, who tend to terminate the contracts and flee once land resistance arises. In those rural towns, bulldozers run out of fuel, construction workers go on strikes for unpaid wages, and township government cannot afford to hire thugs to threaten villagers. The peaceful yet prolonged confrontation constitutes an important facet of resistance long ignored by scholars and public.

Data, Method, and Field Sites

From March 2016 to January 2017, I observed two urban redevelopment projects in a major city in Shandong and five rural "new socialist countryside" programs in Guangxi, Henan, and Shandong. Nail-house resistance in land expropriation was observed in each one of the projects. In each of the field sites, I worked in local land bureaus as an intern, accompanied local officials on their visits to villages, attended meetings with superior offices and meetings with investors, and observed on-going negotiations and interactions between local government, private investors, and nail households. During the period of research, I also carried out 10 formal interviews with private investors. I met with chairmen, senior executives, and field staff, and accompanied them on their field visits. I also conducted unstructured interviews with nail-house resisters and village heads who either supported or suppressed nail-house resistance. In addition, for the purpose of triangulation, I also studied construction logs, which recorded the process of construction, to verify the testimony of the interviewees.

The total investment in land expropriation in two urban projects was almost 10 times as much as in rural projects, and the investors were from a prominent private enterprise (Jade) and a state-owned enterprise (Capital). The projects tended to persist despite resistance from nail households (both were still under construction in January 2018). By contrast, land expropriation in rural towns in this study was funded by local real estate companies or local governments. The real estate companies terminated contracts and fled the countryside after three or four years, leaving behind half-constructed apartments.

Table 4.1. Relocation by Field Site

	Projects	Duration	Total Investment (millions ¥)	Investor
XY village, Shandong	Urban Redevelopment	2012 – Present	¥400	Capital
DD village, Shandong	Urban Redevelopment	2010 – Present	¥2,823	Jade
SL village, Henan	New Socialist Countryside	2013 – 2016	¥24.43	ACE Real Estate
XXJ village, Shandong	New Socialist Countryside	2010 – 2014	¥40	Quanyuan Real Estate
ZJ village, Shandong	New Socialist Countryside	2010 – 2014	¥56.28	Township Government
GL village, Shandong	New Socialist Countryside	2009 – Present	¥47	Municipal Government
LJ village, Guangxi	New Socialist Countryside	2010 – Present	¥59.8	Municipal Government

Facilitating Bargaining

Examining tactics applied by grassroots officials to silence resistance, Lee (2013) reveals that the most common strategy of local officials for silencing land resistance is by offering extra monetary compensation. In constant negotiation between cadres and protesters, the rights claims of aggrieved citizens are reduced to monetary compensation, thereby depoliticizing resistance. However, evidence from this current study suggests that bargaining does not always lead to the silencing of resistance. On many occasions, resistance in peripheral towns was further exacerbated when local officials failed to deliver on promises. The study further points out that grassroots officials in urban areas rely heavily on private investors to fulfill their promises to protesters and appease resisters, especially when the demands of citizens exceed official standards.

Bargaining Failure in a Mountain Village

It is a well-known fact to local land bureaus that village cadres struck bargains with peasant households in relocation programs for favorable compensation in exchange for election

or re-election. It is instructive to note, however, that the negotiations often went awry. As the bottom layer of the bureaucratic system, the village-level cadres are the only directly elected officials in China. Village cadres tend to turn village grievances concerning land expropriation into a non-zero-sum game. By promising to deliver compensation far exceeding national or local official standards, village cadres won the hearts of fellow villagers and consequently secured their votes. However, when the cadres failed to deliver on promises, the protests worsened. For example, the LC district land bureau identified village-level elections as one of the most serious disturbances to land expropriation and peasant relocation. In a report to the municipal land bureau on on-going relocation programs, land bureaucrats complained that unfulfilled promises triggered further protests and villagers refused to cooperate with any move from the local government: "Village-level elections are slowing down the process of everything, from demolition, compensation, and relocation to reclamation" ("Report on Work Progress" LC district, April 2016).

The relocation program in GL village well illustrates a bargaining failure. GL is a mountain village and a weekend gateway for local urban dwellers. After an hour drive from the city, tourists would arrive in the village and stay in one of the rural houses where they would enjoy fresh vegetables, feed animals, and experience the lifestyle of peasants (*nongjiale*). When the township government decided to expropriate peasant land and leased it in 2010 to a tourism development company, which intended to use the land to grow lavender, grievances swelled among villagers. One villager who had already moved into an apartment recounted: "The land in the mountains was too sparse for cultivation. Lucky for us, the mountain scenery was a blessing. Our family used to earn ¥100,000 a year from tourism. Then, all of a sudden, our houses were torn down and the tourist income was gone."

To carry out the order from superior office, and to act in solidarity with his angry fellow villagers, the village head tore down his own three-story house and moved into a government-

subsidized apartment before asking fellow villagers to join him. Many villagers were persuaded by the village head and started to move into high-rises. However, some households were reluctant to cooperate due to the cost of relocation. According to compensation guidelines, the households would be compensated ¥600 per square meter for their old houses, after which they would be eligible to purchase the government-subsidized apartments for the price of ¥1,200 per square meter. Consequently, households with small houses and multiple family members could hardly afford to move. Under such circumstances, another key member of the village cadre, the village party committee secretary, began to visit those impoverished households and strike bargains:

> He would knock on our doors and claim he brought good news. He promised us we would be eligible for free apartments if he was re-elected. Each member in the household could get 40 square meters for free – that was his promise. So we all voted for him. But soon after he got re-elected, he told us the village could not afford to build those apartments, and it was not going to happen. Of course we felt cheated. Does he think that we are easy to deal with? We will show him we are not. I can promise you there is no way that we will move out of this house. No way. (Interview, GL village, April 2016)

The unfulfilled promises exacerbated the fury of impoverished households. More than 10 households stubbornly held on to their old houses and refused to cooperate unless the apartments were granted for free. There was no way to know how sincere the party committee secretary was or how much effort was put into fundraising, as he refused to show up during my visits. However, after reviewing fiscal records and government reports, it was clear to me that this mountain village did not have sufficient resources to fulfill the secretary's promises. If there was any budget surplus, it should be used to pay the long-delayed unpaid wages of construction workers and the debt to the district government (around ¥6 million loaned for the purpose of apartment construction). While the cost of apartment construction has continued to rise in recent years (from ¥1,200 to ¥1,750 RMB per square meter), the chance of receiving a free apartment – which would put an end to the resistance – is unlikely, if not impossible.

In more impoverished villages, township governments or small developers lacked the resources to co-opt village cadres. Consequently, village cadres held back from negotiating and joined the nail households in resistance. Located miles away from one of the most impoverished municipalities in Guangxi, LJ village, experienced massive relocation when the city launched an unprecedentedly widespread land expropriation of 43.62 hectares. Villagers waited for four years only to find out that the township government still had not raised sufficient fund to build apartments as promised. While the old houses were falling apart, and floods became increasingly threatening every year, 70% of the villagers decided to violate government orders and build new houses on their own by illegally occupying farmland further away from the river. When I accompanied a local land bureaucrat, Ms. Li, on her field trip to the village, I found the village party secretary, Mr. Yan, constantly complaining to her about the lack of resources and reward:

> I was here from the start, and I have been working for six years with this program. I carried out home visits to persuade villagers to give up their land and not to build new houses. I went to every household and talked to everyone! But what do I get out of this? A salary of ¥900 RMB per month! I have 11 people working in the village committee, and only six of them are on the payroll. The other five, they do not work at all. (Field notes, December 2016)

While we carried out home visits, it became obvious that the party secretary was not putting effort into prohibiting illegal land occupation and house construction. The three households we visited were all in the process of constructing new houses on contracted farmland. The secretary shrugged and explained: "What am I supposed to do? The flood is coming. I can't let them drown, can I?" Later when I followed him home to fetch some documents, I found out that his new house also illegally occupied a parcel of farmland.

Bankrolling Populist Politics: Bargaining in an Urban Village

Land expropriation in urban areas is also riddled with bargaining between grassroots officials and resistant villagers. Lee's (2013) ethnographic study conducted in Beijing and

Shenzhen shows that on many occasions stability is "bought," meaning that the promises of monetary compensation was fulfilled by a government fund. While the GL village case shows that peripheral mountain villages can lack the resources to "buy peace," my observation of land expropriation in urban and peri-urban areas presents evidence that peace was not bought with government funds, but rather by real estate developers. The land expropriation and relocation program in DD village well demonstrates the role of real estate companies in facilitating negotiations, fulfilling the promises of local officials, and ultimately silencing land resistance.

Located at the intersection of several main streets in the urban center, DD village was once a vigorous regional market in the 1980s and 1990s, and a wholesale center for raw steel, auto-parts, seafood, and fake alcohol. Besides the famous market, village businesses also included a steel factory and an auto-parts factory. As shareholders in village enterprises, villagers were entitled to annual dividends ranging from ¥5,000 to ¥10,000, depending on one's age. Residents of this "urban village" have long since opted out of farming. Taking advantage of the location, most villagers built multi-story houses and rent out rooms to tenants working in CBD offices and opened small shops or restaurants on the ground floor. In the 2000s, the municipal government decided to demolish the village and launch its urban redevelopment plan, converting land in DD village to commercial use by constructing high-end apartments. The redevelopment plan was met with ferocious resistance. Dozens of nail households refused to sign relocation contracts and stubbornly resided in their old houses.

Similar to other municipalities, the municipal government has created government-owned companies with the aim of urban redevelopment. The "old city investment platform" (*jiucheng touzi pingtai*) was in charge of the urban redevelopment plan in DD village. However, the officials in this arms-length company soon realized that carrying out the plan was far more complicated than they thought, as described in the following:

> Because of the lost benefits, such as dividends, rent, and income from small businesses, nail households in DD village were incredibly fierce and stubborn. On top

> of that, the village politics was too complicated for any outsiders to meddle with. Village cadres struck all kinds of deals with resisters, and officials fought with each other for greater power. It became increasingly clear to the municipal government that the political risk of land expropriation in DD village was very high. Any tiny wrong move could trigger a collective event [*quntixing shijian*]. The municipal government wanted the land to be converted, but nobody wanted to risk one's own political career for that. Then we decided to bring someone else in the game – the real estate developers. (Interview, June 2017)

Jade Holding Group took over the task of expropriating land in 2010, after the municipal government promised them the development rights to the converted land with a negotiated price. For Jade, the bargain with the municipal government saved millions by bypassing the tendering and bidding process. It was expected that Jade would spend a reasonable amount of the savings on smoothing the relocation process.

The constantly changing compensation guidelines in DD village reveal a close relationship between village election and compensation increase. Consequently, the compensation package in DD village had far exceeded the municipal official standard. In the city's official compensation guidelines for urban village households for the year 2010, members of village collectives whose house registration fell into the urban village were entitled to a free apartment of 40 square meters per person. In 2010, an election year, the incumbent village party committee secretary claimed that once re-elected, he would reward cooperative households with another free 40 square meters. On top of this, he also promised to continue to distribute dividends after the village enterprises were closed down and demolished. During the next election year (2013), the village cadres repeated the tricks by promising to increase the apartment size by another 10 square meters per person. A manager of Jade recalled the tri-party negotiation between district government officials, the newly-elected village cadres, and Jade in year 2010:

> The village cadres did not consult us before they made promises. They informed us *after* they struck deals with villagers, and forced us to accept their conditions. The party committee secretary said: 'The promises were already made, and I was already re-elected. The expectation of the villagers was raised, and the nail households would

> not move unless they get what was promised. I know that you could easily deliver, after all, you made a fortune out of our land.' The district government officials were also okay with raising compensation standards, and sided with the village cadres. Alas, then Jade had to fulfill the secretary's promises. (Interview, April 2017)

Consequently, Jade fulfilled nearly all the promises made by village cadres in order to prompt the nail households to move out. Beginning in 2010, Jade paid an annual dividend of ¥40 million to the DD village collective, which then allocated the funds to each collective member according to the previous village enterprise dividend distribution standard. I also visited the "bonus apartment building" Jade built for free and bequeathed to the village collective, which used these apartments exclusively for the purposes of making good on the promises of village cadres. The rights claims of nail households were to a large degree appeased by annual dividends and free apartments. When Jade promptly delivered apartment keys to nail households that cooperated with them, and the households signed compensation contracts and moved out, fellow resisters quickly followed suit for fear that the offer would soon expire.

Using Force

It is important to note that nail households and village officials do not share equal bargaining power, as the latter can always resort to force. Local states in China have been known to rely on police force to crack down on nail houses and protestors who take land issues to the street (O'Brien and Li, 2006; Li, 2013). Scholars have also pointed out that lately local states have also turned to informal groups of professional criminals to carry out unpopular decisions. "Thugs for hire" become a solution when local states tried to silence resistance while maintaining an appearance of legitimacy. However, the extreme violence carried out by undisciplined thugs runs the risk of backfiring and ultimately undermining the legitimacy of local states (Chen, 2017; Ong, 2018).

The current study points out that using force in land politics varies according to the context and the players in the game. It shows that peripheral towns have few resources to recruit

formal or informal forces and repression tends to backfire, whereas urban districts outsource repressive tasks to real estate developers, which then hire "private security forces" with a successful history of silencing resistance while minimizing the risk of backfire.

Meager Resources, Rudimentary Violence

With a limited budget to maintain stability, rural villages could neither afford to hire assistance or recruit undisciplined thugs. The minor violence that broke out easily backfired and led to more serious social instability. In ZJ village, when peasant households were told in 2010 that they were expected to pay about ¥30,000 per person to move into new apartments, a rumor broke out that the village cadres embezzled millions in village enterprise funds, and that these funds were supposed to pay for new apartments. When the demolition team arrived to the village two years later, families in 55 nail houses still protested against the relocation program, refused to sign compensation contracts, and instead held on to their old houses. The village could only afford to hire a demolition team of 11 members to tear down nail houses, and the actual number of demolition workers varied daily, and at its lowest point included only four workers in the field. The excerpt from a construction program log below vividly shows how the use of force was constrained by meager resources:

> March 30th: Bulldozers ran out of fuel. No budget for fuel. Demolition suspended. Appealed for extra budget for fuel.
> March 31st: No budget for fuel. Demolition suspended.
> April 5th: Demolition suspended due to lack of budget.
> April 14th: Four workers in the field. Demolition suspended due to resistance by current residents. Demolition continued. Residents surrounded bulldozers and smashed windows. Demolition team called 110. Police came and stopped the attack. (Construction Program Log, March–September 2010)

It is clear that due to an extremely limited budget, repression by the demolition team was very ineffective. The resistance was plausible and efficient since the demolition team could hardly defend themselves. Consequently, the original 30-day contract between ZJ village and the demolition team took six months to carry out.

Rural township governments do not only lack the resources to recruit professional demolition teams, they are also understaffed and can hardly rely on local officials to carry out daily surveillance of nail households. The nail households generally make every effort to repair old houses or build new ones on occupied land, or run extension cords and tap electric wires after electricity is cut off by the local government. Such strategies have been noted to prolong confrontation, increase compensation costs, and require constant surveillance. In a typical rural town in Henan, the monthly budget for township government is about ¥30,000, and a mayor admitted in an interview that the time and money needed for surveillance was not feasible under current circumstances. That was why, he explained, the former party secretary of GW town applied GPS surveillance to track the activities of nail households. This surveillance strategy was carried out by town planning bureaus, which included the installation of GPS tracking devices on all nail house properties in 12 villages. The interviews with resisting households revealed widespread fury and contempt:

> He [the former secretary] has no conscience [*mei liangxin*] and would not hesitate to advance his own political career at the cost of us fellow villagers. They came and installed those GPRS *[GPS]* devices on our houses. I don't know how it actually worked, but I can tell you that once we built a new henhouse, he knew immediately and ordered us to demolish it. A henhouse! (Interview, May 2016)

The surveillance technology enabled township officials to watch the activities of nail households at a minimum cost. Once a violation was detected, the former secretary would "storm the house with an army of ruffians, hooligans, and local officials" and order the demolition of newly built houses. I was told by villagers that thugs were hired at a piecemeal rate of around ¥200 per incident and injuries were very common during demolition. The constant surveillance and undisciplined violence soon backfired.

In May 2015, after the forced demolition of two houses by township officials and a failed bargaining with township government, a nail household resister, Wang, threw himself out of a building and committed suicide. The pictures of the dead and a heartbreaking letter

from Wang's daughter went viral on the internet, triggering widespread fury and hatred towards the party secretary and his notorious repression. The event led to a thorough investigation of incumbent township officials, and a year later, both the major and the party secretary were arrested for fund embezzlement. According to the judicial verdict (Wood Municipal Court, 2016), the two officials were found guilty of falsifying evidence of dilapidated houses and swindling national funds for renovation (a total of ¥4.13 million), and were sentenced for four years and six months in prison.

Interestingly, for officials in neighboring townships, the event raised alarms, which were not about illegal embezzlement, but rather on forced demolition and the possible backfire. The mayor of YX town soon downgraded the scale of his ambitious demolition plan from seven villages to one village after the crackdown in GW town. He later told me:

> Embezzlement is not the real problem. The real lesson is that demolition cannot possibly end well with very meager resources in hand. Why did they embezzle funds from other projects? Because there's not enough funds for demolition. We all know that the funds did not end up in the pockets of officials, but rather in demolition programs. Just imagine, while peasants in rich counties were given free apartments in exchange for their old ones, we are asking peasants to destroy their own homes and purchase new ones. If they resist cooperating, we would have to forcefully tear down the houses. How could this end well? As fierce as the mayor and secretary in GW village are, they were still unable to demolish the whole village. There were still multiple nail houses scattered throughout town. So what for? One'd better be shrewder in using violence. (Interview, May 2016)

Professional Private Security Forces and Zero-Casualty

In the urban core and suburban villages, there were new strategies of coercion, specifically that of hired violence. In recent studies of third-party violence in China, scholars have concluded that "thugs-for-hire" are undisciplined, unaccountable, and are more violent than necessary, effectively intimidate protestors; however, their tactics also tend to backfire and embolden resistance on the part of their victims instead of suppressing it (Ong, 2017; Chen, 2018). While my observations of strategies for silencing resistance in rural towns confirms these conclusions, the ethnography on urban and suburban villages reveals a transition to

thuggish violence. The nail houses are now faced with highly experienced gangsters, who were shrewdly selected and well paid by real estate developers. A manager at Jade explained the selection criteria of demolition teams:

> The service has largely improved in recent years, and there are some pretty reliable teams. You have to understand the team is no longer a temporary army of the unemployed thugs. On the contrary, those teams are relatively stable, and they build up their reputation by successfully demolishing a couple of villages. We reviewed past experiences before hiring a particular team. The members either work in the construction business, or belong to a mafia, which means they are well-disciplined and credible. (Interview, December 2016)

The professional demolition teams were well paid by Jade, with an average bonus of ¥100,000 for every nail house they demolished. When asked about the extravagant payments, and the surprising price gap between the service Jade hired and those recruited in rural towns, the manager explained:

> The district outsourced the demolition task to Jade, and any mishap would be traced back to us. The untrained and inexperienced thugs could be really cheap, but they could not possibly achieve our goal, which is zero-casualty demolition. (Interview, December 2016)

"Zero-casualty" well summarizes the goal of hiring third-parties to violently suppress resistance. Recruiting thugs allows the local states to achieve their goals while avoiding scrutiny from higher-up authorities for using force. However, as illustrated in the last section, thuggish violence easily backfires and leads to bloodshed, escalated conflicts, and media coverage. It was found that the central or provincial government was most likely to intervene when protests were announced by the media, when they involved serious casualties, or when a large number of participants were mobilized (Cai, 2008). Therefore, there was usually an inherent risk to recruiting groups to carry out violence. However, it seems that professional gangsters hired and paid for by real estate developers solved the problem.

The Jade field staff worked closely with demolition teams and told me a story to illustrate the skills used to reduce casualties and disturbance. While local governments

stipulated that peasant households could live in their new apartment only if they moved out of their old houses, multiple households in DD village forced the locks of new apartments and continued to rent their old houses to small businesses. One night, the demolition team decided to raid a nail house rented to an auto-parts business, as recounted in the following:

> You would think that the team would surround the house and yell with a loudspeaker, but that attracts too much attention. We did our homework, and we picked the night when there was only one employee asleep in the house. We quietly knocked on the door around midnight. When he came to answer the door, we quickly covered his head with a comforter, threw him in a car, and drove away. Next, we searched the house. I can't emphasize enough, this was one the most important procedures you should never forget to do. It was possible that there was a second person in the house, and for some reason we did not know about. It would be a disaster if the house fell on a person while they were sleeping. Remember, zero-casualty! You have to search every corner of the house and make sure there's not a single living thing inside. Then the bulldozer tore the house down, long before the boy could walk his way back. He was in his slippers and pajamas, the comforter would keep him warm, but he did not have his phone or wallet with him when he answered the door, so he could reach no one for help, nor could he take a taxi. And that gave us enough time. (Interview, June 2017)

Demolition team members also visited nail households on "friendly" terms before they took real action and tried to strike deals with their occupants by offering to share part of the bonus. They would reason with nail house resisters by stating,

> We are going to tear down your house in a week, and there is indeed nothing you can do about it. It will be gone. But before everything's gone, why don't you take this ¥20,000 and walk away? Leave everything else to us. Please just take the money, pack, and leave. (Interview, June 2017)

The trick sometimes worked. Nail house resisters understood that hiring gangsters was the final warning from local governments, and that violence would be used to oust them from their homes, not to mention the intimidation one felt when sitting face-to-face with tattooed gangsters. Although the bonus offered was far below the demands of nail households, some households accepted this last minute offer and quietly moved out.

The negotiation was not always successful, and the nail households sometimes responded to the offer with contempt or violent resistance. In June 2017, I accompanied a field staff member on his trip to a nail household. Mr. Wang and Mrs. Wang, a couple of nail

household resisters, once owned a small grocery shop on the ground floor, and rented rooms on the second floor to employees in nearby offices. Mr. Wang was a retired worker in a state-owned enterprise. Mrs. Wang was well known for her comprehensive knowledge on land policies and outstanding organizational skills. She mobilized all of her extended family, including three brothers and their families, to join her in resistance. The couple was not satisfied with the current compensation package and asked for another free apartment. In the living room, I saw barrels and bottles of liquid, which, according to the field staff, contained gasoline and sulfuric acid. When everyone was seated, the member of the field staff reiterated that the family's criteria could not be met and that their house would be demolished soon. When the staff member tried to persuade the couple to give up their house, Mr. Wang suddenly reached for two kitchen knives hidden under the TV stand. He waved the knives at the staff member and threatened to hurt him if he did not leave immediately. Chasing him downstairs, Mr. Wang accused the demolition teams of their evildoings: "You bastards! We can't even leave the house for a toilet. You will tear it down the minute we leave! You broke our windows, you broke everything! I know it was you! I know you did it!" The staff member fled the scene immediately.

When conflicts escalated, demolition teams were forbidden from using violence against resisters or incurring injuries. The final raid took place in September 2017, demolishing all the nail households in DD village. Demolition team members were ordered to drag resisters out of their houses using every possible method without injuring resisters, and they were paid handsomely to be beaten up by villagers during this process. Every member of the demolition team was injured, and photos and medical bills showed that multiple team members were sent to hospital for concussions, cuts, and a broken legs or arms. Several villagers had scrapes and bruises, but strikingly different from the cases in rural towns, no protesters were killed or seriously injured. The team members also succeeded in preventing villagers from hurting or

killing themselves, as was recounted in the story of Mr. Wang's case at the beginning of this paper.

Casualty control enables local states and real estate developers to undermine the rights claims of peasant households. Six months after the demolition, I followed up with a manager from Jade, and was told that several households still refused to sign compensation contracts or move into new apartments assigned to them. It was highly likely, according to the manager, that those protesters had travelled to Beijing to plead with central government for justice. But "there is nothing to worry about", he added, "There is no casualty, hence, the central government probably won't even address such trivial cases."

In most cases, the recruitment of demolition teams is tacitly approved by local governments, and their involvement can be detected in the cooperation between demolition teams and local police force. According my informants in real estate companies, before the final raid, it is crucial to "tip off the local police." When nail households call the police station to report forceful demolition, local police will respond to the call but arrive at the scene after the house is torn down and demolition team leaves the village, claiming that nothing could be done.

By carefully selecting and generously paying experienced gangsters as private security guard forces, real estate developers minimized local disturbance and resistor casualties. Claiming that compensation standards were above the official standard and that there were no casualties of the demolition process, local governments were able to fend off intervention from central and provincial government. Therefore, the shrewd using of private security forces in urban villages cut into the logic of both the body politics of nail house resistance and the central–local gap in rightful resistance. Nail household resisters use their own bodies as moral leverage in the bargaining process, and their actions force officials to choose between violence, which carries inherent political risks, and financial compromises (Hsing, 2010). By minimizing

the physical injuries in the process, the recruitment of professional thugs lowers political risks, further diminishing the moral leverage of nail households. In rightful resistance, protesters exploit the gaps between the central and the local government, by accusing the latter of poor policy implementation and holding the state to its own account (O'Brien and Li, 2006). When there are zero casualties in relocation programs, this greatly reduces local deviance and narrows the gap between policy and implication. Consequently, nail households are deprived of the opportunity to appeal to the central government and make powerful rights claims.

Wearing Out Resisters

The current study finds that the duration of resistance is a crucial factor for nail households, and it is different for actors in urban and peripheral rural settings. While prolonged resistance in rural towns tended to drag small real estate developers into bankruptcy, real estate titans investing in urban redevelopment reduced the bankruptcy risk by rolling out development plans in multiple stages and actively used waiting as a strategy to mentally and physically defeat nail household resisters.

It is instructive to note that the land expropriation programs in which local governments invested are less sensitive to the duration of resistance and are less likely to be disturbed by prolonged nail household resistance. In the last two decades, land expropriation was mainly funded by bank loans that the local government took out. China witnesses a fourteen-fold increase in the amount of loans between 1998 and 2009, routinely accounting for one-third or more of total urban infrastructure investment. In the crisis year of 2009, the share jumped to nearly 40 percent as infrastructure construction accelerated (Tsui, 2001). At the same time, the inherent soft budget constraint of China's local states (see Walder, 1995) renders them insensitive to the duration of debt and the consequent loan interest. Accordingly, the local debt burdens reached a staggering ¥10.72 trillion by the end of 2010 (China's National Audit Office, 2011).

In the post-global financial crisis era, China has witnessed a sharp increase in real estate investment in the land expropriation process. Time sensitivity resulting from the inverse relationship between return of investment and the duration of the land expropriation process is strikingly acute in land expropriation processes funded by real estate developers. As real estate developers also borrow from banks to invest in land expropriation programs, loan interest gradually eats up investment returns. In various land expropriation programs considered in this study, in order to secure a return on an investment of 15–17%, it was crucial to conclude the process and pay back the bank loan in less than two years. When a land expropriation program lasted longer than six years, the return on investment normally plummeted below zero. Although time sensitivity was widely observed in multiple cases, small real estate developers or fly-by-night companies investing in peripheral towns were under far more serious pressure compared to real estate titans investing in urban core and urban fringe, and they were also more likely to be threatened by nail household resistance.

Bankrupted Real Estate Companies in Rural Towns

Located on the outskirts of Wood, Henan, SL village is far away from urban centers. Agriculture was the greatest contributor to the local economy, and most villagers worked on their contracted land for a living. In eager pursuit of political achievement, township government officials ordered SL village to launch an ambitious "new socialist countryside" campaign in 2013 that included plans to demolish seven old villages and relocate all the peasant households into a newly built high-rise communities. With nearly no compensation, peasant households were expected to demolish their own houses and pay market price to real estate developers to purchase an apartment in newly built high-rises. Two local businessmen seized this opportunity and jumped on the bandwagon by creating ACE, a fly-by-night company or "briefcase company" (*pibao gongsi*) to invest in a relocation project. It was, at first, a profitable investment project. ACE would invest in the construction of seven six-story high-rises in the

new community. The size of each apartment would be 108 m^2, hence, a typical multi-generation household was expected to purchase two apartments to accommodate all members of family. The construction cost was ¥650/m^2 in 2013, and the sale price was set at a maximum of ¥1000/m^2. To further reduce its financial burden, ACE required a down payment of ¥5,000 for each apartment.

ACE's sales plan was soon jeopardized by nail-household resistance. The new community was planned adjacent to SL village and occupied 17.74 hectares of farmland. The farmland expropriation was relatively smooth, but the township government encountered great difficulty when they ordered households to demolish old houses. The reason for nail household resistance was quite obvious: after spending one's life savings to help their offspring to purchase an apartment, the older generation could not afford another apartment for themselves, and so they had to continue to reside in old homes. The township government went to great lengths to persuade young peasants to take in their parents. However, most of those home visits failed due to a long lasting local taboo that prohibited an adult male to live under the same roof with his daughter-in-law. The government later constructed a senior home consisting of 50 rooms to accommodate older peasants, but most of the older generation refused to move there because of the extremely poor conditions. When I waded through mud to visit the senior home in the spring (there was no road connecting the senior home to SL village), I found it was affected by flood water that was knee high. Desperate for apartment sales, ACE called on the township government to violently demolish the nail houses. However, township officials were largely intimidated by the bloodshed and backfire caused by forced demolition in neighboring towns, and were consequently reluctant to use violence. During an interview, the town mayor told me: "If I fail to carry the relocation through, the worst scenario is I get stuck on my career ladder and never get a promotion. But if blood is shed in a forced demolition, I would be immediately fired." Nevertheless, prevented from using violence, the township government

still prohibited peasant households from maintaining old houses, or constructing new ones, hoping that nail households would eventually move out of their dilapidated homes.

In the meantime, ACE suffered great financial losses due to the prolonged relocation process. With increasing nail households, and decreasing home buyers, ACE was unable to pay off bank debt and construction was further slowed. In May 2013, unpaid for several months, construction workers confronted labor contractors, but were bitterly beaten in the process, resulting in strikes and further construction delays. Consequently, ACE was unable to deliver new apartments to home buyers on time, and buyers became increasingly doubtful about ACE's capacity to carry through the construction. For fear that ACE would flee and embezzle payments for the apartments, peasant households fiercely demanded that ACE return down payments of ¥5,000. The massive withdrawal was the last straw: ACE was bankrupt and fled the countryside, leaving behind unfinished apartment buildings. Only 700–800 peasants moved into this community, which had the capacity to accommodate 2,200, and current residents could not even use the bathrooms since the plumbing system was still under construction when ACE fled. When visiting the new community, I found that foundations of several other apartment buildings were already put in, but the construction site was abandoned. The foundations irreversibly were constructed on farmlands and made it impossible for farmers to reappropriate lands and grow crops.

To clean up the mess ACE left behind, the township government had to wait for another real estate developer to take over, since it was beyond the town's financial capacity to continue the project. Over the last decade, CS township has been borrowing from private individuals to pay basic salaries of local officials, as the monthly budget of ¥30,000 could hardly support the daily functioning of a township government.

ACE was not alone in going bankrupt on account of nail household resistance. The same fate fell upon Quanyuan Real Estate Company, which invested in XXJ village in a rural

town. Under the banner of protecting farmland and attracting agri-business, the township government decided to relocate hundreds of households in XXJ village into high-rises and expropriate their land to develop "modern agriculture." In order to expedite the relocation process, instead of having real estate developers build high-rises before demolition, local officials and developers forcefully evicted peasant households and destroyed old houses before new apartments were available. Quanyuan held on for four years, but was still unable to evict more than 500 nail households. The already evicted households in XXJ village suffered greatly since their old houses were demolished, and their residential areas were used to construct apartment buildings. By the time of my field visit, over 100 households had been forcibly living with a meager subsidy in rented apartments for over six years, and when Quanyuan fled, the hope of returning to the village became increasingly dim. As one villager shared:

> A home means a lot. In our village, sons used to walk home from the hospital with their parents on their backs so that the parents could have their last breath in their own home. A whole generation of old people have died over the past six years under other roofs. It is a lifetime of shame and regret for all family members. (Interview, May, 2016).

Rolling Development and Staying Put: How Real Estate Titans and Wealthy Local Government Defeat Nail Households

XY village is a suburban village located near a newly built International Airport, and the village underwent prolonged conflict during its urbanization process. The municipality launched the Airport Economic Development Zone in 2005, which attracted multiple chemical industries, auto-part factories, and electronic factories. As the development zone expanded in XY village, there were several rounds of farmland expropriation for industrial use. In 2010, 687 villagers (half the village population) signed a public petition for the recall of village cadres. According to the petition, 1064.7 mu of village land had been expropriated over the previous decade, but this process had not followed the legal protocol and households had not received adequate compensation. The letter also charged village cadres with embezzlement and corruption. Conflicts escalated in 2012, when XY village cadres launched an urban

redevelopment plan and relocated village households into high-rises. As nail households refused to give up their houses, the first real estate investor suffered financial losses and was unable to pay off bank loans. As a result, the capital chain soon ruptured. A real estate titan, Capital, took over the project in 2015, and brought in new strategies to crush nail household resistance.

Working with village cadres, Capital divided the whole village into six blocks, and started with the block with the least resistance. Capital first invested in constructing four high-rises for the 150 households of the first block. After the most cooperative peasant households moved into high-rises, the land on the first block was sold on the land market. In the meantime, developers and village cadres struck bargains with nail household resisters in the second most cooperative block and in other more recalcitrant blocks. The high price of land on the urban land market guaranteed sufficient returns, and the returns were once again invested in new apartment buildings and the demolition of the second block. The process repeated itself until all six blocks were demolished. The rolling development strategy provided a sufficient time window for bargaining with the most stubborn nail household resisters, while fragmenting nail household resistance by dividing resistant households into different blocks. Consequently, it minimized loan interests, and lowered the initial investment by half (from ¥400 million to ¥200 million).

Besides the rich demolition experience of the real estate titan, the rolling development strategy was also made possible by the high land price on the urban market where the sale price of a small parcel of land could cover the construction cost of a few apartment buildings. The same rolling development strategy was also found in some of the wealthiest counties in Eastern China to ease the financial burden caused by prolonged resistance. When visiting Orchid county, home to the first wave of township and village enterprises in the 1980s, an official from local land bureau explained that:

> Demolition is taking longer and longer to carry out due to resistance by nail household resistance. Before 2010, it only took an average of nine months. From 2010 to 2015, it took 15 to 18 months. After 2015, a demolition itself normally took up to two years or longer. We now apply for bank loans with longer term compared to several years ago. The interest rate was definitely higher, but it's better than falling behind the payment schedule. (Interview, August 2015)

Consequently, similar rolling development strategies were used to shorten the duration of demolition program, and fragment nail household resistance:

> We conducted household surveys and home visits to map the degree of cooperation from households. Then we divided one village into multiple programs. We left the stubborn nail households out of the program at first, thus starting with most cooperative households while continued to work on the hardcore resisters. This way, each demolition program would be completed within a year. (Interview, August 2015)

However, the most recalcitrant nail house resisters would not be defeated by those strategies, and real estate titans used their own weapons against them: the prolongation of demolition. Residing in half-destroyed or under-maintained houses with water and electricity cut off by local government, the physical and psychological conditions of nail households deteriorated as the resistance continued.

The conditions of nail households have irrevocably deteriorated during prolonged resistance. During another field visit to DD village, after the field staff member parked his car along the road and got out, a nail household resister showed up with a long wooden stick. The field staff quickly fled the scene. While I was left behind in the car, the nail household resister threw himself under the car. When I invited him to sit with me, he refused to get up: "I know you are a student, and it's none of your business. Call that bastard and get him back. We have unfinished business here. Otherwise you will have to drive over my body to leave." The resister under the car, Mr. Zheng, was in his sixties, and was incessantly cursing the field staff and the demolition team. His wife was standing by the car, crying and begging him to get up and leave with her. When she tried to remove him by grabbing his arm, he threatened to beat her with the wood stick. The rain had just stopped, and the ground was still wet. Mr. Zheng was lying on

the ground naked to the waist. I could not help but notice that his skin was turning red and his breath was becoming shorter. In the meantime, the wife was calling their daughter: "It's your dad…He tried to fight the demolition person again, and he crawled under a car. Come back immediately! …I couldn't… I worried sick. Just come back." With tears in her eyes, she explained:

> It was his heart…He has heart disease, and the doctor said excitement could trigger a heart attack. It's been getting worse over the last three or four years. He gets angry so often. He was agitated especially by the demolition people, but they constantly harassed us. We didn't dare to not sleep at night, as we were afraid those black-hearted hooligans would come and destroy our house if we let our guard down. (Field notes, June 2017)

Mr. Zheng was not the only nail house resister whose health deteriorated during resistance. Living next to them in a half destroyed house was a couple, Mr. and Mrs. Liu. The Lius had two sons who were both were about to get married when land expropriation began. Instead of a 150 square-meter apartment, the Lius demanded two smaller apartments with a size of 80 m^2 each. The village cadres denied their request and explained that such an arrangement could not be made. However, the Lius soon found that a relative of the village party secretary was compensated with two smaller apartments for their two toddler sons. Feeling discriminated against, the Lius held on to their house, and refused to move unless their request was fulfilled. The living condition of the old house deteriorated through those years of resistance, and an unfortunate event finally took place. When the water was cut off by local government in the hottest days in 2016, Mr. Liu, a truck driver, struck by fury and anxiety, suffered from a stroke and has been confined to bed ever since. Since Mr. Liu could no longer stand up and resume work, Mrs. Liu had to sell the truck. The Lius have since sank into a pit of misery, as the family lost its source of income and had to pay expensive medical bills.

The nail households have also suffered from severe psychological torment. News broke out in DD village that an old female nail-household resister in a neighboring village died from

a heart attack when she was informed that the developer decided not to demolish her house. The field staff commented:

> It's rather ironic. Do you know what's worse than demolition? Being left alone. When the developer dropped the negotiation and gave up, the nail households would be forever stuck in their shabby old houses. The new apartments, the health insurance for urban citizens, the demolition compensation – all gone. All those years of resistance and suffering, all the costs, in vein. They hated us when we came around, but they freaked out when we stopped our home visits. There was this constant fear, fear of being demolished and fear of being left alone. Imagine living with this fear for all these years without even a moment of peace. No wonder some of them have gone mad! To be honest, when the bulldozers finally came, some of them were so exhausted, it was rather a relief. (Interview, June 2017)

Unlike briefcase companies, the real-estate titans were at ease with prolongation caused by nail-household resistance. It had been seven years since the demolition program started in DD village, and Jade was paying dividend of ¥40 million every year on top of accumulated loan interest. When asked about the financial pressure, a senior executive answered:

> The boss always says, 'sit tight and relax', 'Wait a little longer', 'There is no rush'. These are burdens we can afford. The capital chain of Jade does not break easily, and, the rolling development also partly solved the problem. We need more time to play games with them (the nail-household resisters). We offer different sets of solutions, and if they are not satisfied, we change to another set and then another until they come to their senses and agree to move. And they will. Most of them will. (Interview, June 2017)

This section extends our focus from moments of confrontation and violence to the everyday encounters between resistant households and developers. Nail house resistance was not only a heroic and unyielding move against powerful state actors, or a shrewd bargain in which rights claims were exchanged for monetary compensation. It was also a cruel gamble over time and sacrifice that was constant between the powerless and the powerful on a highly unequal field. The process eats up the profits of developers, while damaging the mental and physical health of resistors. The titans still win the game, not by violence, nor by bribing, but by diminishing the resisters mentally and physically to the bare minimum.

Conclusion: Powerful Outsiders, Location Dynamics

The current discussion on land resistance in China largely revolves around the state–society division and focuses exclusively on the role of local states in the repression of resistance (O'Brien and Li, 2006; Lee and Zhang, 2013; Chuang, 2014). The current study argues that the long-ignored actor, the real-estate developer, is becoming increasingly important in repressing peasant resistance. The paper demonstrates this point by highlighting that the successful implementation of silencing strategies hitherto identified by scholars was made possible only with the support from real estate developers. This is in part due to the fact that the land expropriation process has been increasingly funded by real estate developers since the central state tightened lending policies and eventually completely prohibited local states from borrowing from banks to fund land expropriation. But more importantly, the resistance silencing strategies of real estate developers have begun to show evidence of transformation and upgrade, a phenomenon that might interest scholars of contentious politics and authoritarian domination in China.

The developer-funded negotiations in village elections are different from the strategy of local governments to "buy peace" (Lee and Zhang, 2013) and are often more efficient. When local government buys peace from resisters, the "stability maintenance fund" managed by the local states is primarily used to pay off resisters after negotiating, whereas local officials do not benefit directly from the deals. By funding elections, real estate developers are capable of co-opting village cadres, who often times sympathize with fellow villagers for their shared fate in demolition programs, thus compromising relocation program. An interesting parallel can be drawn between developer-funded elections and vote banks in postcolonial India, in which political parties extend benefits and welfare in exchange for votes from slum dwellers, and the bargains reflect a mutual arrangement of convenience (Chatterjee, 2004). Both practices include extensive negotiations, but while the vote banks prevented slums from demolition, the ultimate goal of developer-funded elections is the demolition of the village. Rather than

working on its own political agenda, or delivering promises for its voters as described in vote bank theory, village cadres were co-opted by a third actor, the developers, to complete the task of destruction.

The real estate developers do not only work their way through village politics, they also explore and expand the safe zones in central-local politics. Local government's use of brutal forces and the consequent mass casualties in land politics create opportunities for "rightful resistance" (O'Brien and Li, 2006), in which peasants hold the states to its promise of protecting its people and punishing deviant local agencies. By hiring experienced private security forces and minimizing physical injury, the developers undermine the "body-politics" of nail-household resisters and reduce the likelihood of intervention by the central government.

In his study of China's urban transformation, Hsing (2010) rightly argues that location matters in China's urban transition and land politics. The urbanization process in the urban core, the urban fringe, and the rural fringe each has a different territorial dynamism, corresponding with distinct patterns of resistance. In the urban core, forced eviction and inadequate compensation have been the primary triggers of widespread contention and social activism; in the urban fringe, land-owning village collectives bargain with the urban government, profit from urban property markets, and define and defend their territorial autonomy; and, finally, in the rural fringe, displaced peasants have very limited bargaining experiences and mobilization remains largely fragmented and localized (Hsing, 2010).

Acknowledging that residents in different places adopt different strategies for self-protection, the current study examined how repressive strategies also vary in different locations, and adds complexity to Hsing's conclusion. Instead of reaching the conclusion that residents in the urban core and urban fringe are more likely than their rural counterparts to mobilize resources and protect themselves from losses in land conversion, the current study argues that

urban and rural residents experience different kinds of challenges when facing land expropriation, and there is no easy answer for those who are more successful at resisting.

The residents of urban villages are able to carve a small chunk off the booming urban property market by subleasing rooms and operating small businesses. However, the lucrative return from land redevelopment also enables rolling development strategy of developers, in which the sale of a small parcel of land covers the construction fee of several relocation apartments, allowing developers to divide up the village into multiple programs and further fragment resistance. The high profits of land development in the urban core and urban fringe endure during periods of prolonged resistance, as the accumulative loan interest does not eat up profits easily. Consequently, confronted by real estate titans who can afford some delay in the process, peasant households are rendered fundamentally powerless.

Rural households, on the contrary, do not need to put up a fierce fight to beat back developers or local governments. The smaller, fly-by-night companies were easily scared off by bank loans piled up in prolonged resistance. However, the investor flight is hardly a success. Developers leave behind half-built apartments, half-destroyed houses, and cemented farmland that could no longer be farmed. The township governments then spend several years searching for another fly-by-night company willing to take over this high-risk, low-profit program, knowing that the company might also end up fleeing. With no apartments to move into, peasant households either continue to reside in under-maintained houses or, if their homes are already destroyed, live as tenants subsidized by a meager "transition fee" provided by local government.

What we witness here is not only an unprecedented expansion of urbanization into remote rural peripheries, thereby changing the fate of millions of peasant households, but also a series of upgraded and transformed strategies to silence resistance performed by powerful actors outside the state bureaucracy who are apparently adept at exploiting both opportunities within the bureaucracy and frictions between state and society. Based on findings above, the

current study calls for an increase of state intervention in non-extreme popular protests. As the repressive strategies are becoming more refined, casualties on account of violence are becoming less. Thus, mass injuries are no longer an efficient indicator of the violation of local peasants' rights. As a result, peasant households are less likely to draw the attention of the state, even though their rights continue to be violated. The study also suggests that the state tighten rules on investment in rural towns to protect peasant households from the aftermath of failed speculations. After all, while real estate developers are becoming increasingly involved in silencing resistance, local states are not the only potential deviant actors the state has to keep an eye on.

Chapter Five. Conclusion

Summary of dissertation

This dissertation started as a study of documents and maps and bureaucracy, a typical institutional ethnography. But when I accompanied local land bureaucrats on field trips, I was surprised to see that land expropriation process once monopolized by local states had been taken over by private investors in many field sites. I also witnessed the frequent investment flights, and the disastrous effects on local communities. But in my observation within bureaucracy, I found that the state supervision of land conversion was greatly intensified by a series of technologies, such as GIS and satellite images, and the work teams sent down to oversee the daily work of local bureaucrats. So on the one hand, we witness intensified supervision from the state to control land conversion and urban sprawl, on the other hand, rampant land speculation in rural peripheries carried out by private investors. Therefore, a new question was formed: How does speculative and predatory capital find its way into the hinterland villages, changing life of millions of peasants, when China unprecedentedly strengthen regulations to prevent land speculation and control urban sprawl?

Chapter 2 of this dissertation described the central state's efforts to launch intensified technological surveillance of local land conversion to protect China's farmland, and its unintended consequences. Based on my observation of the daily work of local bureaucrats, I described how local bureaucrats redirect the dialogue and technologies to relocate peasant households in rural peripheries into high-rises, and reconstruct local communities to maximize land conversion quotas. Ironically, the intensified surveillance did not lead to the efficient control of urban sprawl, but prompted the local states to push further the urban frontier into rural peripheries.

Chapter 3 described the privatization process of funding land expropriation. I pointed out that the transition was caused by the central state's policies on tightening bank loans in post global financial crisis years. The policy change was fundamental, since local states used to borrow extensively from banks to fund land expropriation programs. Instead of slowing down the urban sprawl, local states turned to private investors for help with infrastructure funding. By comparing social consequences when land expropriation was funded by local states and by private investors in two counties, I argued that the land rights of relocated households were further deprived when the process was funded by private investors.

Chapter 4 looked into the transfer of another key function of local states- silencing peasant resistance, to private investors. As the state intensified its control over social stability maintenance, it closely supervised illegal behaviors of local bureaucrats, and punished them for accidents happened in social unrest. Instead of holding back from land expropriation to reduce conflicts, local states outsourced the task of silencing peasant resistance to private investors. This chapter describes various tactics developed and used by real estate developers to silence nail household resistance.

What's next

On an early summer day, a regional manager in Jade invited me on a field trip to the company's latest land project. He explained that although the project was in its initial planning stage, the company was very enthusiastic about it since it was believed that the project represented a new trend in China's urbanization. Furthermore, because the company was participating early in the process and there were few competitors, it stood to profit handsomely.

After an hour's drive from the urban center, we arrived at a satellite town. In front of me was a vast plot of farmland scattered with debris from demolished houses. The planning map showed a project zone spreading over 4000 mu of land. I was startled by the size of this

project, which was rarely seen in urban real estate development projects. The manager noticed my confusion and explained, "Not all of the land will be used to build commercial housing. Only 40 percent of the land is planned for apartment buildings. The other 60 percent is planned for a healthcare industrial park and a continuing care retirement community." He further explained that Jade would expand its previously narrow focus on commercial housing to community planning, bringing in industries, cultivating value chains, and attracting employees who were also potential home buyers. "We are going to build a town here. Isn't it spectacular?"

This proactive move of building new towns was a response to the central government's recent call for constructing "characteristic towns." Originating in Zhejiang Province in 2015, those characteristic towns are expected to serve as platforms for industrial upgrading and economic restructuring, as well as to serve as new vehicles to promote urbanization. A characteristic town should ideally have a foundation of industry, and each town forms a territorial agglomeration of enterprises with distinct industries. A characteristic town also emphasizes the function of living: a characteristic town should be no larger than three square kilometers. The constrained area is meant to dissuade urban sprawl and to keep the area within walking distance of the livable space (Zou and Zhao, 2018). In July 2016, the state announced that it planned to develop around 1,000 characteristic towns nationwide by 2020.

The characteristic towns marked a great opportunity for local states to simultaneously expand their tax base and raise real estate prices in suburbs and rural peripheries. However, funding the construction of a town on undeveloped farmland or wasteland could be a real challenge, especially when the central government meticulously supervised expenditures on mega land projects to safeguard financial health. As we could expect after examining mass relocation programs in China's rural peripheries in previous chapters, local states turned to real estate developers for help and, this time, with even more concessions. Here we witness another wave of structural transformation of the local states, as illustrated in the following field note:

> When asked about the thorny issues in negotiations with local states, the manager commented: 'It's all about giving up the municipality's previous rights over land, and the local state is not yet ready for this transition. For so many years, the municipal government held tightly to its right over land, so it's not that easy to let go. The original plan of a "healthcare town" covered 26 square kilometers, but the municipal government turned it down, and its major complaint was that it would lose control over a one fifth of the city. But it will eventually come to terms with this transition. The municipal government recently leased 4,000 mu of land to us, and this is only the first step.' (Field notes, June 30, 2017)

At the beginning of the dissertation, I identified three kinds of control local states exert over land: 1) a monopoly on the primary land market, 2) planning and zoning rights, and 3) the allocation and coordination of resources. When local states pushed the urban frontier into rural peripheries, we witnessed the intensified control of local states over planning and zoning and a transfer of rights to real estate developers in the primary land market. What I see in this very initial stage of building "characteristic towns" is a more comprehensive transfer of rights from local states to real estate developers: apart from control over land expropriation, the local states also yielded part of the right to allocate and coordinate resources. Jade, instead of the municipal government, would decide which industries could join the park and get tax cuts, how much land would be allocated to the factories, and the concrete preferential land lease terms offered to them.

Does this further transfer of rights from local states to private investors in land management show an irreversible logic of privatization, as predicted by the neoliberal paradigm? Or, are we witnessing the high flexibility of local states as they proactively change the forms of land management they use to fall between the cracks of central policies?

"Filtered through a sieve" vs. "Falling between cracks": Major findings and implications for studying China's urban agenda

A common assumption in previous studies on central–local relationships in China can be summarized as an absent state that meant well and local states that constantly bent the rules. The benign rules and central policies are always manipulated by local states, which are constantly aiming to maximize fiscal income and promotions. Scholars coin concepts such as

"selective policy implementation" to describe the behavior patterns of local officials who conscientiously enforce unpopular policies while refusing to carry out other measures that villagers welcome. They will, for instance, urge peasants to pay taxes and fees and to comply with birth control statutes, yet ignore or distort policies that ban unauthorized appropriation and require respect for villagers' rights and interests (O'Brien and Li, 1999). When implementing national environmental policy, local officials selectively pick the path of least resistance and choose quick, low-quality approaches (Eaton and Kostka, 2014). This analytical approach is best visualized as "filtered through a sieve" model in which national policies that "meant well" are selectively implemented and distorted when going through the sieve of local states, which violate the original benign purpose of such national policies. This paradigm easily leads to a set of policy implications that encourage intense state supervision to increase the transparency of policy implementation.

However, the "filtered through a sieve" metaphor might miss the point of the nature of the central-local relationship at the current stage. First, the central state is no longer absent. Rather, what we see is an ever-present state that spends massive resources on constructing national land database, sends work teams to supervise on-site implementation, and launches more and more satellites into space to monitor the daily operations of local states. Accordingly, rather than well-meaning yet loosely implemented and distorted policies, China's state land policies are better conceptualized as strictly implemented rules that achieve multiple state goals but miss the specific point of offering real protection to peasant households. Second, the local states do not have a fixed behavior pattern and bend central rules to fit into their own purposes. On the contrary, local states proactively respond to central policies by systematically transforming themselves in order to "fall between the cracks" of state rules, simultaneously achieving legitimacy and maximizing profits at the cost of local peasant households. This flexibility marks a distinct feature of subnational actors in the current era and fundamentally

reshapes the way I ask research questions in this study. Instead of posing the question of how policies are changed when implemented by local states, I ask, "How do local states change when implementing state policy?", and I pay close attention to the social consequences of those structural changes. Early in my fieldwork, the local land bureaus in Sichuan were very excited about the newly-generated revenues from peasant relocation programs. Later, I witnessed rounds of bitter negotiations between local states and real estate investors when local states brought in private investors but were not ready to relinquish their monopoly over the primary land market. On later visits, land bureaucrats would actively reach out to private investors and offer to share profits. The bureaucrats would repeatedly tell me that "local states were only platforms, and we do not expect any profits from relocation programs. The private investors would walk away with all the profits – we only provide services, and, yes, the platform." If scholars focused exclusively on the filtering of policies in local implementation, they would probably miss the more salient point concerning the China's current land policies and their connection to the profound transformation of local states.

Apart from the distinct assumptions made about nature of both central and local states, the "falling between cracks" paradigm also implies close interactions between central government policies and local responses, which often leads to highly unpredictable and contingent consequences. Departing from the localist assumption that local states have their own agenda, and are therefore to some degree autonomous and immune to the central government's policies, I found that central policies profoundly influenced the structural reconfiguration of local states. The current dissertation explored three sets of central–local interactions in land management: First, over the last two decades, the central government has intensified spatial surveillance to protect farmland from urban sprawls by establishing national land databases and launching satellite surveillance. Local states responded by enhancing land planning and zoning capacities, proactively taking advantage of the collected data to reorganize

local communities and coordinate land use in urban and rural areas by specifically relocating peasant households residing in rural peripheries to densely populated high-rises, and reclaiming and then exchanging their original residential area for additional land conversion quotas near cities. These local practices maintained the total amount of farmland in a territory, and therefore conformed with central policies on farmland protection. However, the negative influences incurred on local communities often passed unnoticed. Second, after its massive investment in urban infrastructure to revive China's economy in Global Financial Crisis years, the central state was daunted by accumulated bank loans that posed serious threats to the nation's financial health. Consequently, the central state tightened borrowing policies and gradually banned local states from borrowing from banks to fund land expropriation. Local states responded in an unprecedented way by giving up their monopolies over primary land markets and sharing profits from land expropriation with real estate developers in exchange for their investment in the process. Local states conformed with the central state's rule on borrowing, whereas the privatization of land expropriation further deprived local peasant communities of land rights and benefits. Third, the growing unrest of landless peasants posed threats to China's social stability. To maintain stability, the central state cracked down on local states that triggered peasant unrest via land expropriations and punished land bureaucrats and local officials harshly for their misconduct in forced eviction. The local states responded by outsourcing sensitive tasks such as demolition to real estate developers, who efficiently achieved goals by co-opting local cadres, hiring gangsters, and using "waiting" as a strategy to wear out resisters.

The interweaving of those heterogeneous and strictly implemented central rules, and the innovative local response, have led to highly unpredictable and unintended consequences. Essentially, these negative effects were concentrated in China's rural peripheries, a geographical area rarely influenced by land speculation previously, thus largely ignored by both urban scholars and policy makers. In response to the central state's farmland protection

policies and intensive surveillance, local states relocated millions of peasant households into high-rises to create additional farmland, thus pushing the urban frontier into remote villages. When the central state tightened borrowing rules, local states invited real estate developers to rural peripheries to invest in relocation programs and reap profits. Not surprisingly, the comparatively high risk and low profit in rural peripheries drew fly-by-night companies, many of which were set up to take advantage of the situation. Consequently, peasant households were targeted for their spacious residential areas and piled up with households from other villages to maximize population density. The apartments built by real estate companies were small and overprized, and many of the village collective land rights and benefits were reaped by investors. Worse still, fly-by-night companies abandoned relocation programs for various reasons, including capital chain rupture, better investment opportunities, major stock market crisis, and bankruptcy. Having few resources to guard their rights, peasant households were left with half-built apartment buildings, half-demolished homes, and destroyed farmland. The question I raised at the very beginning of this thesis, "How does speculative and predatory capital find its way into the hinterland villages, changing life of millions of peasants, when China unprecedentedly strengthen regulations to prevent land speculation and control urban sprawl?", is answered by tracing the highly contingent and unintended consequences of local responses to a series of heterogeneous central policies.

On the all-embracing neoliberal model

My dissertation explains the presence of predatory investors in hinterland villages as the unintended consequences of a series of interactions between the central state and local states. However, an alternative explanation of the phenomenon would be that it exemplified the expansion of neoliberalism into urban governance. It is difficult if not impossible to nullify the neoliberalism argument, as neoliberalism has become such an all-embracing concept that privatization and marketization of land expropriation process we witness in China would be

marked as "neoliberal" as if by definition. This study tries to think beyond the neoliberal framework and reflect upon other ways to study urban governance in non-Western contexts.

Defined as the attempt to impose market-based regulatory arrangements and socio-cultural norms, neoliberalism is widely used by scholars to describe a process of market-driven social and spatial transformation (Brenner and Theodore, 2005). To extend the scope of this concept to explain socio-economic processes in non-Western contexts, scholars coin new concepts such as "actually existing neoliberalism" to emphasize the contextual embeddedness of neoliberal restructuring projects as they have been produced within national, regional, and local contexts and to acknowledge the path-dependency of neoliberalism and the contextually-specific interactions between inherited regulatory landscapes and emergent market-oriented restructuring projects (Brenner and Theodore, 2002). In such a perspective, many socio-economic processes in non-Western countries would be explained as a form of liberalism embedded in a specific context, such as "developmental neoliberalism in East Asia" (Chu, 2002), and "neoliberalism with Chinese characteristics" (Liew, 2005; Wu, 2008)

The current study contributes to the study of urban process in non-Western contexts by reflecting on the concept of "contextual embeddedness." There are fundamentally different ways to think about the process of contextualization. To better illustrate this argument, we can draw a comparison between the recent urbanization in Bangalore and the rural relocation programs in China. India is transitioning to neoliberal urban governance by liquidating rural land and launching mega infrastructure programs. Land speculation caused massive land grabs, and rural residents in Bangalore were not sufficiently compensated, many of whom lost their homes without any compensation since they could not prove land ownership in India's complicated land system (Goldman, 2011). In this scenario, the pre-existing market-driven logic (land liquidation and land speculation) interacts with local institutional contexts, whereas in China's peasant relocation programs, the market-driven logic (investment in land

expropriation process) is enacted by specific needs in the institutional contexts. The private investors are not brought in because they can achieve higher efficiency, but because local states intend to simultaneously abide by the central state's policy on farmland protection and bank loan restriction while maximizing local fiscal income at the same time. In other words, the private investors are brought in to help restructure the local state's land management system so that the reconfigured behaviors can fall between the cracks and remain undetected. Private investors would not be interested in relocation programs if any of those institutional conditions was missing. The following excerpt from my field notes reveals an investor's reflection on his investment decisions:

> I was having lunch with a real estate developer, Mr. Ma, who owned a 'real' real estate company (not one of those briefcase companies). Recently he got interested in investing in relocation programs and was now actively negotiating with a rural town government in Shandong. I was reading Harvey recently and kept thinking about 'spatial fix' as an explanation of urban sprawl. Then I made up my mind to test the hypothesis by asking him: 'Why did you decide to invest in relocation programs? Is that because the profit in inner cities is dropping and potential profit is higher in rural periphery?' His eyes were wide open in surprise and denied at once: 'That's definitely not true. Investing in the stock market would definitely generate a higher return than investing in mountain villages. What really attracts me is the stableness of *an internal market*. Investing in relocation, and selling quotas to urban area- you have to understand this is not a free market, it's a market designed and sustained by the bureaucratic system.' 'Why is it stable?' I asked. He answered: 'Because there's no other way. The state is determined to protect farmland, so the local states have to rely on relocation program to comply with the rule, and of course, continue to increase their revenue. Plus, they (the local states) need our money to fund relocation. It is stable because it could not be otherwise.' (Field notes, April 2016)

This distinct pattern of "contextualization" defies a pre-existing logic of the market, as the market is to a large extent created and sustained by the logic of bureaucracy. A series of moves we witnessed in China's land management over the last decades, including the liquidation of rural land, the privatization of land expropriation, and the outsourcing of demolition to non-state actors, bear a striking resemblance to market-driven social transformations in North America. The major contribution of the dissertation study lies in that it reveals a fundamentally different mechanism with a similar appearance. This differentiation

is crucial, as the discovery of this underlying mechanism leads to a distinct set of policy implications (explained in the following section).

In a similar vein, the current study also challenges the model of growth machine and regime theories, more specifically its fundamental assumption that local political, economic, and landholding elites, among other elites, cooperate to achieve the goal of growth no matter how split they might be on other issues (Logan and Molotch, 1987). The Chinese experiences on urban governance demonstrate that elites do cooperate, but it is highly doubtful that there is such a goal as abstract as "growth." The foundation for this cooperation would be better conceived as private investors using resources to help local government fall between the cracks of central policies and benefiting from the situation. The cooperation between economic elites and local officials thus hinges on central policy changes and the consequent local responses. This explains the widespread "policy speculation" in land investment in China, in which private investors speculate on future change in central policies and local responses and sign investment contracts with local states based on speculation. Cooperation of this kind is highly unpredictable and more than often falls apart. Once when we were having dinner, my colleague in a local land bureaucrat commented on a successful private investor: "Those who invest with a simple mind to reap benefit would eventually lose money. Only one who understand policies, especially future policies, walk away with all the profit" (Field notes, July 2014).

Implications for state polices: tying up loose ends

There are two fundamentally different answers as to why the central state fails to protect peasant households. Simply put, the "filtered through sieve" perspective leads to the conclusion that local states' selective implementation of "well-meant" policies seriously deviates from original policy goals of the central government, and incurs loss to local communities. Consequently, legal, administrative, and technical perspectives of supervision should be further improved to oversee local implementation. Chapter Two challenged this viewpoint by

revealing the local responses and the consequent unintended consequences of advanced supervision technologies: the systematical reconstruction of China's rural peripheries in the form of mass peasant relocation.

This dissertation study, in contrast, acknowledges and identifies large cracks existing between a set of heterogeneous central policies. The central state, with improved supervision technologies and legal, legislative, and administrative reforms, has successfully achieved a series of concrete policy goals: safeguarding farmland quantity, tightening bank loans, and maintaining social stability. However, the central policies miss the point of offering real protection to peasant households, whose lives were often changed for the worse by local states trying to maximize local revenue while achieve legitimacy in the eyes of central government. The most significant contribution of the current study is to raise awareness of the possibility that, no matter how counterintuitive it may sound, the fulfillment of state policies may well lead to the suffering of local communities if policies that specifically aim to protect local communities from potential harm do not exist.

It is very difficult, if not possible, to predict local responses to a set of heterogeneous policies and their social consequences. The unpredictability itself makes urban policy research necessary for retroactive state interventions to "tie up loose ends." The current study has shown that the negative social consequences of a set of state policies are unevenly distributed with rural peripheries suffering from unprecedented infiltration of private capital. For the first time, remote villages have become the target of speculation, not for future rent, but for farmland quotas and apartment sales. The tightening of land loans, and the urgent need for investment, prompt local states to adopt very loose investment entry rules. Consequently, fly-by-night companies dominate the rural investment market and abandon projects for various reasons, incurring economic loss to village collectives and individual households. With few resources

to defend themselves, peasant households passively hold on to their old homes and refuse to move, causing project delays and triggering further investment flight.

It is therefore necessary that the state launch strict inspections of investment entries and prohibit fly-by-night companies from entering rural investment market. The qualification of a company and its past experience in urban infrastructure investment should be carefully inspected before it is allowed to bid for any investment program. The current urban real estate and infrastructure investment market has strict inspection rules and requirements on public bidding and auction, but the rural investment market is still rather rudimentary. A murky term of "social investment" covers a wide range of investors from transnational real estate titans to local fly-by-night companies. Furthermore, the more desolate a village is, the more likely it is to hold on to an unqualified and highly speculative investor and the less likely it is to be capable of defending itself in negotiations and in failed investment. The vulnerability of rural peripheries calls for strict state policies on investment entry to protect the already precarious life of peasant households.

In a similar vein, the state should be equally cautious of the "voluntary" contracts signed between village collectives and private investors, often orchestrated by local states to exonerate themselves from future investment failures by shifting the total burden to village collectives. If a program is abandoned by investors, the local state, which benefits from extra conversion quotas generated from the program, should be responsible for bailout. Under no circumstance should peasant households suffer the cost of speculative investment and imprudent decisions made by local states.

The prospects of counter-mapping

Besides the murky and unregulated rural investment market, another equally obscure arena I witnessed in this study was the process of mapping. Mapping is at the core of local states' enhanced planning and zoning functions. In a typical relocation program, mapping

includes a series of moves such as measuring residential area and home structures, targeting specific villages, selecting relocation sites, apartment designing and allocation, and infrastructure planning. The concrete process is not only opaque in the eyes of relocated households, but it is also largely unknown to the central state. Consequently, by monopolizing the black box of mapping, local states acquire power to systematically reconstruct local communities with comparatively little resistance. Local states are also capable of achieving legitimacy and maximizing revenue at the same time by the extensive application of mapping tools (as shown in Chapter Two). As China is determined to modernize its countryside, and the central state is not against the idea of systematically reconstructing rural communities, we can expect an increasing significance of maps as planning tools of local states. For the same reason, we should explore alternative ways to challenge this mapping monopoly and expose facts in the black box.

Contrary to the conclusion that the politics of mapping is by nature hegemonic and only serves the powerful, Peluso (1995) points out that maps can also be used to pose alternatives to the languages and images of power and become a medium of empowerment or protest. Alternative maps, or "counter-maps" greatly increase the power of people living in a mapped area to control representations of themselves and their claims to resources. Local people may exert control directly by making their own maps or entrust a representative of their choice, such as a local NGO, to perform the task. Recently in China, innovative "mapping workshops" based in universities are already sending students to local communities to track and record residents' social activities and social needs and then use their knowledge to redesign communities. Two findings of this study point to the necessity and potential benefits of developing counter-mapping strategies in China: First, the current map makers are either land bureaucrats or third-party mapping companies hired by local states, and both work under the supervision of local states to achieve maximum revenue income from land. The land bureaucrats and private

cartographers are found to deploy multiple strategies, including targeting villages with spacious residential area to acquire maximum land quotas and piling up villages in high-rises to minimize peasants' living space. In extreme cases, bureaucrats are found to abuse their right to mapping and engage in rent-seeking. Peasant households have to bribe land bureaucrats to update the cadastral map and measure one's house. Otherwise when the old houses are destroyed and compensated, bureaucrats would compensate the relocated households by referring to data collected 20 years ago, incurring serious economic loss to the households. With the development of counter-mapping strategies, households would have the chance to turn to an NGO or a university research group for help. For instance, mountain villages with inadequate residential space and sub-optimal living standards are in real need of relocation, but their applications are often turned down by local government, since smaller residential space translates to fewer land quotas. The cartographers from NGO or research groups would help by mapping the villagers' real need for relocation in the form of, for example, per capita living space, access to irrigation facilities, and annual yields of crops.

Second, not only do local states monopolize the mapping process, they also keep it opaque by refusing to share information. The lack of transparency gives great advantage to local states, as their power of planning is almost unchecked. Local states are found to secretly revise relocation plans by piling up several villages and reducing average apartment space for relocated households. The local states are also found to cover up real estate developers' illegal land use by discreetly changing zoning from residential to commercial use. With the development of counter-mapping strategies, villagers would have the chance to be included in each step of the relocation program, from selecting relocation sites to the allocation of new apartments. The obscurity of mapping would be greatly reduced, and the local states would no longer be capable of using ad hoc tactics to cover up their tracks.

However, the counter-mapping can only succeed when mapping efforts are combined and supported with broader legal and political strategies (Hodgson and Schroeder, 2002). First, the counter maps must be recognized by the central state in order to serve as an alternative voice beyond official maps and weapons of the weak. For instance, the land rights of relocated peasants would more likely to be protected if court accepts counter map as validate evidence. Second, more effort is needed to seek allies in a fragmented bureaucratic system to strengthen the power of counter-mapping. A potential ally could be the Ministry of Agriculture, which was involved in farmland protection and oversight since the beginning, but its effort to launch third party inspection was frustrated by the Department of Land and Resources, which monopolized land data and mapping process.

The "falling between cracks" metaphor developed in this study has encouraged hopes for another prospect of urbanization in China, one that addresses the real needs of peasant households and restricts land speculation and urban sprawl. This multi-site institutional ethnography reveals that the infiltration of predatory capital into hinterland villages is an unintended consequence of a set of local state transformations in response to central policies rather than a demonstration of an invincible and irreversible logic of capital predicted by the neoliberal paradigm. It is my belief that with state legislative and legal efforts to tighten investment entry rules and through proactive intervention in mapping processes normally led by local state bureaucracies, China has a chance to address the negative social consequences of the current urbanization process and achieve a more just distribution of social wealth generated from land across different social stratums.

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