

Place, Power, and Potential: Agricultural Modernization and the Remaking Of China's
Countryside

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Abstract

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This dissertation explores the influence of the Chinese state's ongoing agricultural modernization policy through the experience of Ruilin township, Anhui Province. One of the first sites to receive modernization funding, Ruilin became a state model based on its rapid and expansive implementation of large-scale, mechanized agriculture. Based on 12 months of ethnographic fieldwork in Ruilin, I find that Ruilin officials coerced villagers into transferring their land; implementation varied drastically between villages; and large-scale farmers were financially failing. This dissertation explores the causes and implications of these outcomes. Using cultural geographic, political ecologic, and resilience theoretic lenses, I argue that Ruilin's modernization campaign contains core failings and extreme disparities – yet is perceived by the state at large as a success – due in part to competing territorializing interpretations of Ruilin's identity.

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INTRODUCTION

A Narrative of Success

When I met with Ruilin¹ Township Deputy Mayor Luo Jie in July 2018 he had news to share. Ruilin had just passed a milestone. With the completion of grading work in the Lan villages in the southern part of the township, the Ruilin government had consolidated all of the township's arable land². "The government tasked us with contributing to the country's development," he said. "I think we've done very well."

Luo Jie's pride was understandable. It was only 11 years prior that the township received its first project funding award from the Ministry of Land and Resources to consolidate a portion of Mei administrative village. At the time, Ruilin's arable land consisted of small and scattered plots. These were farmed by households averaging 7 *mu*³ (.46 ha). Among Ruilin's 30,000 residents⁴, the majority relied on farming for some part of their livelihood. Only 6,800 worked outside of the township. In some respects, it resembled the family-farm dominated rice-growing area it had been for most of the previous 1,000 years, when an embankment along the Kui River opened Ruilin's plains to settlement and permanent agriculture. By 2018, the township had been

¹ All names of places in Anhui and personal names are pseudonyms.

² Chinese state legislation designates all rural land the property of village collectives, who grant member households usufructuary rights on 30-year contracts. While members cannot sell this land, they may transfer, subcontract, lease, or exchange their contracted usufructuary rights. Thus, land transfer rates provide insight into the rural land market (National People's Congress 1999, 2002).

³ 1 *mu*=.067 hectares.

⁴ For the purpose of administering fiscal resources and government staffing, the Chinese state divides all territory into hierarchical units, with power centered at the central government level and extending down to townships. According to the Chinese state's household registration (*hukou*) system, individuals' residency status and entitlements are linked to their mothers' natal administrative unit. Geographical relocation by itself is insufficient to obtain new residency status. Rather, relocation must be combined with a change in entitlements. Officially permitted means of changing entitlements include adequate wealth, education, familial connections to other local *hukou* holders, and the exchange of rural land rights, either via state expropriation or through sanctioned development policies (Chan 2010, Chan and Buckingham 2008, Chuang 2014).

transformed. Ruilin's 9,000 households had leased 61% of its arable land to 135 industrialized farms averaging 200 mu (13.3 ha). Half of its population labored outside the township.

Ruilin represented the achievement of the vision articulated by Premier Wen Jiabao in his 2006 address to the State Council. Wen told the gathered officials that the country urgently required reform. The country's astonishing gains in GDP, wages, and social services access had disproportionately benefitted urbanites and excluded its 700 million rural people (Wen 2006). While Wen left specifics unmentioned, statistics from the era bear out the extent of the gap. In 2005 the rural consumption rate was 27% that of urban areas (National Bureau of Statistics); rural children averaged six years of schooling compared to 10 for urban children (Wu 2011); and the neonatal mortality rate and risk ratio in the countryside was almost twice that of urban areas (Wang et al. 2010). These conditions not only threatened Party legitimacy and social stability, but also food security. Rural people were fleeing the countryside for the higher wages offered in the cities (Chan 2009), leading to a 10% decline in the agricultural work force as a share of the national total workforce between 1995 and 2005 (Felipe et al. 2016).

Wen argued that the state needed to allow rural people to share in China's prosperity, while at the same time securing domestic food production long-term. The answer, Wen said, was large-scale, industrial, "modernized" agriculture. Capitalized operations could lease land from rural people for fair rents, giving them a stable income to support their move to wage work. At the same time, the fixed term lease-based land use structure meant that rural people could continue to have access to their land as a source of social security. The new class of professional farmers would be more productive, profitable, and stable. To facilitate this nationwide transformation,

Wen called for the state to allocate funding to lay the groundwork for large-scale agriculture via construction projects (Wen 2006). Referring to the topic of countryside construction work in his State Council address in 2007, Wen warned officials to “respect the wishes of farmers, safeguard their rights and interests, and oppose formalism and the issuing of coercive orders” (Wen 2007).

In recognition of Ruilin’s achievements in implementing agricultural modernization, the state has celebrated the township as a policy model. The Anhui Provincial government designated Ruilin an Agricultural Modernization Demonstration Zone in 2013. The township frequently hosts visiting delegations to learn from its example. This policy model status has come with funding and promotions. The central government has awarded Ruilin agricultural modernization funding every year. Ruilin officials responsible for implementing earlier stages of the modernization campaign now serve in county and city government offices.⁵

This narrative of success hides significant flaws and contradictions, however. Based on 12 months of ethnographic fieldwork in Ruilin, I found that, far from respecting the wishes of Ruilin’s farmers, Ruilin officials relied on persuasion, pressure, and coercion to implement modernization. Villagers who retained their land did so largely by collectively resisting officials’ pressure. In part as a result, the geography of modernized agriculture in Ruilin is highly uneven. In eight of Ruilin’s thirteen administrative villages⁶, households transferred an average of 84% of their land to a large-scale farmer. But in the remaining four villages, an average of only 40% of households transferred their land. This disparity is even more extreme on the level of natural

⁵ In the Chinese state’s hierarchical administrative system (see Footnote 4), cities oversee counties. Thus, Chinese cities typically include many counties.

⁶ Excluding mountainous and remote Fanxing village, where the government has struggled to build an effective irrigation system and thus attract large-scale operators.

villages⁷. Only 100 meters separate the villages of Lanru and Kuning, yet 100% of Lanru villagers transferred their land compared to 34% in Kuning. Meanwhile, the new large-scale farmers are struggling to produce and make ends meet. Ruilin's climate places tight constraints on double-cropping farmers to harvest their spring crop and plant their fall crop in the summer. For the new professional farmers, meeting those demands at large scales often requires hiring expensive laborers, reducing farming areas, or using land less efficiently. As a result, between 2014-2018 90% of professional farmers either lost money or broke even. Most of the large-scale farmers with whom I spoke were at least considering not renewing their land leases. Large-scale farmers were producing 20-50% less rice per hectare than small-scale farmers.

Why has the state deemed Ruilin's modernization work successful despite its many fundamental failures? Why have some Ruilin villagers responded to officials with resistance, and others with acquiescence? What might this reform work mean for the future of Ruilin's society and ecology?

In this dissertation I argue that Ruilin's modernization campaign contains core failings and extreme disparities – yet is perceived by the state at large as a success – because of competing interpretations of Ruilin as a place. By “place,” I mean an understanding of Ruilin's identity and meaning. An often taken for granted notion, what a particular place is and means is frequently understood to be determined by environment. By contrast, my argument rests on the presupposition that place identities are constructions which both change place environments and

⁷ Administrative villages (*xingzhencun*) are a state administrative designation. They govern natural villages (*zirancun*). Administrative villages are also natural villages, though natural villages are not necessarily administrative villages. The state does not recognize natural villages as administrative or legal entities. Rather, they are traditional concepts referring to “villagers' senses of what is local and longstanding, whatever the documented evidence of actual continuity” (Feuchtwang 1998, quoted in Ho 2005).

are changed by them. People often engage in place identity construction in response to threats to their interests. By creating narratives about the essential identity of a place, individuals and groups can rationalize their authority to govern over those places. Symbols are key to these narratives. Groups and individuals ground their authority by tracing lines between powerful place-aligned symbols and themselves, by effacing those symbols, or by creating new symbols. Making meaning of memories is a powerful means of bridging gaps across complex historical periods. When symbols of place identity and meaning appear in the environment, they may take on profound significance, as their place in the material world creates the appearance that power structures are transparent extensions of nature. As place identity becomes irrefutable and taken for granted, so too might the power structures with which that identity is aligned also be taken for granted. At the same time, as discourses and symbols of place become embedded in popular consciousness and the landscape, over time they take on a life of their own, guiding and shaping new narratives of place independent of what may have been their original intent. In other words, while it is taken to be intrinsic, place is malleable. While it is taken to be innocent, place is bound up in questions of resource access. This gives it immense power, including determinative potential.

The meaning of Ruilin as a place is central to understanding the ways modernization has unfolded and been interpreted there. The state has viewed Ruilin's modernization as a success for three reasons. First, its perception of the countryside in developmental terms has shaped its administrative isolation from community-level politics. Second, Ruilin officials undermined villager resistance by weaponizing the state's development discursive imaginary, and later used the changes they enacted to the landscape to evidence their claims. Over time, the reformed

landscape exerted a persuasive influence, signifying to villagers the inevitability of enclosure. Third, villagers drew on place-based historical experiences and memories to represent their acquiescence as rational and agential. In so doing, they elided not only the influence of officials' persuasion and coercion, but also the long-term lived experience of insecurity in Ruilin constituted by officials, state policy, and unequal power relations among villager groups. These experiences, refracted through ordering and hopeful narratives, powerfully shaped groups' willingness to resist modernization.

The expansion of large-scale agriculture reduced the diverse and autonomous governance, land use, and marketing practices and features that facilitated Ruilin's historical socio-ecological resilience. In the new Ruilin's flattened, homogenous, and emptying landscape, not only are there significantly fewer elements capable of signaling pending disaster, there are fewer people capable of interpreting them.

In making these arguments, I draw primarily on theories aligned with cultural geography and critical place studies in particular. I explore here the role of place as a function of power. Groups contest the meaning of place in an effort to lay claim to their authority over the direction of Ruilin's future. Place, then, is a component of culture. By culture I refer to the active process of meaning-making that directly and indirectly shapes conceptions of the imaginable and thus practicable. Following the work of Gramsci (1973), I understand culture as a component of power along with coercion. Hegemons work to guide popular understandings of the thinkable to encourage the ruled to consent to their subjugation. But a truly popular understanding of the possible is impossible. Rather, conceptions are shaped in conversation with an array of

economic, political, and socio-spatial elements, which are produced and reproduced by hegemon and subjects. Change is not imposed by agent and unitary hegemon on passive, falsely conscious subjects. Rather, both hegemon and subjects have agency within cultural spaces bounded by geographically-specific factors (Hall 2003, Williams 2001). As Foucault (2003) argues, this conception of power and culture as inextricably linked ultimately breaks down the boundaries between hegemon and subjects. Power is instead diffuse, exercised and contested as it is through an array of mundane practices as well as phenomenal occurrences. In Ruilin, the central state's development discourse shaped township officials' strategies for dispossessing villagers. The township then employed many of those dispossessed villagers to help build new irrigation channels for large-scale farmers. Along with central government leaders, the Ruilin officials who replaced the officials responsible for the first modernization projects referred to those completed projects as evidence of the inevitability of modernization and thus the need to expand the implementation of large-scale farming.

A subsidiary of cultural geography, critical place studies builds on work in cultural geography by exploring the micropolitics of culture and power and the ways they shape and are shaped by particular spatial settings. Scholars in this field are especially attentive to the ways in which a place's people narrate and practice their experience with and understanding of landscape and memory, and the ways in which these narrations and practices maintain and contest notions of place identity and meaning (Harvey 1989, Massey 1995). By landscape I refer to the field of vision observable from place (Cressell 2014). By memory I refer to act of meaning-making in reference to historical events (Baird 2014). These elements are often particularly powerful for the very reason that they are a part of people's everyday lived experience. Theorists argue that

landscapes act as material expressions of cultural politics, guiding, directing, and limiting conceptions of the imaginable (Daniels 1993, Mukerji 1994). In Ruilin, it took less than four years for many villagers to seemingly accept the modernized landscape as a natural – and thus as an irrefutable – product of development. Returning to the small-scale farms of the past, to what had been, had become for many unthinkable.

Collective memories, meanwhile, become ingrained in popular conceptions by virtue of their collective nature, and because they are often shaped in response to inconvenient or unpleasant contravening history (Mills 2010). Members of resistance villages in Ruilin evoked their history of collective action to explain their resistance to township officials' efforts to dispossess them. But this narrative effaced their shameful history of gaining power by intimidating weaker neighboring villages. Villagers on the receiving end of this everyday intimidation rationalized their decision to abandon the land by evoking the memory of the Great Leap Forward famine, which they interpreted as meaning the land is inherently inadequate to ensure security. In this way, they effaced the memory of their powerlessness and its influence on their perception of land and home. Memory and landscape are also powerful because they often mutually reinforce. Memories may become parts of the landscape via memorials or as reference points for narratives. In resistance villages, villagers pointed to the land around them in noting its role in providing security during the Great Leap Forward famine, and in contrast to the risks represented by large-scale monocropping.

What are the broader implications of this study? A focus on micropolitics runs of the risk of suggesting that nothing can be extrapolated from that study: a study of Ruilin is merely that, and

thus of interest only to those with an interest in Ruilin. In responding to this concern I am again guided by cultural geographic theories, which suggest that while particularities of place mean that no place can stand for all, common dynamics are nonetheless present, identifiable, and instructive. In Ruilin, these dynamics can be seen at the national and global levels. I argue that the Chinese state's decentralization measures, tax reforms, and cadre management incentive structures shifted Ruilin officials' attention and priorities away from Ruilin itself and towards meeting the imagined desires of the central state. The agricultural modernization policy follows similar drives to mechanize and scale-up farming implemented by states worldwide, including in India (Nicholson 1984), Mexico (Ireson 1987), and Sub-Saharan Africa (Bergius et al. 2017). Ruilin officials drew on the universalizing modernization discourse undergirding all such projects to flexibly position themselves as both embodiments of and subjects to modernization processes. I argue that the power officials thereby gained to justify the use of violence in dispossessing villagers and deflect responsibility is a feature of modernist states everywhere. Officials' persuasion tactics sought to discourage villagers from retaining their land by undermining villagers' sense of belonging to a national collective as farmers. Echoing studies of large-scale land development projects from around the world, Ruilin villagers responded to officials' persuasion and coercion by drawing on their experiences of the past, and interpretations of those experiences, to justify their responses (Mamonova 2015, Wolford 2005). As a focus of study, Ruilin offers insight into the experience of rural communities and environments in China as well as more broadly. I elaborate on my findings and contributions over three chapters as well as a conclusion.

Chapter 1: The Cultural Politics of Dispossession

Literature associated with agrarian studies has theorized the role of the arrival of “outside” influences on peasant dispossession. In Marxist literature, this takes the form of the state and its mercenaries drawing on liberal theories of property rights to rationalize villagers’ violent dispossession through the “blood and fire” of primitive accumulation (Blomley 2005). Leninist scholarship posits the inevitable decline of the peasantry via the dull compulsion of expanding capitalist relations (Bernstein 2010, Lenin 1956). These theories have informed recent work describing the influence of state threats and violence (Luo et al. 2017, Sargeson 2013), as well as increasing market competition (Gong and Zhang 2017) on the decline of small-scale farmers in China.

However, the uniform patterns of implementation suggested by these theories – including the formation of class strata – contrasts with the uneven conditions in Ruilin. There, not only do leasing rates vary considerably between villages, but acquiescing and resisting villager groups are roughly equivalent in their income levels and living conditions.

Gramscian theories of hegemony offer insight into Ruilin’s conditions. Gramsci (1973) argues that post-sovereign states rely on a combination of coercion and consent to achieve their political goals and retain ruling authority. Consent refers to the use of ideology to shape the cultural boundaries of the imaginable and thus the practicable. Regimes work to secure their authority by using selective interpretations of history to establish a sense of internal logic and continuity with the present as well as visions for the future (Anderson 2006, Massey 1995). The landscape plays an important role in the process by naturalizing regimes’ claims (Cosgrove 1998, Daniels 1993).

But rather than directly conveying a prescribed meaning, the landscape's form and significance changes over time in relationship to discourse, including practice and labor. The landscape both signifies and is interpreted (Mitchell 2000, Yeh 2013).

In Ruilin, officials were under extreme pressure to both maximize the implementation of agricultural modernization and avoid inciting the kind of visible resistance from villagers that inspired the agricultural modernization policy in the first place. Coercion and consent provided the answer. Officials used ideological reeducation or “thought work” (*sixiang gongzuo*) to persuade holdouts. Officials undermined villagers' sense of belonging on the land by recasting villagers as subjects rather than engines of the state's development policy vision. They also worked to undermine the value of land and village life by discursively aligning happiness with wage work, and by framing the replacement of subsistence farming with industrial agricultural as a historical inevitability. When this failed, officials threatened holdouts with the cancellation of social security and violence, then tasked construction crews with demolishing holdouts' arable land and filling in their irrigation ponds. In a number of natural villages, these tactics succeeded in dispossessing over 90% of residents. As modernized farms arose in the wake of this action, officials in later phases evoked them as material evidence for their teleological assertions. This correlated with reduced villager holdout rates. Over time, the changed landscape worked to naturalize officials' claims independent of their persuasion work. While many resisters, especially those affected by early stages of modernization, vowed to return and retake their land at the end of the contract period, almost none did. When asked why, many villagers responded that the land in its new form no longer belonged to them.

In recent years scholars have considered the role of consent as well as coercion and capitalist relations on dispossession (Chuang 2014, Zhang 2018). I contribute to this work by exploring the co-constituting relationship between ideology, landscape change, and dispossession. Drawing on fieldwork data collected in 2014 and 2017-18, I argue that officials' deliberate work of coercion and consent helped set in motion Ruilin's modernization by forcefully and discursively de-linking villagers from the land. Critical to this process was undermining the perception that villagers belonged on the land based on their contribution to national development. The subsequent landscape transformation effectively naturalized that work, projecting officials' rhetoric back to Ruilin's villagers and solidifying as irrefutable the perception for many that they no longer had a place in the new Ruilin.

Chapter 2: The Historical Relations of Resistance and Acquiescence

But as literature aligned with peasant studies often points out, peasants – far from passive in these agrarian change processes – co-constitute them through their responses. What then determines their responses? Studies informed by liberal economic theory contend that peasants' desire to engage in more productive and lucrative work informs their acquiescence to development (Lin 2012, Olsen 1965, World Bank 2014). By contrast, Chayanov-inspired studies argue that peasants' values and labor structure – centered on well-being and security over profits and the household over the individual – both encourages and facilitates their adaption to expanding capitalist relations (Shanin 1990, Der Ploeg et al. 2104). Populist Marxist-aligned studies often posit that this alternative subsistence farming value structure in combination with a common history of oppression drives a tendency to collectively resist (Barker 2014, McMichael 2010).

Recent work has questioned these more generalizing theories of “bottom up” responses by highlighting the relationship between specific rural communities’ perceptions of the land, their lived experience on it, and their responses to large-scale land development projects. They find that resisting communities often have histories of collective action in defense of their land rights. This history in turn centers the land and village in individual understandings of identity (Edelman and Léon 2013, Martiniello 2015, Wolford 2005). Others document the mobilizing influence of shared trauma, particularly when land under threat of expropriation serves as a memorial to that trauma (Baird 2014, Alfonso-Fradejas 2015). Past experiences with other large-scale development projects may also inform responses. In these cases, communities’ perception of the “new” project as a continuation of the past in turn guides their response (Mamonova 2015).

But as in Chapter 1, the consistent outcomes suggested by these frameworks do not match the uneven conditions observed in Ruilin. The concept of place as articulated in work aligned with critical place studies offers insight into the formation of this unevenness. Critical place studies conceptualizes place as possessing dialectical potential. Understood as a relational, historical, and ongoing “gathering” of material and discursive elements, the notion of place may inspire an examination and a celebration of the animate and inanimate elements around us as manifestations of a convergence of rich historical practices, ideas, and habits (Relph 1976, Tuan 1977). Investigation based on this sensibility exposes the ways power as ordering systems is constructed, calling attention to its utility and limitations (Cresswell 2015, Massey 2005). Understood as a fixed identity, however, the concept of place may close off alternate interpretations. Like states in Gramscian theories of hegemony, interest groups and individuals

that feel threatened may work to secure the naturalization of their authority over a place by working to define the essence of a place's identity, or territorializing (Harvey 1989, Mills 2010).

As I show in this dissertation, Ruilin has only recently come to have a fixed, territorialized place identity. The earliest archeological evidence of settlement in Ruilin dates to the Western Zhou period (1045-741 BCE). Seasonal flooding brought on by the rising "Kui" River made the area largely uninhabitable outside the Tang mountains and foothills, however. Ruilin was defined by the largely transient nature of its visitors. While I use a pseudonym of Ruilin for the township to protect the identities of my research subjects, the meaning of the township's actual name references its position along the overland route between the cities of Jingdezhen and Nanjing. It was not until Song dynasty-era (960-1279) leaders built an embankment along the Kui that Ruilin welcomed broader permanent settlement of the floodwater plain between the Kui and the Tang. While flooding remained a persistent problem, the embankment – expanded with the support of governments in the Ming and Qing dynasties, along with irrigation and transport infrastructure – supported a growing number of villages.

The state under the Chinese Communist Party leadership constructed an early sense of Ruilin's place through their Western social science-inspired development discourse identifying areas in need of "improvement" (Sigley 2004). Leaders divided the nation into geographic spaces based on their perceived location along a linear development path that began with agrarian societies and ended with the industrial city. Under Chinese Communist Party leadership, the state has largely retained this understanding of development and the countryside (Day 2013, Harrell forthcoming). The contemporary post-Mao state in particular has reflected this understanding of

the countryside in its approach to rural governance and administration. The state has weakened rural government's capacity and responsiveness to grassroots conditions by siphoning from their budgets while making them dependent on funding transfers for development projects like agricultural modernization. Charged with implementing a policy disconnected from the wishes of those they govern, Ruilin officials used the state's development discursive framing of Ruilin to undermine villagers claims to land. Coercion in the form of threats and land demolition forced many villagers into leasing their land. But as construction reshaped the material land to accommodate professional farmers, the changing landscape became both an evidentiary reference point for officials working to persuade other farmers, and an independent signifier naturalizing professional farmers' claims to the land.

At the same time, Ruilin people were both producing and reproducing their own understandings of Ruilin-as-place in response to and in dialogue with those of the state and Ruilin officials, as well as their history and memories. The national upheaval that led 20th century leaders to reconsider China's identity profoundly influences Ruilin people. The Taiping Rebellion (1850-64) led to mass migration and mortality throughout the region. The migrants from outside Anhui who predominantly resettled in Ruilin thereafter had little understanding of Ruilin's particular history, environment, or customs. Ruilin was the site of a second collective tragedy from 1958-61, when the state's Great Leap Forward campaign triggered a famine that killed 10-30% of Ruilin's population and reduced fertility by perhaps 66%. The state's retreat from the countryside after the end of collective farming in the 1980s created a power vacuum (see Thaxton 2016), which some natural villages filled by uniting in solidarity to secure and defend their interests.

But this came at the cost of the security and interests of the residents of surrounding villagers. Villages that formed solidarity bonds used threats and violence to assert control over resources, and regular intimidation and belittling to reinforce a community hierarchy. This encouraged greater unity among households in solidarity villages and atomization among those in weaker villages. Thus, the Ruilin officials tasked with implementing agricultural modernization encountered communities with vastly different histories and experiences. But the reasons villagers gave for their decisions to resist or acquiesce to officials' coercion offered no indication of this history. Rather, villagers used rational and agential place narratives tied to identity and memory. Resisting villages justified their response to officials as consistent with their history of collective action. They also evoked the Great Leap Forward famine as evidence of the inherent value of land relative to the fragility of modernity. Acquiescing villagers, meanwhile, framed their response as consistent with their villages' traditional focus on household interests over those of the village collective. Also evoking the Great Leap Forward, acquiescing villagers argued that the Great Leap era evidenced the inherent insufficiency of the land and the need for financial security.

This study contributes to the literature on “ground up” responses to large-scale land development by exploring Ruilin villagers' accounts of their histories and memories in conversation with data on inter-village historical politics. Through their explanations, both resistance and acquiescence villagers inadvertently support and refute the others' agential, rational, and heroic notions of historical change. While not disputing the validity and power of villagers' accounts, these findings suggest the need to consider them in a broader spatio-temporal context.

This study also contributes to studies of agroecology. Literature aligned with this field posits that small-scale agriculture as a social structure benefits social equity in rural areas (Altieri 1998, Holt-Gimenez 2001). This in turn suggests that small-scale farming communities represent an egalitarian class unified in its opposition to outside threats. Through its exploration of historical inter-village relations and their relationship to peasant persistence and enclosure, this study argues that small-scale farming communities contain nuanced factions and unequal power relations of their own. In Ruilin, the security of resistance villages came at the cost of the vulnerability their neighbors. Rural communities are not merely reactionary. Rather, they may co-produce and embody wider societal power imbalances. This study suggest the need to cast an interrogating lens on the “internal” as well as “external” power dynamics that drive peasant persistence and enclosure.

Chapter 3: Agricultural Modernization, Adaptive Resilience, and the Future of Farming in Ruilin

What informs the Chinese state and officials’ perception of and relationship to Ruilin-as-place noted in chapter 1? Critical development studies associated with the work of Foucault (2003) as well as the cultural geographic theory outlined in chapter 2 often highlight the rational empiricist approach to governance characteristic of post-sovereign states. Modern states premise their legitimacy on their ability to improve the population though the application of administration to discipline individuals and social science-based discourse to regulate populations. But the former isolates development practitioners by rendering them myopic functionaries, while the latter reduces heterogeneous environments and populations to homogenous categories with shared

traits (Scott 1998). The encounter between spaces constituted by diverse historical, material, and discursive elements and uniform blueprints results in uneven outcomes (Hart 2002, Yeh 2013). But the modernist state – with its component parts both atomized and armed with rationalizations for failure – is a self-replicating machine (Ferguson 1995, Li 2007, Said 1978).

Studies using analytical lenses associated with political ecology, meanwhile, examine the “bottom-up” changes in land use precipitated by changes to development policy and accompanying discourse. As liberalizing reforms encourage competition, short-term profit, and resource-overuse, land users may unknowingly fall into cycles of desperate ecocide (Blaikie and Brookfield 1987, Muldavin 1997, Wood 1998). Literature on the political economy of Chinese development offers insight into the administrative structures, legislation, and policies helping to determine rural officials’ priorities and constraints (Chan 2010, Kung et al. 2013, Sun 2017).

At the same time, this literature leaves important questions unanswered. Namely, beyond the policy’s failure to meet key goals, how are we to evaluate the influence of modernization in Ruilin? What would “successful” development look like? I apply resilience ecology theory to explore these questions. While acknowledging its shortcomings and contradictions with other chapters in this dissertation (outlined above and in Chapter 3), resilience ecology, I argue, offers a useful analytical lens for investigating these questions. Resilience ecology theory describes what I might term “successful” societies and ecologies as those capable of buffering disturbances and continuing to function. Autonomy and diversity on the levels of governance, marketing, and resource use, as well as the ability to build and store knowledge and capital, are essential to buffering disturbances. These attributes facilitate learning, knowledge sharing, and adaption

(Gunderson and Holling 2002). Scholars applying resilience theory to the study of agricultural societies and ecologies find that resilient farming communities in particular benefit from diverse cropping and land parceling practices, autonomous governance, and the presence of “local” leaders and land use practitioners with an understanding of systems’ ecological and social particularities (Apeldoorn et al. 2011, Belfrage and Tengo 2004, Berkes et al. 2000, Cabell and Oelofse 2012).

I contribute to this literature on agroecology by adapting these lenses to Ruilin through historical research as well as fieldwork data to create a contextualized analytical framework (see also Whiting et al. 2019). I find that for almost 1,000 years Yangzi Delta farming communities like Ruilin produced enough grain to support growing populations without capital-intensifying and mechanizing technological innovation. As noted in chapter 2, consistent state investment, including in water control, irrigation, and infrastructure, was essential. The Song, Ming, Qing, Republic of China, and Mao-era PRC states all made important investments in water control. But communities’ governing autonomy was also critical. The imperial-era states in particular largely remained in dialogue with rural communities yet allowed them to self-govern. Local formal and informal leaders and unregulated markets encouraged self-sufficiency and bet-hedging via diverse land use practices. These practices and conditions fostered learning and the sharing and retention of knowledge. In short, ecological and social richness helped constitute a kind of continually changing text of agroecological conditions as well as communities adept at interpreting it.

Changes to land use practices that took place after the 1978 Reform and Opening – many precipitated by changes to state development policy and its accompanying discourse – undermined these conditions in Ruilin. Nonetheless, a number of important resilient practices and hallmarks remained, in particular diverse land use and a base of grassroots community leaders. The latter was a product of the informal land leasing practices that arose in the wake of increasing labor out-migration beginning in the 1990s. Villagers leaving the township to work leased their land to family, friends, and neighbors for nominal rates. In exchange, lessees paid taxes and cared for the land. Lessees often accumulated holdings based on economies of scale. Working their holdings using only household labor – in addition to part-time hired labor – allowed them to make a salary equivalent to their out-migrating neighbors. Incentivized in part by their economic stake in the community, these “middle” or “backbone” farmers acted as community advocates and encouraged the continued practice of village customs. Prior to modernization, “backbone” farmers constituted about 20% of all Ruilin farming households (He 2011, Sun 2017).

The expansion of agricultural modernization has significantly reduced those features. Land consolidation work eliminated gardens, tree and brush cover, and irrigation ponds. Further, state-subsidized and -capitalized large-scale farmers offered out-migrating villagers rental rates well beyond those affordable by the middle farmers. By 2018, Ruilin’s middle farmers had all but disappeared. Government advocacy for villagers also declined. After cutbacks in rural government budgets following the abolition of taxes, county and township officials ordered what remained of villager government offices to direct their attention entirely on the needs of the new large-scale farmers. This all but eliminated extension services for villagers. This work

contributes to literature on the political economy and ecology of development in China through its systematic analysis of modernization policy on socio-ecological resilience.

Methods and Methodology

This dissertation is based on 12 months of ethnographic fieldwork in Ruilin township, Anhui Province (Figure 1). I conducted 220 interviews with peasants, migrants, rural officials, and suppliers and marketers of agricultural inputs and goods; conducted ethnographic observations to understand farming practices, household production and village life; engaged in participatory mapping; and collected archival materials and secondary sources pertaining to Ruilin and its surrounding region.

I selected these methods in response to several factors pertaining to the study: modernization reform began relatively recently and is ongoing; it is a source of trauma for many; and reform is politically sensitive. In addition, the focus of my study – culture and discourse – is somewhat abstract in nature. My methods also reflect the poststructuralist ontology informing this study, which holds that change is the product of mundane practices and everyday materiality as well as singular political and economic events. To elucidate these change elements, I use triangulating methods such as focus groups that encourage subjects to consider reform, its influence on their lives, and discourses related to it from varied spatial, temporal and social contexts. Other methods, such as participant observation, open spaces for acts of non-discursive communication that are often used by those who have experienced psychological destabilization or marginalization (Gilroy 1993, Hall et al. 2003). In turn, these methods create the potential for the

kinds of lively, unexpected encounters that may encourage creative thoughts-in-formation and counter-narratives (Cameron 2012, Grove and Pugh 2015).

As described in Footnote 1, all names of places in Anhui and personal names are pseudonyms. I have followed this practice in part in an effort to adhere to the ethical principle of beneficence in social research (Saunders et al. 2015, Vanclay et al. 2013), which has led a number of official social science ethics guidelines to recommend disguising the identities of research participants as a default (BSA 2002, ESRC 2012). This practice also reflects the wishes of many of my research participants, who stated or intimidated concern about possible retaliation from government officials or Ruilin-area elites for revealing information about illegal or quasi-legal acts of coercion. At the same time, this study requires some level of geographic specificity in order to offer historical and ecological context. In choosing to anonymize place names to the provincial level, I am following the practice of other ethnographic studies critical of state policy in rural China (see Gong and Zhang 2016, Sun 2017). This approach has limitations. By including details such as “Ruilin’s” national awards and satellite imagery in conjunction with the location of its province, I risk providing sufficient information to triangulate Ruilin’s location within Anhui. However, following the convention of similar studies in China, I defend this decision by arguing the approach I take here retains a level of ambiguity regarding the location of Ruilin necessary to provide Ruilin government officials and elites with plausible deniability about their possible role in the events I describe herein. Some scholars have understandably criticized the practice of protecting the interests of the powerful (Baez 2002, Moore 2012). However, given the wishes of my subjects, for this study I contend that this compromise is necessary to protect those vulnerable to the retribution of the powerful while at the same time telling their stories.



Figure 1. Anhui Province, People's Republic of China. (Map data, left to right: Universal Images Group North America LLC / Alamy Stock Photo; Steffen Hammer / 123RF.com.)

1. The Cultural Politics of Dispossession

Summary: Propelled by considerable state policy and funding support, China’s agricultural production system has become increasingly mechanized, scaled-up, and standardized. This considerable change in land use structure has coincided with overall declining incidence of rural unrest, a phenomenon some researchers have attributed to the agricultural modernization policy’s villager rights and interests-conscious design. I explore this claim through material from long-term ethnographic research in a township that served as one of the first sites designated for state reform. Interpreting fieldwork data through the lens of cultural politics, I find that officials in my field site discouraged resistance by using ideological reeducation work to undermine value-based claims to land rights. When this failed, officials used threats and demolition to coerce villagers to “consent” to formally leasing their land to large-scale farmers via signed contracts. As modernization expanded to include more villages, the changed landscape became both a tool of officials’ ideological work and an independent signifier, exerting influence beyond officials’ intentions by naturalizing and reshaping the state’s policy.

Introduction

In 2007, the Chinese state began supporting the expansion of large-scale, mechanized agricultural production enterprises. The state earmarked funding to support land consolidation, irrigation, and infrastructure projects, as well as subsidies for large-scale farms (Sun 2017). Since its initiation in 2007, the Chinese state’s rural modernization policy has ushered in rapid and expansive agrarian change. The cumulative percentage of formally transferred household arable land – a key indicator of land consolidation – increased from 5 in 2007 to 36.5 in 2017 (Li et al. 2018). Between 2005 and 2014, annual state subsidies for agricultural mechanization increased

from approximately RMB 10 million (US 1.5 million) to RMB 190 million (US 29 million). In that same time, the use of mechanized inputs in the cultivation, breeding, and harvesting – increased from 33% to 61% (Qiao 2017). Between 2013 and 2020 the state allocated US \$500 billion in support of nationwide agricultural modernization (*China Daily* 2013, 2016). In 2018 it announced a goal of modernizing agriculture throughout the country by 2035 (*Reuters* 2018).

But perhaps modernization's most impressive accomplishment is what it has not done. The state initiated the policy partly in response to increasing unrest in China's countryside, frequently sparked by rural officials' coercive land takings. Officials threatened, intimidated and beat villagers as well as demolished their homes and farms in an effort to force them to transfer their land. By helping to standardize and clarify the land transfer market while making farming easier and more profitable, agricultural modernization would, in the state's vision, develop the rural economy while respecting villagers' rights. National-level studies of villager resistance suggest the state has succeeded in these goals. Despite the considerable social and economic change that has taken place in the past 15 years, researchers using data from social media archives, official documents, research papers, and media reports and have found that annual land expropriation-related protests and conflicts have declined since 2013 (Göbel 2017, Lin et al. 2018). These studies attribute this decline to the state's policy and legislative reforms, which responded to villagers' economic and social demands while respecting their rights and ensuring their security. Media reports on agricultural modernization have echoed this sentiment, characterizing the policy as of mutual benefit to villagers, the Chinese state, and the global economy (CGTN 2017, Schuman 2018). I explore this claim through data and insights I collected during 12 months of

ethnographic research in Ruilin Township in Anhui, one of the first sites designated for agricultural modernization reform under the state's ongoing policy initiative.

In recent years, scholars of land-related policy implementation in China have offered insight into the indirect means by which dispossession has occurred. This study confirms many of their findings. They have described rural officials using threats to compel consent, including via destroying resources (Gong and Zhang 2017, Luo et al. 2016, Sargeson 2013), as well as more strategic tactics, including using development discourse to undermine villagers' rights-based claims to land (Chuang 2014). Seemingly incidental economic and livelihood factors brought about by development policy have also contributed, including changes to the land market and the land itself (Gong and Zhang 2017), which may create obstacles to retaking the land and place pressure on those who remain to follow suit (Zhang 2018). This study contributes to this literature by exploring the co-constituting relationship between ideology, landscape change, and dispossession. Interpreting fieldwork data through the lens of Gramscian theories of cultural politics, I argue that officials' deliberate work of coercion and consent helped set in motion Ruilin's modernization by forcefully and discursively de-linking villagers from the land. Critical to this process was undermining the perception that *nongmin* belonged on the land based on their contribution to national development. The subsequent landscape transformation effectively naturalized that work, projecting officials' rhetoric back to Ruilin's villagers and solidifying as irrefutable the perception for many that they no longer had a place in the new Ruilin.

The Cultural Politics of Dispossession

Gramsci's work on cultural politics considers relationships of power, in particular the conditions that perpetuate and disrupt relationships of dominance and subordination. Gramsci theorizes that while coercion is an essential element to maintaining such relationships, its economic and legitimacy costs demand indirect methods. By shaping culture – understandable as popular values, identities, norms, and perceptions – rulers attempt to shape the parameters of what is considered thinkable and thus actionable. Ideology, then, encourages the practice of self-governance: subordinates and state members alike know their place within the space of a ruling territory. Gramsci emphasizes however that understandings of culture are never statically defined and uniform, consciously and finally imposed by a ruling class onto the passive ruled. Rather, they continually change, as on both conscious and unconscious levels the ruled challenge cultural definitions, which in turn provoke responses from the ruling as they attempt to co-opt challenges and enfold diverse elements of society. Further, understandings vary across space as they come in conversation with place-specific histories (Gramsci 1973, Mitchell 2000).

This ideological component to rule unintentionally invites challenges to itself through its efforts to incorporate diverse populations, such as marginalized groups. In the context of rural China, O'Brien and Li (2006) explore this phenomenon in their study of rightful resistance. In an effort to legitimize its ruling authority after instituting market reforms, the Chinese central government increasingly formalized the exchange of rights and responsibilities between state and society using laws and policies, as well as the rhetoric of legality and rights. As Mao-era rights eroded under statewide decentralization, marginalized groups powerfully drew on this rights framework to preserve their entitlements, positioning their resistance as defense of national interests. In the

countryside, villagers referenced their Constitutionally-granted right to farm plots as working members of rural collectives, enshrined in the 1982 Constitution (CCP Central Committee 1983). In so doing, they positioned themselves as loyalists and officials as transgressors. The formal and rhetorical underpinnings of this approach also produced vulnerabilities. Huang's (2014) study of a rural development initiative in Sichuan described officials' attempts to justify their efforts to dispossess villagers by rhetorically aligning that work with national goals, which equated land improvement with villager improvement. Officials succeeded in part by weakening villagers' ability to create a persuasive rights-based narrative.

Huang's study suggests that while resistance hinges on the aggrieved party's ability to make a legally persuasive argument, it is also critically tied to values. Premised on class struggle and the establishment of an industrial utopia, the Mao-era development project cast *nongmin* as both revolutionary exemplars as well as obstacles to development. They perceived their sacrifice as made for the benefit of the country's restoration (Yan 2008). Post reform, many interpreted the state's bestowal of rights not in contractual terms but in terms of citizenship. This represented an acknowledgement by the state of the value of villagers and their farming work. While legislation conveyed a sense of rights, it also conveyed a sense of belonging.

The landmark replacement of the agricultural tax with state subsidies and modernization project spending in and around 2006 thus disrupted that value-based relationship. Whatever benefits may accrue from the reform, it also repositions *nongmin* from development engines to development subjects. While central state leaders insist that officials respect the wishes of *nongmin* to continue farming, their development policy itself adds legitimizing weight to

dispossession by discursively positioning *nongmin* as low-producing relics of a bygone age. Seen through this lens, *nongmin* are no longer eligible to use the means of production. Further, given the “gift” of state largess via subsidies and development projects, *nongmin* now must show their gratitude to the state by passively accepting its prescriptions (see Yeh 2013).

Finally, the conceptions of power and possibility that help determine resistance are powerfully informed by place and landscape. States work to unite diverse populations and quell dissent by perpetuating conceptions of the common traits, practices, and goals of those who “belong,” whether that be in the nation state (Anderson 2006) or geographic regions (Kosek 2006; Ybarra 2012). But such ideas do not merely describe spaces. Those ideas change the spaces and speak through them. Over time, built environments become merely environments. The politics that informed their making becomes naturalized (Mukerji 1997). As they seep into the background of everyday life, such landscapes take on a life of their own, working in dialogue with speech acts and embodied labor to produce and reproduce conceptions of belonging and value (Mitchell 2000). In this chapter, I show how both hegemonic discourse and certain forms of local resistance – and the lack thereof – played out in the process of land consolidation and agricultural modernization in China, using a study of the lower Yangzi Delta township of Ruilin.

Agricultural Modernization in 21st Century China

By the early 2000s much of rural China was seething. The export manufacturing-led economic boom that began in the early 1990s relied on and exacerbated urban-rural inequality, as factory owners employed low-wage rural migrant workers to whom – under the state’s administrative system – they and overseeing city governments owed no welfare benefits. Meanwhile,

investments and profits pooled overwhelmingly in urban areas (Chan 2010). Rural officials began expropriating villagers' land to sell to developers at windfall profits, spurred in part by tax reforms that both favored land taking and robbed them of alternatives (Hsing 2010). By the mid-2000s sensational stories of rural and peri-urban residents clashing with officials over land grabs had become media fixtures symbolic of the state's governance failures (see Beech 2006, Pan 2007). These conditions represented a threat to national food security and Chinese Communist Party (CCP) legitimacy.

In response, the central government acted to increase rural investment and ease *nongmin* burdens. Legislation in 2002 extended household contracting rights to 30 years, abolished periodic land adjustments, and allowed villagers to transfer their contracted land to third parties, including those outside the village. The latter reform established three kinds of land rights: ownership (which remained in the hands of the village collective), usufruct, and management (Hanstad et al. 2009). In the late 1990s, the state began reducing agricultural taxes and fees, and formally abolished them in 2006. In place of extracting from the countryside, the state began subsidizing it. Under the banner of what ultimately became known as the Building a New Socialist Countryside (BNSC) campaign, the central government established a system of direct project awards to support the development of rural infrastructure, housing, health care, social services, and agriculture. Awards would be distributed and overseen by designated central ministries. To encourage innovation and initiative, the state made these awards available on the basis of competitive bids and cadre performance (Fock and Wong 2008, Gong and Zhang 2017, Looney 2015).

The state formally established as its goal the development of modern agriculture – which it defines as commercialized, specialized, scaled-up, standardized, and internalized – in 1997 (Ye 2015). Initial policy focused on using subsidies and tax breaks to promote agricultural processing and distribution enterprises that would link small-scale producers with suppliers and markets (Day and Schneider 2017). That changed in 2005, when for the first time the state called for reconstructing the countryside to create the material foundations of modern agriculture (PRC 2005). With the 2007 No. 1 Document – which outlines policy goals for the coming year – the central government became more explicit, calling for the state to “Actively develop large-scale professional farmers, professional farmers' cooperative organizations, leading enterprises and collective economic organizations, and other business entities that meet the requirements of modern agricultural development” (PRC 2007). Modernizing agriculture no longer entailed only coordinating with small scale producers, but replacing them with vertically-integrated, large-scale, mechanized, standardized, and specialized agricultural enterprises (PRC 2005, PRC 2007).

For the state, actively developing large-scale professional farmers translated into funding the reconstruction of agricultural production conditions to create the foundation for large-scale farming: consolidating small and scattered farm plots and building suitable infrastructure networks. In the state's vision, modernization would create a long-term stable foundation for national food security, and – by opening a new sphere of investment – would benefit the national economy. Modernization would be of specific benefit to farmers and rural people in general. The state's construction improvements and subsidies for large-scale and mechanized production would make farming easier and more profitable. Along with legislative and policy reforms that improved the definitions and transactability of household arable land contracts, the state's

construction investments and the arrival of a new class of subsidized large-scale farmers would improve the market for rural land, freeing those who wished to abandon farming to enjoy the benefits of China's economic boom (GoC 2008, Wen 2006). To protect villagers' land rights and social security, the central government promulgated land transfer regulations, established administering bureaucracies (see Hu 2007, PRC 2013), and preserved the safety net of its longstanding collective land rights structure (Zhang and Donaldson 2013).

Ruilin Township

Ruilin Township has a population of 30,000, including 8,000 households, and is composed of 13 administrative villages and around 120 "natural" villages. The township lies approximately 20 kilometers from the county seat of Yangchun, and around 50 kilometers from the municipal seat. Surrounded by a mountain range to the west and a tributary of the Yangzi to the east, Ruilin's geography historically offered both protective barriers and exposed it to frequent flooding. This flooding also helped contribute to the area's soil fertility and provided favorable conditions for rice cultivation. Critical to rice farming were the hundreds of irrigation ponds dotting Ruilin's landscape. Ponds served to irrigate crops and drain fields during planting. So critical were ponds to rice farming that historically and currently farmers considered them inseparable in land transactions, and guard access to them via informal understandings.

After the founding of the People's Republic in 1949, the state adopted a command economy for the purposes of quickly developing its industrial capacity. The state formally divided the workforce into agricultural and industrial sectors, restricted migration, collectivized agriculture, and instituted a compulsory procurement policy for grain, which was sold to urban people

through ration coupons, and sold internationally in exchange for currency (Chan 2010). In Ruilin, post-Revolution farmers began their contemporary practice of double-cropping early and late varieties of rice. State decentralization policies beginning in 1978 included the gradual phasing out of collective agriculture in favor of household farming. Villages remained the owners of arable land, but the 1982 Constitution formally guaranteed rural households usufructuary rights on a contract basis. In general, officials contracted a share of village land to rural households based on the size of their households for 15 years. In Ruilin, most households farmed 6-7 *mu*.

As was common throughout China, village officials in Ruilin periodically readjusted household landholdings in response to demographic changes. Over time, as pieces were added and subtracted in accordance with births, deaths, and (in some cases) marriages, this practice created a patchwork effect on the landscape. By 2006, Ruilin households' landholdings often scattered across 7-10 parcels. While households largely supported the effort to maintain landholding fairness driving the land readjustment practice, land fragmentation also made farming laborious. In Ruilin, farmers often needed to transport heavy items such as irrigation pumps and bags of fertilizer across muddy fields in temperatures that varied from well below freezing in the early spring to 40 degrees Celsius in the summer. At the same time, small parcels were advantageous. Level, evenly-graded land is critical to rice farming. The uneven distribution of water over unlevel land creates dry patches, which invite weeds, and pits, which drown seedlings and mire tractors. With small plots, farmers can easily maintain the level land conditions that allow them to maximize their output. In addition, multiple plots gave farmers the flexibility to experiment

with different growing patterns, while the berms dividing parcels created buffers against flooding and the spread of diseases and infestation.

Owing in part to its relative remoteness, Ruilin never developed the kinds of small-scale enterprises that sparked economic development across rural China in the 1980s and early 1990s (see Oi 1999). The township government largely relied on agricultural taxes and fees to maintain its budget, fees and taxes that villagers paid annually on their holdings. Along with the growth of export-led manufacturing and urban-centered economic development in the early to mid-1990s, Ruilin villagers began migrating in greater numbers to China's cities to work as temporary laborers. As they did, they established informal land leasing arrangements with friends and neighbors. Typically, lessees would agree to pay taxes on the land and care for it in exchange for the rights to use the land and profit from its residuals. Typically, the lessees were over 50, having aged out of urban manual labor market. Guided by economies of scale, most of these households settled on landholdings of around 25 *mu*. By combining the income from farming with part-time laboring work, these farmers could earn annual incomes of around 20,000 yuan – equivalent to those of their migrant neighbors. Over time, this practice gave rise to a new class of villager: what the sociologist He Xuefeng refers to *zhongnong*, or middle farmers (He 2011). Given the importance of the land to their livelihoods and their relative wealth, *zhongnong* became important village leaders. They advocated to the government for *nongmin* rights, invested in public goods, and maintained customs and traditions. In part due to the stability offered by *zhongnong*, Ruilin remained an overwhelmingly small farmer-based and relatively stable society. At the time Ruilin first received state modernization funding in 2007, its 8,000 households farmed 2200 hectares of arable land in small holdings averaging six *mu* (.4 ha). Eighty percent of

Ruilin residents farmed at least part-time. *Zhongnong* represented about 20% of this farming population. This arrangement shielded Ruilin from much of the unrest that had happened in rural China in the 1990s and early 2000 decade.

Ruilin's Agricultural Modernization

Ruilin's land consolidation work began in 2007. While the county and township arranged the first professional farmers, or *dahu* ("big household" or state-subsidized large-scale farming household), directly, in subsequent years they advertised for *dahu* to apply for the chance to lease land. The townships' early preference for farms over 1000 mu (666 ha) limited successful applicants to businessmen from outside of the township. The township's shift to preferring smaller scale *dahu* farms between 200-600 mu (13-40 ha) in subsequent years reduced operating costs and deposits. As a result, by 2018 75% of "official" *dahu*⁸ were in household registration terms Ruilin natives. In 2009 the township standardized annual land transfer rents at 400 *jin* (200kg) of rice per *mu*⁹ and lease terms at five years.

By 2018, 99% of Ruilin's arable land had been consolidated, and 64% of that land had been transferred to 135 farming households and enterprises on fixed-term contracts averaging 200 *mu*. In recognition for what it deemed the township's successful implementation of national policy, in 2012 the state named Ruilin a provincial-level agricultural modernization demonstration zone

⁸ As opposed to subcontracting farmers with scales above 100 mu. These *de facto dahu* represented 60% of all "*dahu*" in 2014.

⁹ Ruilin *nongmin* households produce an average of 2,000 *jin* of rice from farming two seasons per *mu* annually. Thus, theoretically for *dahu* engaged in double-cropping a 400 *jin* annual rent would represent around one-fifth of a total annual harvest. However, Ruilin *dahu* with holdings around or above 1,000 *mu* produced on average only half this amount of late rice. Smaller-scale *dahu*, or so-called "family farms," with holdings between 100-600 *mu*, produced an average of 800-900 *jin* of late rice per mu. In practice then this rent represents between 22% and 40% of *dahu* yields.

and has rewarded Ruilin government officials with continued project funding as well as promotions. The Ruilin government frequently hosts visiting officials from around the country eager to learn from their experience.

During fieldwork in Ruilin, conducted in 2014 and again in 2017-2018, I carried out participant observation and 220 interviews with villagers, large-scale farmers, officials, input retailers, and grain processors. I found that Ruilin officials did implement modernization policy while largely avoiding large-scale villager demonstrations, violent confrontations, and other high-profile reflections of villager resistance. That many villagers supported the modernization policy was unquestionably a factor in this outcome, while Gramscian ideas of hegemony and resistance help to explain why they supported it. Based on my fieldwork I find that, on average, around 40% of landholding villagers welcomed or accepted the opportunity to transfer their land to large-scale farmers in exchange for rent without the influence of officials' persuasion or coercion. However, that number leaves around a 24% gap between land “willingly” transferred and land ultimately transferred. This disparity grows when the *dahu* percentage of arable land is disaggregated by village (Table 1).

Administrative village	No. of households	Total land area (mu)	Arable land area (mu)	Land reform time	<i>Dahu</i> area (mu)	No. of <i>dahu</i> (households)	<i>Dahu</i> % of arable land area
Meicun	863	14817.37	3817.37	2008	3254.11	6	85.2
Gecun	667	8500	3879.73	2008	3338.2	10	86.04
Yuancun	664	7439.4	5247	2008-2012	3596.68	9	68.5
Baicun	753	9600	4543.56	2010-2012	1754.19	3	38.6
Kuning	926	8200	3500	2011-2017	1569.3	40	44.8
Ruicun	568	5400	3484.5	2012	1639.18	6	47
Tangcun	736	9630	4393.95	2012	1389.27	10	31.6

Chencun	535	5880	2983.18	2013	2092.43	10	70.1
Yancun	585	8900	3456	2013- 2014	2592.49	11	75
Rongcun	821	16152	3048	2014	2476.05	15	81
Lincun	730	16435.5	4222	2015	2842.64	8	67.3
Zhangcun	569	13153.5	2671.87	2015	1876.06	2	70.2
Fanxing	531	7890	2512	2017	314.28	2	12.5
Total	2651	53631	12453.87		7509.03	27	59.8 (average)

Table 1. Ruilin agricultural modernization by administrative village.
Source: Ruilin Township Government

Among its 13 administrative villages, Ruilin’s four demographically largest villages account for 36% of its population. Only 40% of households in those villages transferred their land to a large-scale farmer. Yet in Ruilin’s remaining nine villages (64% of the population), 68% of households transferred their land. Excluding mountainous and remote Fanxing village, where the government has struggled to build an effective irrigation system and thus attract large-scale operators, the percentage of households that transferred to large-scale farmers reaches 84%. In short, agricultural modernization produced highly uneven geography of development, leaving the landholding arrangements of sections of Ruilin largely untouched while vastly reshaping others.

Ruilin officials – eager to demonstrate their governing acumen and allegiance to Party policy – used a set of ideological and coercive tactics to discourage resistance and encourage land leasing. With ideological reeducation or “thought work,” officials sought to diminish traditional villager values of land and livelihoods, define modernization as inevitable, and position land transfer holdouts as selfish resource wasters. Where this failed, officials used threats, intimidation, and landscape reconstruction to reduce villagers’ ability to farm. Last, officials ended extension

support for small-scale farmers and set financial standards for achieving large-scale status at levels unattainable to all but a few wealthy Ruilin people.

But these practices also had long-term indirect consequences. As modernization work expanded to include new project sites in the township, village officials in those areas employed completed project sites to support their ideological work, referring to newly reformed landscapes as evidence of the inevitability of modernization and thus the futility of resistance to it. As a result, villagers became more inclined to see modernization as inevitable and thus self-undermine their own potential as disrupters. Finally, over time land consolidation and the township's shift to large-scale farming diminished villagers' association with the land and their sense of entitlement to it. These changes manifested in two trends: declining resistance to land transfer and interest in retaking land at the end of the contracting period. In effect, within 10 years from the start of modernization Ruilin officials had dispossessed of over 80% villagers from over half of the township's territory. They did so without producing tangible and clear evidence of their having violated state policy, thus achieving the illusion that the villagers had wanted their land to be consolidated after all.

Like rural governments everywhere, when the state eliminated agricultural taxes, Yangchun county suddenly faced the prospect of immediate financial shortfalls with the elimination of agricultural taxes and fees. The county deputy head of agriculture offered a solution. He interpreted the central government's rural policy statements as signaling a shift in the "upper level weathervane" (*shangmiandefengxiangbiao*) towards supporting large-scale and mechanized agriculture. Around 2006, he proposed that the county apply to the Ministry of Land and

Resources for land consolidation project funding. County leaders envisioned transforming Ruilin into a national model for modernized agriculture. If successful, the county could use Ruilin to attract a consistent supply of central government agricultural reform funds. But even more valuably, turning Ruilin into a showcase for large-scale and mechanized farming would demonstrate the county's innovative and responsive approach to food production and environmental protection. This in turn would both boost officials' evaluations scores – increasing their chances for receiving promotions and more Building a New Socialist Countryside (BNSC) funding – and offset and distract from their expansion of heavily polluting industrial manufacturing enterprises, taxes from which constituted the bulk of the county's revenue.

While the county succeeded in its initial bid for Ministry of Land and Resources funding, it faced numerous obstacles to achieving its goal for Ruilin. Chiefly, it had to balance the needs of *nongmin* with those of new “modern” farmers. Needing an annual rental rate both low enough for prospective *dahu* to afford and high enough to incentivize *nongmin* to lease their land, officials settled on 400 jin per mu. But while that rate could lure those already leasing their land to *zhongnong*, that still left unmoved the 50% of Ruilin *nongmin* who still preferred to farm. Officials needed to disperse holdouts without sparking precisely the kinds of high profile, violent incidents of unrest that led to the very BNSC-affiliated reform they were working to institute. Pressure to avoid such outcomes only increased with time. In the 2008 Plenary session, the central government stressed that rural officials must respect the rights of *nongmin* during the land transfer process, a point consistently repeated in central government statements since. To overcome this problem, Ruilin officials ultimately employed the following four methods.

Thought work

The first of these methods is practice of ideological reeducation or indoctrination referred to as “thought work” (*sixiang gongzuo*), or what Ruilin officials and *nongmin* call “doing work” (*zuo gongzuo*). With the introduction of agricultural modernization, doing work took the form of persuading *nongmin* to lease their land to the *dahu*, even as they simultaneously presented land leasing as a choice. In a characteristic example, a Tangcun village official began by introducing the plan. If two-thirds of villagers agreed, the village would commence with land consolidation. Villagers who preferred could lease their land to a *dahu* for eight years in exchange for an annual rent of 400 *jin* per *mu*. Households who wished to continue farming would be assigned new, consolidated plots commensurate in size with their total contracted landholdings. He then added:

In 20 years, everyone will live and work in the cities. They won't be interested in farming and agriculture. There is no income in farming. There are no factories left in small towns. The good teachers have left, schools are getting smaller. There used to be a school for every village, but no more. Parents are buying homes in the cities so their children can attend school there. It's better to work outside, where you can earn 120-180 yuan [US \$18-\$27] a day. It's better to give your land to someone who can use it productively. You will be happier outside.

By echoing the rationale used by the central government for agricultural modernization, the official discursively aligned the Ruilin government's modernization work with the state's development policy. But he also adapted that policy to suit his needs. In its modernization policy statements, the central government never says that its goal is to replace *nongmin* with *dahu*. Rather, its goal is to facilitate the transition to large-scale, mechanized, professional farming. This statement not only preserved a place for *nongmin* to continue farming, it theoretically allowed for the possibility that *nongmin* could become *dahu*. The official's statement, however, suggested that this was not true. By stating that “It's better to give your land to someone who can

use it productively,” the official suggested that *nongmin* were inherently incapable of becoming *dahu*. Thus, the only way for the state to achieve its development goals was for the *nongmin* to transfer their land. The official implied that *nongmin* were no longer engines of state development. Rather, as obstacles to development, they were no longer state members, but only subjects. While they might have a right to the land, they no longer belonged on it.

But while the official’s statement undercut a potential rhetorical framing, it also powerfully diminished *nongmin* understandings of value, extending beyond land use practices to fundamental components of village life. By aligning happiness with financial wealth, the official negated traditional village values of community, subsistence, and familiarity. He proceeded from the unexamined assumption that productive capacity and exchange value constituted land’s only potential sources of value. Society’s evolution into the stage of high mass consumption rendered the demise of the countryside inevitable. *Nongmin*, to the extent they could be said to still exist at all, were merely the last remnants of a bygone age, reminders of a difficult past, and worthless constraints on progress. The official did not deny *nongmin* the right to stay and farm. Rather, he suggested, there was nothing worth remaining for.

Those who refused to sign over their land to a *dahu* in initial meetings received visits at home from village officials. There, *nongmin* report that officials made explicit what they had implied in village meetings. Officials told them they were being selfish by impeding national progress and were doomed to fail and disappear and issued indirect threats of retribution. Referring specifically to *zhongnong*, Ruilin’s deputy secretary of agriculture He Jinping offered a characteristic statement:

They are driving backwards in history, hindering us. We must look at the issue from the perspective of development. You see, we used an abacus for calculations before, but later switched to calculators. Now we only use computers. Old things will be eliminated. These people are like the abacus. They are cultural relics, and they will be eliminated sooner or later. When they seek the government, they prepare a letter and visits and public prosecution law for them. If there is a problem, we have the Bureau of Letters and Calls, and arrange a few good-minded comrades to deal with them and let them vent their anger; if this is not the case, if there is any trouble, we will use the public prosecution law. Otherwise, what should we do? Always develop! (Sun 2017: 204-205).

Such statements had an immediate influence on *nongmin*. In Tangcun village, the township had negotiated to lease 200 mu of farmland to a vegetable farming *dahu* with lucrative ties to Hong Kong wholesalers. Half of the villagers initially resisted leasing their land. Using thought work, village officials reduced that number to a quarter. Wang Shulin was among those who initially held out. Asked why he finally acquiesced and leased his family's seven *mu* to the village, his response echoed the village official's statement: "There is no income in farming. Farming is too much trouble. I can make more money laboring, and I have more free time. It's better to give the land to the *dahu*."

Threats and intimidation

When thought work failed, officials turned to direct threats and intimidation. Despite the efforts of Tangcun village officials, an alliance of 20 Tangcun village households remained opposed to land leasing. One Tangcun villager recounted township officials publicly threatening resisters with eliminating their access to social services, such as the minimum subsistence allowance. "You don't give the government face!" the official said. "If you need something from us, you should die, and you will die!" (Sun 2017: 123).

The alliance persisted. Villagers collectively took their grievances to the township government. When their demands went unmet, they went to the county, where officials told them to return the township. At that time, the township government deputy secretary visited the brother of one of the resistance leaders, Jiang. Jiang owned and operated a rare earth mine. The deputy secretary threatened to destroy his mining equipment. If Jiang resisted, the deputy secretary told him he would put him in jail, shut down his operations, and instruct merchants not to buy from him. The resistance leader relented, the alliance disbanded, and ultimately 95% of the village leased their land to a *dahu*.

In later phases of township modernization, Ruilin officials adopted another threat, that of economic loss. Township officials designated southern Gongru village, within Kuning administrative village, for land consolidation beginning in 2017. Villagers there had already planted their fall late rice crops when officials gathered them to announce that the township had located a *dahu* interested in farming their land. To accommodate the *dahu* however, the village had to begin construction that summer. Xu Ning, 56, described the meeting with village officials: “They told us that *dahu* farming is the trend. It is what the US and Japan have done, and what we must do.” Nonetheless, about half the villagers resisted preferring to retain their land and continue farming, all of them over 50 years old. Without land and with grandchildren to care for, male heads of household faced the prospect of seeking out manual labor in the cities for the first time. Many had never left the township or been separated from their spouses since they married. Female heads of households faced the prospect of caring for grandchildren on their own. Officials then visited Xu Ning and presented her with this scenario:

You will be the last farmers in your family. Your children won't want to farm. When you are too old to farm, it will lie in waste and be worthless. At that time, you will want to transfer it. But what if then we offer you half of the rent we are now offering? What if we give you nothing?

Officials told villagers that if they agreed to transfer, they would begin receiving their 400 *jin* per *mu* rent that autumn and would be compensated for the expenses they lost in planting. Faced with the prospect of the loss of all returns on their land, every household in Gongru village leased its land to the *dahu*. That November, the *dahu* withdrew his bid. The land lay in waste and villagers were never compensated for their losses.

Landscape transformation

When thought work and threats failed to mobilize *nongmin* to transfer their land, officials sought to discourage holdouts by using landscape transformation to undermine their ability to farm. The initial 2007 phase of agricultural modernization in Mei village provides an example. In their pitch to Mei villagers at the time, village officials did not work to persuade *nongmin* to transfer to *dahu*, but rather to agree only to land consolidation. The results of consolidation, officials promised, would benefit all.

Villagers overwhelmingly welcomed the official's plan. For those who already leased their land to a *zhongnong*, renting to a *dahu* represented a stable source of income. For those who still farmed, meanwhile, consolidation could greatly reduce workloads. Ultimately, 20% of Mei villagers elected to transfer their land to the *dahu*. The remaining 80% chose to continue farming newly consolidated land. Officials told *nongmin* that construction companies would begin working after the early rice crop harvest in July and would complete the project before planting

began on next year's crop in mid-March. To fill the gap in their incomes caused by the lost fall harvest, most villagers left Ruilin in the summer to take seasonal jobs in construction and manufacturing in the cities.

Yet when villagers returned home for Spring Festival in early 2008, they were shocked by what they found. Construction contractors had cleared, levelled, and divided the farmland into a grid of massive farm plots between 10 and 50 *mu* each. Nearly all of the irrigation ponds – around 320 in total – were filled in. Villagers were assigned new consolidated holdings within grids marked by irrigation channels. However, households required official village or township government permission to access that water. If they received it, the scale of the new farm plots meant that households had no way of flooding their own fields without also flooding those of the up to eight other households sharing that plot. Thus, the simple task of irrigation suddenly required extensive community coordination. Those who could irrigate their fields found that water distributed unevenly, an indication of poor land grading work. Push tractors and water buffalo got stuck in the pits where plants became waterlogged, while weeds grew rampant on dry rises. Modernization work had rendered the land all but unfarmable.

Officials acknowledged in interviews that they intentionally created these conditions to discourage *nongmin* from continuing to farm and promote land transfer. Their plan succeeded: 85% of Mei farmers ultimately signed over their land. Asked why they did not resist and rebuild their land, many said they were overwhelmed by the enormity of the labor and time rebuilding would involve. But many *nongmin* also said that while officials did not admit it to them, they assumed that the rural government had intentionally eliminated the ponds and left the land

unlevel to discourage them from farming. They interpreted this work as an indication of the importance of this specific project. Thus, even if they could succeed in rebuilding their land, they would almost certainly face continued government opposition. “Of course it was intentional” one Lin villager said. “As the first project, it was too important to make mistakes. They did not support us farming.”

Officials designated nearby Yuan village, within Yuan administrative village, for consolidation in 2011. Half of the village’s 38 households opposed leasing their land to a *dahu*. Shen Aida, 65, was among them. Prior to the modernization work in 2011, Shen and his wife were *zhongnong*, farming around 20 *mu*. The Shen family’s farm work provided them with a good income and the free time to care for their then-four year-old grandson. According to Shen, while doing thought work, officials issued a threat to holdouts: “We were told that the land wouldn’t be good to farm, that it would take one to two years for the land to be developed and re-levelled.” Officials then followed through on that threat: “After the land was levelled it was not convenient to farm. It was uneven, and ponds had been eliminated.” Ultimately only three of 38 households in Shen’s team retained their land, and each had political connections. Shen too agreed to transfer his family’s eight *mu*. “Farming was just too much trouble. Without the changes to the land such high levels of compliance could not have been achieved,” Shen told me.

Cronyism and eroding nongmin social services

Finally, Ruilin officials overwhelmingly excluded *nongmin* from achieving *dahu* status. This practice began during the initial *dahu* recruitment phase at the outset of modernization in 2007. Given the strategic importance of the project for the county, officials needed trustworthy,

dependable individuals. At the same time, the risk of fallout from failure and uncertainty about the extent to which the central government might support agricultural modernization long-term meant few were willing to participate. Officials then needed capitalized businessmen to whom they could offer incentives and over whom they might have leverage. The township invited Zheng Feiyu, the owner of Ruilin's largest grain processing and agricultural supply stores, for a meeting. When Zheng expressed reservations, officials offered him incentives, including paying one-quarter of his land rent and promising preferential treatment when allocating future contracts. They also threatened to cut off his supply and distribution channels. After agreeing to contract 2000 mu, Zheng promptly subcontracted the bulk to friends and neighbors for an annual rent of 300 *jin* per *mu*, with the understanding that all sales, processing and distribution would go through him. Yet he retained a portion of the land so that officials could continue to use it as an agricultural modernization project site. He has since received numerous funding allotments, including some for the same project. Zheng was also granted state "leading enterprise" (*longtou qiye*) status in 2009, a distinction that entitles him to subsidies and loans.

Zheng's success generated considerable interest among area businessmen. The county generated more enthusiasm when, in 2009, it issued a policy on land contracting that offered subsidies and loans for *dahu*, including 80 yuan per *mu* annually and funds for purchasing tractors and threshers. The county made it known to prospective bidders that "the bigger, the better": those willing to contract over 1,000 mu would be considered more favorably. Yet based on the county's mandated security deposit standard, contracting over 1,000 mu equated to a down payment of over 1 million yuan. To achieve this standard, bidders formed partnerships to pool their money. Despite these standards, the county awarded contracts to only one-third of bidders.

In response to the widespread failure of these “mega *dahu*,” in 2012 the township reduced the minimum threshold for *dahu* status to 100 mu. Yet even at this level, the security deposit standard still required prospective *dahu* to make a down payment of 100,000 yuan. With the average *nongmin* household earning only around 8,000 yuan per year, and *zhongnong* households earning around 20,000 per year, the township’s down payment standards rendered state-subsidized large-scale contracting all but impossible. Businessmen from the municipal capital, county, town, and village, along with village cadres, contracted 92.7% of all *dahu* apportioned land. Former *nongmin* and *zhongnong* farmed only the remaining 7.3% (Sun 2017: 54).

The township also all but discontinued its formal support of *nongmin*. This process began with the elimination of agricultural taxes and fees in 2006, which resulted in the township reducing its agricultural extension budget and tasking extension agents with additional duties in other service stations. But the expansion of *dahu* farming marked the end of formal township support for small farmers. 2010 marked a turning point. That year, a disease known as red leaf lesion caused widespread grain crop damage. *Dahu* attributed their losses to a negligent rural government. In response, county officials demanded that government extension work in Ruilin – including face-to-face networking, trainings, and demonstrations – focus exclusively on the *dahu*. *Nongmin* without access to the extension office’s instant messaging platforms began relying on supply and marketing shops for farming-related news and information. Reflecting on these circumstances, the head of Ruilin’s extension station told me, “*nongmin* have been left to live and die.”

Long-term Relational Consequences

Officials' work to persuade and coerce villagers had a direct and immediate influence on villagers' rates of land leasing. But the high rates of land leasing officials achieved also had a powerful influence on *nongmin* in later phases and over time. Officials used their successful dispossession of *nongmin* during the initial phase to their advantage in later phases, referring during thought work to the landscape transformation in those villages as an example of the inevitability of modernization reform. Echoing this framing, one township official told me: "Look around – what do you see? The change here in the last ten years is proof that we have no choice other than to develop." Seen in this way, the re-formed landscape – an outcome he helped to bring about – stands as an independent signifier of natural change. By conflating the work of his office with evolution and the common good of development, the official denied the possibility of debate or interruption, and further aligned his office with the will of the broader state.

The reinforcing effects of landscape change and thought work altered *nongmin* responses. Over time, *nongmin* holdout rates declined. Where only 20% of villagers in Mei village – site of the initial project launch – agreed to lease their land at the initial meeting with village officials in 2007, in the villages impacted by the 2010 expansion those rates had increased to about 50%. By the time modernization expanded to reach Kuning village in 2017, only one household refused to contract its land after thought work. While villagers in each place made decisions based on a host of place-specific reasons, they also noted the material change already in place. Speaking of his reasons for leasing his land to a *dahu*, a Kuning villager echoed the township official's

statement: “Of course we see the change around us. Whether we give now or later, it doesn’t matter. Eventually, we will give.”

In 2015, officials sought to develop Xu village, in the foothills of Mei administrative village.

Resident Mr. Ma, 62, resisted thought work, along with about one-third of his neighbors.

Explaining why he held out, Ma told me: “I’m too old to find good work outside. The work I do find is temporary and low-paying. Farming work is stable. I can be here with my grandchildren.”

But he and his neighbors were unable to stop bulldozers from filling in their irrigation ponds and leaving their land unlevel. Ma told me that he believed he could have rebuilt his land, but he understood that even if he did, he would have to continue fighting an uphill battle with a hostile government. “The local government doesn’t support us *nongmin*. It doesn’t want us here. I could stay and fight, but for what? We’re facing the wind.” Along with around 90% of those in his production team, Ma elected to lease his land to the *dahu*.

The influence of policy-driven land transformation was not limited to the way it visually supported officials’ notions of linear progress. It also severed *nongmin* ties to their land. Prior to modernization, for *nongmin* no distinction existed between households’ legally contracted land rights and their manifestation in material plots. *Nongmin* were intimately familiar with their land and cared for it. This stemmed from historical experience and a sense of obligation to one’s ancestors and children. Xue Hui, 57, of Gongru village (within Kuning administrative village) referred to this in an interview: “It’s our family’s land, my inheritance. I hope my son won’t have to farm. But if he does, the land has to be ready for him.” Her great grandparents migrated to Ruilin from northern Anhui in the 1870s, fleeing a famine. Her grandfather perished in the in

Great Leap Forward, along with – according to villagers’ estimates – as much as one-sixth of Ruilin’s population. From her parents she adopted the habit of using as much of the land as possible. She almost never wasted land by leaving any of it idle. While she used the great majority of her family’s eight *mu* for rice farming, she used the berms for subsistence vegetables and cash crops like Sichuan peppercorns, chrysanthemums, eggplant, and soybeans.

While Xue Hui worked for months every year in nearby cities as a bricklayer, the sense of attachment to land and village was even stronger for those whose age had decreased their ability or willingness to labor outside the village or township. Feng Guihua of Kuning village, 52, spoke to me while his grandson, three, climbed on his back and ran circles around the kitchen table. His son works in construction in Nanjing. In addition to rice farming, he and his wife use their six *mu* to raise ducks. They also use their shared pond to raise carp for their own consumption. Outside of farming-related costs, he estimated he spent only about \$25 a year. He and his wife grow almost everything they need. He scoffs at the idea of moving to the city to live with this son and daughter-in-law. “I have nothing to do there. I don’t know anyone. I would just sit around and wait to die. Here, I can help my son, and not be a burden on him.”

Ruilin’s agricultural modernization campaign relied on officials’ ability to de-link households’ legally-contracted land rights from their material manifestation. The moment village officials obtained the consent of at least two-thirds majority to initiate consolidation, households’ land rights were decoupled from any particular piece of land and took on the virtual form of a transactable credit in a collective pool. Having produced a homogenous landscape in legal terms, officials then set about recreating that condition on the land itself. Bulldozers and backhoes

removed trees, berms, gardens, ponds, and, in some cases, entire villages. They then graded and divided the land according to the specification of maps designed by planners in the provincial capital 200 kilometers away. In just 10 years, officials transformed Ruilin into a collection of rationalized, featureless, seemingly interchangeable plots.

Over time, these changes produced a sense of alienation from the land among *nongmin*. When I first spoke to the former *zhongnong* Shen Aida in 2014, he told me that half of the households that leased their land to a *dahu* regretted not resisting officials' pressure more adamantly but planned to fight to retake their land when their contract with the *dahu* expired in 2016. He planned to join them in the fight, and even to expand this production area: "The land is easy to farm now. We can grow two to three seasons of rice now." In his view, the cost of life in cities would motivate even the more skilled workers to return home to farm when they reached their 60s. "Life in the city is too expensive. Housing prices, raising children... it's necessary to return to farm later in life."

However, when I returned in 2018, Shen told me that no one had tried to retake their land when the contract expired. He insisted that the government had applied no pressure. Instead, he gestured outside his door to the expanse of rice fields. "Farming these days is *dahu* farming. The land is the *dahu*'s. So what is there to fight for? Most chose instead to accept their situation. They combine their land rent with labor money."

I found a similar situation in Mei village. In 2014 *nongmin* in these villages told me that half of the population was merely waiting to retake their land and continue farming when their leases

expired in 2016, at which time they planned to demand that the *dahu* return their land. Said a production team leader: “Going outside is not as good as farming your own land. We don’t know anyone outside, and that work is not stable. This is our home.” But when I returned in 2018, I found these villages largely deserted. I located the Wang village production team leader fixing a truck by the side of the road. He said most villagers had left to find work in the cities. Like Shen, he insisted that their doing so did not reflect pressure from officials. Rather, they had changed their minds about farming and land. “We accept that it’s better to give the land to the *dahu*. You can’t make money farming... Of course the land is still ours, but it suits the *dahu*, not *nongmin*.”

Xue Hui of Gongru also took a new view of her land after it was consolidated. When village officials told her of their modernization plans in 2017, she initially resisted, but was persuaded by thought work. I returned to ask her how she felt about her family’s land. “It doesn’t matter. It’s the *dahu*’s now,” she said. She said she didn’t have time to think about it: she was too busy with her new temporary job helping the village build a new irrigation channel for the incoming *dahu*. “We have to be practical,” she said. “Farming is too hard, too dirty. Our grandchildren won’t do it. We have to move forward.” She planned to continue living in the village for the rest of her life, unless the government decided to demolish it. Did she expect her grandchildren to return to their ancestral home in the future? “Maybe they will come to visit our graves for Tomb Sweeping Festival. But over time they will not, and this village will die. There is no connection for them here. This will not be their home. Their home will be in the city.”

Resistance Villages

While over 80% of villagers outside of Ruilin's four largest villages (Tangcun, Kuning, Ruicun, Baicun) ultimately transferred their land to large-scale farmers, within them that rate was only 40%. This is seemingly unrelated to officials altering their strategies. By all accounts, Big Four villagers encountered exactly the same combination of thought work, threats, and coercion. Rather, they differed critically in their responses to these tactics. They were dismissive of officials' thought work. When officials subsequently increased pressure on holdouts by threatening them with the loss of benefits and resources, many households – such as those described above in Tangcun village – formed alliances and registered complaints at village, township, and county government offices. When these efforts failed, some intervened in the process itself.

The 2012-2013 consolidation of Ruicun village provides an example. When *nongmin* heard from a construction team that they intended to eliminate all but one pond and divide the land into 30-40 *mu* plots with limited irrigation access, households cooperated to lobby the administrative village to reduce plots to manageable amounts and add drainage access points. According to Ruicun villager Li Shengli, protestors' persistence paid off:

We went to the government to quarrel a few times before [they decreased the size]. If we don't quarrel, they won't help you change it. Several of our teams sent five representatives to the land consolidation office in the village. They asked us to write a report, stating that the plots should be smaller and the ditches wider. We handed in the report... At the beginning of the land change, according to the drawings, each field was about 120 *mu*. We resolutely disagreed. The towns and villages all came to do [thought] work. We threatened that we would not change [our minds]. In the end, the government had no choice but to decrease the size of the plots. The largest plots did not exceed 60 *mu* acres, generally 18-30 *mu*, and the smallest were more than 12 *mu*.

However, when officials made no concessions regarding irrigation ponds, Li remained defiant:

[Prior to land consolidation] there were many ponds. There were six ponds at first, one of which was about 90 *mu*, and the other five were small ponds of 18-30 *mu*. The total surface area was about 120 *mu*. According to the consolidation design, only one master pond was [to be] retained, and in addition to the master pond, one pond was retained... If that pond is destroyed, the surrounding fields cannot be planted. When the construction team was about to destroy the [smaller] pond, I stood in front of the bulldozer to stop them. I said to them, "Even if I [have to] fight you eight times, I won't let the pond be destroyed." The construction team called the village [office]. The village knew that I had a bad temper, and there was no choice but to relent... In fact, the government's attitude is that if the farmers do not say anything, they will do it according to the drawings. If they are noisy, they will do it according to your requirements. The government is following the model for *dahu*, but we can't farm those big fields. According to the project design drawings, our team kept only one pond and dredged it. All other ponds were destroyed, but in the end only one pond and two ditches were destroyed. The rest of the ponds were not destroyed, mainly because the common people stopped it from happening. I contracted a pond of about 30 *mu* with three other households, and it was my turn to raise fish in these two years. All three households were working outside during the push. At that time, the construction team was going to destroy my pond. I stopped the bulldozer. The town government and village cadres came a few times to do [thought] work, hoping that I agreed to destroy the pond. They talked about destroying the pond, and the fields were connected together, so it was better to do it. I said, water is needed for farming and the pond is gone. Where can I get water? Our family can't use big machines. Besides, I have to raise fish. When we cleared the pond, our family of four would have more than 1 *mu* of land, so we might as well raise some fish. The government has to think about the common people and not destroy the ponds. How can we get water? He just kills, and really kills, he doesn't care if you live or die. In fact, the government designed it this way because it didn't want us to farm it. To improve the field, we held a group meeting to discuss the division of fields. At the meeting, the village cadres encouraged us to stop farming and give our land to the *dahu*. They said that we would be happier going out to work. But some can go out to work, and some cannot go out to work. Going out is not as good as farming yourself (Sun 2017: 110-111).

When efforts to influence planning and design failed, *nongmin* continued to protest and demand fixes, such as relevening or additional irrigation outlets. However, when these efforts failed, some simply adapted to the new circumstances. For example, the government allocated one Ruicun village household a poorly graded 10 *mu* plot. To correct he lands' unevenness, he divided the field into seven pieces in the first year to plant rice, then into three blocks in

the second year. By the third year, he had rehabilitated his land. Seeing his example encouraged other farmers to follow suit.

The tactics used by officials in the Big Four mirror those used in other villages. But Li and his neighbors were resolute in their belief that not only was their way of life superior to that their available alternatives, they had a right to it. They interpreted the Ruilin's government's modernization project not as representative of the will of the state or as in the people's best interests, but as a selfish effort to subvert those interests. For Li, a project that did not serve his interests also did not serve those of the state. He continued to see himself as a citizen and a part of the state, rather than its development subject. This value-based perspective provided the foundation for his claim that he was entitled to land and justified in his practices to retain it, while officials' practices and ideology were illegitimate.

There are multifaceted reasons for this distinction. However, villagers and officials throughout Ruilin often attributed these diverging reactions and outcomes to differences in population size and levels of solidarity. This solidarity and ability to "make noise" had repercussions, increasing villagers' sense of security and land value, an effect that reinforced their solidarity and confidence in their ability to make noise. By contrast, households outside the Big Four perceived themselves as relatively atomized and weak, which in turn influenced their perception of land value. A production team leader in Mei village echoed this when he told me why he believed his neighbors acquiesced to giving up their land without mounting a resistance:

Those villages [Ruicun, Tangcun, Baicun, and Kuning] have solidarity [*tuandui jingshen*]. That gives them the strength to fight for their land. People here are too fragmented and weak. They don't deserve to have land.

In the production team leader's view, entitlement to land was contingent upon possessing the strength to defend it. Modernization accelerates the processes of distinguishing and expelling the weak and allocating resources to the strong, as determined by their ability to express and exert power and will. In this view, the uneven outcome of modernization is not only acceptable, it is just.

Regardless of the reasons why Big Four villagers resisted, their success in doing so also had long-term implications. By fighting to maintain the basic pre-reform structure of landholding arrangements, Big Four villagers experienced at worst only temporary changes to their livelihood patterns. If officials remade their landscape to accommodate large-scale farming, that change too was only temporary. This successful defense not only obstructed the potential naturalizing discursive influence of landscape modernization, it reinforced *nongmin* ideological claims regarding the irreplaceable subsistence value of the land and unnaturalness of the modernization campaign.

Conclusion

On the surface, the Chinese state's agricultural modernization policy achieved its goals in Ruilin, ushering in the expansion large-scale and mechanized farming while generating little noticeable pushback from villagers and gaining their formal consent. Echoing other recent studies (Luo et al. 2016, Zhang 2018), this paper suggests that the lack of high profile opposition to this work and the completion of legal processes is far from an indication of villagers' support. To begin,

Ruilin officials used a host of tactics to induce consent. These included direct means of coercion: threats of financial ruin, eliminating irrigation ponds, and moving villagers onto unlevel land. Ruilin officials also employed ideological reeducation to position Ruilin villagers as the modernization project's development subjects – burdens and obstacles to be fixed rather than participants—and thus undermine their longstanding value-based claims to land. In the initial phase of modernization (2007-8), officials used these tactics to induce over 90% of villagers to lease their land. But these results had relational effects over time. In later phases, officials in other parts of Ruilin referenced “modernized” villages during thought work to support their claims of modernization's inevitability. In part as a result, the number of holdouts largely declined as modernization expanded. Additionally, while early phase villagers expressed an intention to retake their land at the end of the contract period, almost none did so, and villagers impacted by later phases over time expressed increasingly disinterest in retaking their land. Thus, villagers not only acquiesced in greater numbers, they stayed away. Ultimately, in just 10 years between 2008 and 2018 Ruilin officials succeeded in dispossessing over 80% of villagers from the villages that contained almost two-thirds of Ruilin's population.

As these results suggest, dispossession in Ruilin was highly uneven. In those villages containing the remaining one-third of Ruilin's villagers, only 40% of households leased their land to a large-scale farmer. However, both villagers and officials attributed the difference to the ability of villagers in these holdout areas to mount and sustain “loud” resistance. They were not swayed by officials' thought work or threats. They supported each other in the belief that they were entitled to the land, and that their way of life was valuable. When construction crews filled in their ponds and left their land unlevel, they rebuilt and broke into irrigation canals. Having fought for and

held onto their land, they never experienced the long-term influence of landscape change in dialogue with ideological thought work that dissuaded most of Ruilin's villagers from keeping and retaking their land.

Many Ruilin villagers benefitted from the agricultural modernization reform. Those who were dispossessed may benefit in the future. But it is false to claim that Ruilin officials respected the wishes of all or even most villagers in carrying out modernization reform. The issue of who ultimately has use rights over land is to a large extent determined by demonstrations of force and will that require villagers to risk their security and are undertaken only by those confidently backed by kinship networks. In the absence of means of communicating such issues to the broader public and representational governance, there is little reason to believe this will change.

These findings also speak to the co-constituting power of ideology and landscape articulated in theories of Gramscian hegemony and the cultural politics of landscape production. As changes to the landscape increasingly aligned with officials' thought work, villagers increasingly acquiesced to officials' preferences and demands. Over time the landscape naturalized modernization, even when villagers were witness to the literal construction of that landscape by officials.

Modernization took on a life of its own independent of the central government, officials, and villagers, foreclosing the thinkability of alternatives, even as – and because – it led to an increasingly demoralized and dispossessed community and an increasingly fragile and dysfunctional agricultural system. Given this potential to set in motion processes that undermine food and environmental security, if the Chinese state wishes to promote agriculture that is both

sustainable and just, they will need to institute platforms that allow for informational exchange, learning, and adaption.

2. The Historical Relations of Resistance and Acquiescence

Summary: Recent studies of “bottom up” responses to large-scale land development projects highlight the role of communities’ historically-situated identities and memories. This paper explores this topic by applying a critical place studies analytical lens to ethnographic data from the Yangzi Delta township of Ruilin, an early recipient of Chinese state agricultural modernization funding. At the time of the project’s completion in 2018, Ruilin villagers had leased 61% of the township’s arable land to 135 large-scale farmers. However, lease rates varied considerably between villages. Villagers throughout Ruilin invoked their collective identities and memories to support their respective responses to modernization. Yet these narrations hide the influence of historically uneven inter-village power relations, which informed opposing conceptions of the value of land, which villagers rationalize through narrations of memory and identity. This study contributes to the literature on large-scale land grabs by demonstrating that “resistance” and “acquiescence” may co-constitute.

Introduction

As scholars have often noted, 1994 marked a turning point in the direction of China’s development (see Hsing 2010, Looney 2015). That year, the state’s redefinition of tax rights eliminated a primary revenue source for rural governments. Rural officials compensated by taking advantage of their power to determine land use rights. In the context of a newly booming manufacturing sector and minimal state mandated compensation requirements, rural officials extracted exorbitant kickbacks from developers in exchange for obtaining official access to arable land for non-agricultural purposes (Kung et al. 2009, Whiting 2011).

To clear suddenly valuable land of villagers, many officials relied on a combination of ideological persuasion, threats, and force, deploying construction crews to bulldoze homes and thugs to intimidate and assault holdouts (Deng and O'Brien 2005, Luo et al. 2016, Sargeson 2013). As rates of arable land conversion to industrial use grew, so too did village collective action. Incidents of mass social unrest increased from under 10,000 in 1993 to over 60,000 by 2004, with an estimated 65% involving land disputes (Ong and Göbel 2012, Hanstad et al. 2009).

Since then, documented land related conflicts have declined (Lin et al. 2018). Scholarship suggests that this may be due to rural officials' increasing use of indirect tactics to delegitimize and discourage collective action in defense of land rights (Chuang 2014, Gong and Zhang 2017, Zhang 2018). However, many rural people in China continue to fight for their land. Göbel (2017) estimates that protests over land grabs and evictions accounted for about 15% of all protests in 2015-2016, taking place nationally at a rate of about five per day.

Why do some villagers resist officials' efforts to displace them, while others acquiesce? Recent ethnographic studies have explored this question by highlighting the relationship between rural communities' perceptions of the land, their lived experience on it, and their responses to large-scale land development projects. They find that resisting communities often have histories of collective action in defense of their land rights. This history in turn centers the land and village in individual understandings of identity (Edelman and Léon 2013, Martiniello 2015, Wolford 2005). Others document the mobilizing influence of shared trauma, particularly when land under threat of expropriation serves as a memorial to that trauma (Baird 2014, Alfonso-Fradejas 2015). Past experiences with other large-scale development projects may also inform responses. In these

cases, communities' perception of the "new" project as a continuation of the past in turn guides their response (Mamonova 2015).

In this chapter, I consider these claims using data gathered during a 12-month ethnographic study of the lower Yangzi Delta township of Ruilin. In 2007 Ruilin became an early recipient of central government agricultural modernization funding. Between the start of the modernization program that began in 2007 and concluded in 2018, 22,000 (75%) villagers transferred 61% of Ruilin's arable land to 135 large-scale, mechanized farmers. Yet these township-wide statistics hide sizeable village-to-village differences. Among Ruilin's 13 administrative villages, rates of land leasing to state-subsidized large-scale farmers varied from 30-85%. I found that villagers justified their respective responses by evoking the memory of the same event – the Great Leap Forward famine of 1958-61 – yet interpreted from it competing understandings of the value of land, farming, and community. They also referred to the internal consistency of their responses given their historically-based collective identities.

This study contributes to the literature on "ground up" responses to large-scale land development by exploring Ruilin villagers' accounts of their histories and memories in conversation with data on inter-village historical politics. Interpreting fieldwork data through the theoretical lens of critical place studies, I argue that villages' use of collective history and memory in their motive narration reflect and obscure longstanding uneven and messy inter-village power relations. In the context of broader socio-political instability, a collection of villages united to defend their interests, including by bullying and intimidating those in smaller and weaker villages. This place-based history helped inform varied inter-village understandings of security on the land that

now powerfully shape understandings of value and inspire or defuse collective calls for resistance. Through their explanations, both resistance and acquiescence villagers inadvertently support and refute the others' agential, rational, and heroic notions of historical change. While not disputing the validity and power of villagers' accounts, these findings suggest the need to consider them in a broader spatio-temporal context.

Agricultural Modernization and its Implementation in Ruilin

Land expropriations were just one of multiple deleterious effects of the 1994 tax changes. The growth of township and village enterprises (TVEs) throughout rural China beginning in the 1980s powered national development and led to narrowing rural-urban income disparities (Oi 1999). By wresting control of the enterprise tax in 1994, the central government eliminated rural officials' incentives for supporting TVEs (Fock and Wong 2008). The subsequent closing and privatization of TVEs led to layoffs: TVE employment, which had constituted 25% of total rural employment in 1988, decline by almost 37% between 1995 and 2000 (Oi 1999, Xu and Zhang 2010). As gaps between revenue and expenditures increased for rural governments, many were unable to provide basic public services (Fock and Wong 2008). Some officials attempted to fill shortfalls through overtaxing villagers. This took place against the background of an expanding gap between state urban and rural investment. State investment in agriculture fell from 10.6% of total state capital investment in 1979 to 1.7% in 1994 (Yan 2008). Investment in state-owned enterprise and other urban expenditures, meanwhile, increased 97.87% between 1978 and 1992 (State Statistical Bureau 2006). Rural-to-urban labor migration reflected and reinforced growing urban-rural inequalities in consumption, education, and health (Hanstad et al. 2009).

In response, the central government began implementing policy and legislative reforms in the late 1990s intended to alleviate villagers' burdens and encourage investment in rural areas. This included the abolition of agricultural taxes and fees as well as increased fiscal transfers to rural governments to support infrastructure, education, housing, and agriculture. While agricultural funding initially focused on expanding agricultural marketing, processing, and distribution enterprises to serve and integrate small-scale farm communities, in the mid-2000s the central government shifted its goals to encourage the expansion of large-scale agricultural producers. Under the umbrella of modernizing agriculture, the state eased restrictions on the rural land market, increased subsidies for large-scale, mechanized farming, and earmarked competitive project funds and awards for consolidating farmland and building irrigation, electrical, and infrastructure networks. In the central government's vision, these reforms would facilitate the transfer of villagers to higher-paying urban labor and turn their land over to a new class of professional farmer that would provide a long-term foundation for national food security (Hu 2007, Wen 2006).

In an effort to fill its budgetary gaps and create a showcase for its innovative approach to agriculture, Ruilin's administering county of Yangchun applied to the Ministry of Land and Resources for agricultural consolidation funding in 2007. At the time, due in part to relative remoteness, Ruilin remained an overwhelmingly agricultural township. The state did not construct a paved road from Ruilin to the county seat of Yangchun until the early 1990s. By 2006, Ruilin had only one large enterprise, a textile factory outside of Ruilin village. Outbound migrant laborers accounted for only 20% of its 30,000 people. The rest farmed the land contracted to their households at least part-time, the vast majority farming two seasons of rice.

After provincial inspectors judged its initial project a success, Yangchun began receiving modernization project funding each year, all of which it has devoted to Ruilin. In 2012, the provincial government named Ruilin a “Provincial-level Modern Agriculture Demonstration Zone,” a designation that provided Ruilin with priority funding status. By 2018, Ruilin and Yangchun officials had consolidated 99% of Ruilin’s arable land. In nine of Ruilin’s thirteen administrative villages, 84% of households had transferred their land to a large-scale producer.

Ruilin and Yangchun achieved this success in large part by offering villagers an opportunity they preferred over farming. In exchange for transferring their land to a large-scale farmer for a fixed term (usually 5-7 years), villagers would receive an annual rent of 400 jin of rice per mu. For most households, this translated into 3,000-4,000 yuan in annual rent. This represented a substantial increase in the rents previously available through informal leasing. Many, especially laborers and professionals who were already leasing their land or nearing retirement, enthusiastically participated.

But many did not. Based on fieldwork in every administrative village in Ruilin, I estimate that on average half of villagers initially refused the offer to transfer their land in exchange for a higher rent. Chinese state law entitles rural households to a share of arable land, and modernization policy directives require rural officials to respect rural people’s wishes (CCP Central Committee 1983, State Council 2004). Ruilin officials achieved high transfer rates by pressuring and coercing many of these villagers into leasing their land. Pressure and coercion tactics typically began with ideological persuasion, or “thought work” (*sixiang gongzuo*). Officials sought to

undermine holdouts' land rights' claims by casting them as subjects of the state's development goals selfishly holding back collective progress, and by using thought work to undermine the value of subsistence farming and village life. They achieved this by telling villagers that state's goal of enhancing productivity was only achievable by outside professional farmers; by discursively aligning happiness with wage work; and by telling them that village life would inevitably disappear. When that failed, officials threatened and intimidated villagers, demolished their farmland, and filled in irrigation ponds. But while I find that officials applied these tactics in villages across Ruilin, and that Ruilin's villages have largely identical class structures and income levels, their success rate varied significantly. In the remaining four of 13 administrative villages, only 36% of households transferred their land. Literature aligned with critical place studies offers insight into the reasons for this disparity.

Place, narrative, and the peasantry

In theorizing the "bottom up" causes of agrarian change, classic literature often posits distinct, static, and universal relationships between peasants, the land, and the village. Studies informed by economic liberalism portray peasants as profit rate maximizers desperate to flee the land in pursuit of more productive activities (Rostow 1990, World Bank 2014). Describing the stratifying and fragmenting influence of capitalist relations on the countryside, Marxist-Leninist and class-focused studies imply a utilitarian relationship between peasants and the land (Bernstein 2010, Lenin 1956, Wolf 1969). Populist Marxist scholars, meanwhile, argue that some peasant societies perceive land as the center of an alternative subsistence economy focused on the collective good (Scott 1976, Wolford and Nehring 2013). This cooperative tradition in turn may inspire collective responses to shared oppression (McMichael 2010).

In contrast, literature associated with critical place studies argues that the meaning of home and place is produced through the convergence of historical, material, and discursive factors. This suggests that understandings of and experiences with home and place have radically different potentials given their spatial context. For some, place and home may offer comfort, familiarity, and security. The ability to pause and take respite from the flow of outside space may allow for awareness of a place and its particularities, which in turn may encourage learning and exploration: drawing connections across space and time to understand the causes of spatial distinction (Tuan 1977). Memories – in particular those of the historically marginalized – may play an important role in the uncovering process, shedding light on the complex and hidden dynamics that have shaped the “becoming” of a place (Hoelscher 2008, Till 2012). As one learns about and comes to care for place, one becomes rooted in place and inspired to defend it (Relph 1976).

But the notion of place posited by Relph suggests that place conceptions have an opposing potential influence. While a notion of place may emanate from a sense of safety, joy, curiosity, and connection, it may also grow from a sense of fear. Communities facing a real or perceived threat to their security may respond by constructing an essentialist notion of place in which only some belong and have a political voice. History is critical to these notions. Interest groups selectively and creatively interpret the past to posit distinct, bounded, and coherent lineages with which they and their ruling vision align (Anderson 1983, Harvey 1989, Massey 1995).

Far from necessarily conscious, top down productions, such power-laden place narratives are often collective achievements. Individual memories may cohere with the collective in an effort to mutually sustain preferred self-conceptions of identity, heritage, power, and possibility (Fentress and Wickham 1992, Mills 2010). Such historical imaginaries become particularly powerful when they take on material form, such as in memorials or the built environment. Their politics embodied in and represented by the landscape, such historical readings become naturalized and irrefutable (Hoelscher and Alderman 2004, Nora 1989, Till 2001). Absent interrogation, such narratives and their embodiments may take on a life of their own, foreclosing the possibility of alternatives. Confined to a narrow, invented notion of “essence” as a bulwark against change, place may become ossified, conservative, stifling, and oppressive, particularly for traditionally marginalized groups (Rose 1993, Knopp 2005).

Seen through this lens, not only are relationships between specific rural communities, the land, and those communities’ responses to land development projects anything but clear; communities’ self-conceptions and narrations of these relationships and their links to their motivations may hide much more than they reveal. Understanding these relationships and responses requires exploring the historical place-based power relations that shape rural communities’ responses to large-scale land development projects. In Ruilin, the officials tasked with implementing agricultural modernization encountered communities whose histories in Ruilin were both brief and marked by tragedy. Yet villages separated by less than 100 meters responded to those officials’ attempts to bully and intimidate differently. These variations reflect diverging notions of security, power, and value informed by uneven power relations rooted in a history marked by transience, trauma, and instability.

Ruilin Township

Ancient and Early Imperial Eras: Transience and Settlement

In the foothills of the Tang Mountains just east of Ruilin Township lie a set of earthen mounds. These mounds represent the northern edge of a series of 995 mounds that stretches over 20 kilometers south to Yumei County. Around 20 meters in circumference and five meters in height, local people referred to them as “look over cattle mounds” (*wangniudun*) because of the viewpoint they provided herders. It was not until an archeological dig in 2001 that they were discovered to be the graves of people from the Western Zhou (1045-741 BCE) period. Unearthed funerary items within them included celadon ceramics, bronze ornaments, and copper tools. These mounds represent the earliest archeological evidence of human settlement in the area now known as Ruilin Township.

Situated on a fertile floodplain of the Yangzi River and protected to the east by the Tang Mountains, Ruilin has long attracted migrants. The township was historically known as Ruigou (“Plains Ravine”), a reference to the deep gulch carved by the Kui River through the valley. But the constant threat presented by those same conditions resisted anything other than temporary settlement. As result, Ruilin’s societal history was long marked by transience. The area was officially incorporated into Chungu (“Spring Valley”) county during the Western Han Dynasty in 109 BCE, as part of the vassal Eastern Wu Kingdom (the modern Yangzi Delta). During the Three Kingdoms period (CE 220-280), Eastern Wu warlords used the plains area as a military training site. Intense fighting in the Hefei area during the Three Kingdoms period sent residents fleeing southward, where many settled in the Chungu area. As the city of Nanjing rose to prominence as the capital of the Wu Kingdom – and later as the capital of five proceeding

dynasties – Ruilin became a stopover point for travelers making the journey from the commercial center of Jingdezhen, Jiangxi Province. In reference to this role, the state officially changed the name of the township to Ruilin, or “Resting Place on the Plain”¹⁰ in 1949. The civil war that engulfed northern China during the Western Jin Dynasty (CE 266-420) sparked one of the largest waves of migration in China’s history. Many fled to the Yangzi River Basin, where then-Prince Yuan of Jin, Sima Rui, implemented a system of resettlement for Central Plains people (Yangchun County 2003).

It was not until the Song Dynasty (960-1279) that the conditions allowing for permanent settlement in Ruilin were established. At this time, the state began to fund and support water-control projects throughout the Yangzi Delta. In Ruilin, the state and residents built embankments along the Kui River and a series of irrigation canals. Expanded during the Ming (1368-1644) and Qing (1644-1912) dynasties, these water-control projects ultimately rendered the Ruilin plain a polder area (He Yang 2013). In conjunction with local governance and farming practices, these effective water control measures established the Yangzi Delta as a center for national rice, wheat, and cotton production. The Delta’s sustained agricultural productivity critically supported the establishment of the Qing state’s antifamine grain tribute system, which provided food security throughout the state (Davis 2000).

Taiping Rebellion (1850-64)

At the same time, the very success of the Qing state’s grain tribute system produced disastrous consequences. The ever-normal granaries (*changpingcang*), supplied in part by Delta farms and

¹⁰ Refers to actual name of the township for which the name “Ruilin” acts as a pseudonym.

the state's efficient transport network, resulted in the growing dependency of northern and southern regions on the state's transport system (Will and Wong 1991). This vulnerable system collapsed in the 19th century. The 1842 Treaty of Nanking following the First Opium Wars expanded Chinese demand for narcotics and eliminated import tariffs. It also granted Britain favored nation trading status and required that the Qing state pay wartime reparations and taxes on Opium import. Coupled with growing international competition in tea and silk production, these losses drained the Qing state's revenue and capacity to maintain granaries. Peripheral regions were devastated. Incidents of flood-produced famine – rare in previous centuries – substantially increased in the 19th century. The resulting recession and instability in turn inspired violent uprisings, most prominently the Taiping Rebellion (1850-1864) (Davis 2000).

The southern Anhui region's strategic importance as a transportation and grain production hub also made it the site of intense conflict. From 1853 to 1862, the armies of Taiping Heavenly Kingdom and the Qing engaged in near-constant warfare in area surrounding Ruilin. Those who were not killed fled to the mountains, where many starved and turned to cannibalism (Platt 2012). According to Ruilin-based author and historian He Yang, those who lived in remote villages away from the fighting remained, only to die en masse from a plague caused by the scores of unburied or inadequately buried dead. The few refugees did return to Ruilin years after the fighting ended found a haunting scene:

Most of those who were lucky enough to return discovered that their villages had been razed. Their villages and fields had become overgrown with wild trees and sagebrush. But there were no people. In many remote villages where the long hairs [Taiping soldiers] rarely went, houses were intact. When they pushed the doors and windows open, they saw that the furniture was complete, and mosquito nets were still hanging on the

beds. But on the beds were white bones. All had died from the “strange disease” (怪病) (He Yang 2013).

In his travels the area in the aftermath of the war, Von Richthofen (1871) estimated that only 3% of the Anhui and Zhejiang populations remained (Li 2015). At least 20 million died from Taiping warfare and consequent famine and pestilence (Platt 2012).

After the war, Qing generals Li Hongzhang and Zeng Guofan encouraged relocations to repopulate war-devasted regions by offering prospective migrants free land and housing, tax breaks, household registration rights in Anhui. The state focused particular attention on attracting farmers from Henan and Hubei, where land was scarce and malnourishment common. Ultimately over one million people emigrated to Anhui in the 50 years from between the Taiping Rebellion and the beginning of the 20th century, accounting for 74% of the population. Most migrated from Hunan, Hubei, Jiangxi, and northern Anhui (Ge 2002). In Ruilin, many current residents trace their ancestry to Changsha (Hunan Province), Xingguo (Jiangxi Province), Xiaogan (Hubei Province), and Yuexi (Anhui) (He Yang 2013).

Collectivization and the Great Leap Forward (1949-1978)

On April 21, 1949 Ruilin came under the control of the Northern Anhui People’s Liberation Army. Beginning the following year, the state implemented a land-to-the-tiller reform, allocating land to households for private cultivation. In 1954, heavy rains caused Yangzi River flooding, resulting in the deaths of 30,000 to 200,000 throughout China (Courtney 2018, Laris 1998). In Ruilin, floodwaters overcame and collapsed the township’s embankment along the Kui River. Leaders responded with an ambitious mass mobilization water control project. The project

entailed dredging the Shan River, connecting it to the Zhang, and controlling flows via a dam on the lower Shan, and east-west irrigation canals with flood control stations.

In an effort to boost foreign currency reserves and rapidly industrialize, the state established a series of command economy policies intended to promote the efficient production and transport of grain, including collectivization, compulsory procurement, and the *hukou* system. The collectivization process began voluntarily around 1953. Households were initially encouraged to create mutual aid teams and cooperatives to share farming resources. Soon thereafter, officials recommended the formation of lower-level agricultural producer cooperates to facilitate the sharing of land. Between 1956 and 1957, the central government made collectivization mandatory. The state revoked private land ownership rights and placed all arable land under the ownership of the newly-created higher-level producer cooperatives (Ye 2015).

In response to downturns in agricultural productivity from 1956 to 1957, the central government sought to take command economic principles to their extreme. Great Leap Forward campaign (1958-61) rested on three key reforms: mass rural labor mobilization, agricultural rationalization, and economic decentralization. Rural officials absorbed producer cooperatives into communes composed of tens of thousands of peasants. In many areas, particularly those deemed strategically important, arable land was pooled and household subsistence farming replaced by ration cards and cafeterias. Officials were instructed to apply a common set of techniques to improve agricultural production, most prominently close planting and deep tilling (Harrell forthcoming). Finally, the state divided the country into seven economic coordination regions, with each largely responsible for supplying grain to its own industrial centers as well as to

central granaries for export. Regional grain production and transport coordination took place in urban cores. To maximize economic efficiency, regional grain officials emphasized production in zones that featured both low levels of urbanization and convenient access to the transport infrastructure that would facilitate the cost-effective shipment of large quantities of grain to urban centers (Garnaut 2014).

National politics only amplified the demands on officials and farmers. Rural officials and farmers quickly recognized the unattainability of planners' demands, as well as the unsuitability of the central government's strictly-prescribed farming methods. However, the state launched the Great Leap campaign on the heels of the ongoing Anti-Rightist Campaign (1957-1959), which targeted critics of Mao's development policies, primarily scientists and cadres. Thus, while close planting and deep tilling resulted in widespread damage to soil conditions and crops, and grain rations decreased, farmers and officials refrained from communicating on-the-ground conditions to superiors (Harrell forthcoming).

As an almost purely agricultural area positioned along the Kui River near the Yangzi port city of Wuhu, just upstream from the East Region center of Shanghai, Ruilin met planners' criteria for strategic importance – and suffered accordingly. In late 1957 all of Ruilin township was organized into a People's Commune based in Meicun. The following year, officials built canteens and abolished household garden plots. As the Ruilin historian He Yang wrote to me in correspondence, rations gradually decreased to dire effect:

People were given much less than they needed. Every day they were told to “increase production and saving.” Food rations became less and less, and many people were hungry. In the end, many died. Ordinary farmers had no children.

According to some with whom I spoke, production team leaders in some villages resisted officials’ orders by allowing the households they supervised to keep and share small portions of harvests (see Thaxton 2008). But while this mitigated suffering, the influence of the famine on Ruilin was nonetheless severe. Garnaut (2014) estimates that 10-30% of Ruilin residents died as a result of the famine, while fertility rates dropped by as much as 66%. Nationwide, approximately 20-40 million people died from starvation during the Great Leap (Becker 1996, Dikotter 2010, Smil 1993, Yang 2007), while birthrates fell 21% below the trend (Garnaut 2014).

In 1961, the central government began dismantling the Great Leap Forward administrative system. It removed restrictions on household gardens and replaced communes with village brigades and household teams as the basic units for everyday production. That year, the county designated Ruilin as its own commune, separating it from Meicun to create two communes. But while state reforms restored stability, villagers remained close to the subsistence margin throughout the Mao era, particularly prior to the distribution and planting of early rice seeds. Villagers relied on sweet potato and safflower. Incidents of starvation occurred intermittently (He Yang 2013).

Reform and Agricultural Modernization (1978-2018)

Production reform came to Ruilin in 1980. That year, Ruilin farmers observed that farmers across the river in Nanling county had followed the trend begun in northern Fangyang county and divided their land and production responsibilities to households. One year later, once it

became clear that the Nanling farmers would face no repercussions, Ruilin farmers ignored village and township officials' dissent and began to follow suit. The following year, the state enacted the household responsibility system as part of the 1982 No. 1 Document.

Decentralization and declining state budgets led to the state's gradual retreat from village life. At the same time, the inter-household competition sparked by the rise of household farming generated new conflicts. In some Ruilin villages – particularly the four largest villages of Kuning, Ruilin, Tangcun, and Maren – residents responded by strengthening and broadening solidarity bonds. This took the form of sharing farming supplies and equipment and helping one another carry heavy items like water pumps. When burglary became rampant beginning in the early 1990s, they formed patrol groups. Villagers also organized annual holiday celebrations, gatherings, and activities.

For these villager groups, security and solidarity were closely linked to violence. In perhaps the most famous incident to occur in the post-Mao era, during Spring Festival of 1985 contingents of Kuning and Tangcun villages converged in the town's streets. Members of both villages convened on the town with the intention of undertaking dance and human pyramid performances. When neither side ceded the space, a brawl erupted. Most hostility, however, was directed to smaller neighboring villages. Much of it was petty and mundane: rivalries, name calling, and claiming exclusive rights to surrounding roads, walkways, and public spaces. In some cases, however, it involved temporary or permanent access to land and water. The northern village of Dingcun consists of 70 households. During household land contracting in the early 1980s, village leaders defended their claims to land by threatening leaders in the smaller surrounding villages of

Yancun (30 households), Chen (40 households), and Yuancun (40 households) with violence (see Yi Wu 2016). During a drought in the 1980s, members of Ruicun village (120 households) claimed exclusive rights to an irrigation pond shared with smaller Luo and Ninghe villages (50 and 30 households, respectively).

These larger villages demonstrated similar degrees of solidarity in response to agricultural modernization. They resisted officials' efforts to dispossess them with pressure and coercion, including via individual and collective protest. When these efforts failed to stop construction teams from destroying their land and filling in irrigation ponds, they broke into newly built large-scale farmer irrigation canals. In Maren village, community members protested the proposed destruction of irrigation ponds and homes by collectively visiting village, township, and county government offices. In Ruicun village, farmers climbed bulldozers. In Tangcun village, one farmer re-levelled his bulldozed land by hand over the course of years. These efforts were not always successful. When county and township officials perceived projects as particularly important, they applied extreme pressure, including by threatening the safety of holdouts' family members. But overall, this collective resistance succeeded, allowing Ruicun, Tangcun, Baicun, and Kuning villages to retain an average of 60% of their land.

Residents of smaller villages, by contrast, focused their attention on their households' interests. In comparison with larger villages, they left Ruilin to labor in the cities in larger percentages. In the aftermath of household contracting, the 30 households in Yancun village were allocated only 2-3 mu¹¹, in contrast to 18-23 mu for Dingcun villagers. While full-time migrants accounted for

¹¹ 1 mu=.06 hectares.

only around 20% of Ruilin township villagers and around 15% of Dingcun villagers in 2006, they represented 40% of Yancun villagers. In Luo and Ninghe, village leaders estimate that full-time migrants represented around 30% of villagers prior to 2007.

When confronted with officials' persuasion and coercion during agricultural modernization, residents of smaller villages in early stages of the campaign were just as likely to holdout as those in larger solidarity villages. But they were less likely to organize in resistance. County officials designated Lin, Mei and Wang villages, with between 30 and 40 households, as the first to undergo modernization in 2007. There, 80% of villagers resisted officials' thought work and threats. But when construction crews left their land unlevel and filled in irrigation ponds, every household relented without a fight. In Yuancun administrative village, composed of six natural villages each with 20-40 households, around half of villagers resisted officials. All acquiesced after thought work. In Yancun, only three households – all with household situations preventing them from laboring outside – initially resisted officials' pressure and coercion.

Asked why they reacted to agricultural modernization as they did, resisting and acquiescing villagers' responses often echoed officials' thought work. Zhu Rong of Yuancun village, 61, offered a characteristic response:

To be a farmer is a bitter life. Rural people are this [extending his pinky finger]. My teacher used to try to motivate us to study by warning us, "if you don't work hard, you'll be a farmer!" There is no honor and no money in farming. It is better to give your land to a *dahu* ["big household" or state-subsidized large-scale farming household] and to work outside.

Resistance village members, by contrast, indirectly refuted officials' claims. Tangcun villager Liu Wei, 57, offered this explanation:

Officials tell us it is better to go outside to find work. But that is an uncertain life, especially for those over 50. At home we have a feeling of security.

Villagers also cited their village's identities as reasons for their responses. Ma Jun of Ruicun village responded this way when asked about his village's collective response to the threat of pond elimination:

We look out for each other here. For us, one family's problem is everyone's. We are proud to be Ruicun villagers and we will cooperate to defend our interests.

Acquiescing villagers, however, perceived their communities in very different terms. Liu Hui of Chen village characterized his village as neighborly but self-interested:

We get along well. We chat and play mahjong. But we look after our own interests. We're not united like those big villages. Look around – you'll see that everyone's gone. People have left to make money. That is right. There is no money to be made here.

Finally, villagers consistently evoked the Great Leap Forward famine to support their viewpoints. Yang Bo of Ruicun village, 56, explained the motivating influence of the famine this way:

Officials here told us to give our land to a dahu and use the rent to work outside. But look at the Great Leap Forward! They asked us to trust them then. We gave them our land and ate in cafeterias. So many died! We don't trust them. We only trust the land and ourselves.

Acquiescing villagers perceived the famine and its lessons very differently. For Zhu Rong of Yuancun, the famine proved why he had no choice other than lease his land:

Look at the famine. We had no way out. The land couldn't save us. For me, this is a place of death. My daughter's disability means she and I can't leave. But I hope my son never has to return.

The village of Cong, located just outside of Kuning village, has about 25 households, eight of which still farm. Wan Min, 45, looked at his 70 year-old father as he explained his reasons for leasing his land:

Many people died here in this township. My father almost died, when he was just a boy. I think this is why you find that people here seldom have a strong feeling for this place, and for farming. They remember. They want their children to leave. Everyone will tell you that there is no better time in history than right now. And that is because they are not afraid of starving.

In these cases, historical relational power dynamics influenced villages' perceptions of their collective identities and the meaning of their histories and memories. The following cases of neighboring Kuning and Gongru Villages illustrate the means by which relational-historical power dynamics take shape as well as their influence on their residents' collective responses to agricultural modernization. Though separated by only 100 meters, villagers in these two places have diverging perceptions of the value of land the village.

Kuning Village

According to township government-produced *Ruilin Cultural Annals* (Ruilin Township People's Government 2013), Kuning's history dates to the Sui Dynasty (581-618). As cities in the region

grew at the time, travelers stopped in the village to rest and repair their vehicles. Residents erected a *pailou*, or decorated archway, announcing the names of the families that lived there.

The largest lineage group in Kuning – the Guo – trace their own ancestry in the village to the era of the Ming emperor Chenghua (1464-1487). At that time, their forefather Guo Run served as an official in Shaoxing, Zhejiang. Chenghua’s court appointed his two sons, Zongli and Zongqi, imperial censors, charging them with monitoring officials and ensuring government efficacy (Blackwood 1897). Praised by the emperor for their honesty, fairness, and intelligence, the two gained fame as the “double imperial censors” (*shuangyushi*). After their passing, Zongli and Zongqi’s family constructed a new memorial archway from stone in their hometown, which became known as “Honor and Grace Archway.”

Like the rest of Ruilin, Kuning was devastated and abandoned during the Taiping Rebellion. But the Guo retained a powerful presence. Many returned after the war and resettled, and Wang lineage members accounted for around 40% of Kuning residents in 2018. Finding the original “Honor and Grace Archway” archway largely destroyed, the Guo constructed the replacement after which the modern village is named. After the Communist Revolution, the Wang family achieved political power in Ruilin, attaining high level positions both in the township government and in village governments throughout the township.

In the post Reform era, the combination of the Guo lineage story and the family’s political power in turn helped bring about investments and preservations efforts. Most prominently, in 2014 Guo lineage members – including diaspora members whose ancestors fled the Taiping invasion –

donated 900,000 yuan to build the “Honor and Grace Temple” and “Imperial Censor Square.” Leaders also successfully designated Kuning’s original schoolhouse and northeastern temple as official township historic landmarks (Figure 2). In 2006, the administrative village government installed streetlights throughout Kuning, making it the first – and still only – village in the administrative village area encompassing Gongru and other natural villages to have them.



Figure 2. Left to right: the original Kuning schoolhouse and northeast temple. *Photos by the author, January 2018 and December 2017.*

Alliances between the Guo and other Kuning families strengthened in depth and increased in number after the 1978 Reform. In 1986 a member of the Guo family, Guo Ting, married a member of the Shen family, Shen Liqiang. The Shen family migrated from Hubei Province to Kuning in the 1920s to escape hunger. In the 1960s, the wife of first generation child Shen Jie bore eight sons. Known for their fierce loyalty and quick tempers, the Shen brothers became the village’s intimidators in the 1980s. Thus, the marriage between Guo Ting and Shen Liqiang formally united Kuning’s largest and most powerful families. The Shen family’s political power subsequently expanded. In 2005, at the same time that a member of the Kuning Guos held the position of township People’s Congress Chairman, eldest son Shen Jun was elected vice chairman of the administrative village.

The sense of security afforded by this solidarity network improved quality of life for Kuning people, which was in turn reflected in labor decisions. While migrant laborers accounted for about 20% of China's rural population in 2008, in Kuning village full-time migrants represented only around 12-13% of all households. Prior to 2007 around 35% of Kuning household heads worked as migrants for a time, then returned. Two years after their marriage, in 1988, Guo Ting and Shen Liqiang went to Suzhou, where for one year Guo worked as a waitress and Shen found a job at Suzhou metalworks factory. Shen described the experience this way:

The conditions in the factory were terrible. It was cold in the winter and suffocating hot in the summer. The roof leaked. When it rained the water would leak and pour down on us. At the end of the year, my boss didn't pay us. He said, "We can't pay you. We lost money this year." The factory bosses then were all mafia leaders. Black hearted. Country people are simple and trusting. We were taken advantage of.

The couple returned home. Combining their savings with help from family, the two opened a tofu cart in the township. But when migration increased and the full-time population declined, their business suffered. Around 1995, the couple abandoned the cart. Shen Liqiang began informally leasing the land left behind by neighbors and family, ultimately accumulating around 20 mu. He supplemented his rice farming income with part time work in construction around the county. Guo Ting stayed home to raise their daughter.

Most Kuning household heads never left at all, however. Dai Wei, 52, and his wife farm seven mu contracted to them by the village and care for their grandson. They pick up odd jobs around the township when they can. Their annual income averages 10,000 yuan. Asked why he never left the township to work as a migrant laborer, Dai stated that the work was unsuitable given his

nature: “I’m disobedient. I wouldn’t be able tolerate the restrictions. Here, I can relax when I want to, work when I want to.”

Similarly, Li Yao, 57, and his wife have never worked outside of the village. They farm the 10 mu contracted to their family. Around 2012 Li bought a motorized cart and began using it help other villagers transport items like seeds and fertilizer. Asked why he never left, Li states that he’s comfortable staying in Kuning:

Actually, I’m a little bit afraid of working outside. For people in their 50s and 60s it’s not good to work outside. It’s hard to find work. I don’t know anyone in the cities. I don’t make much money here, but I have freedom and family. I don’t need to be at work at a certain time, if I want to meet a friend, I can.

The children of these Kuning households also largely eschewed schooling in favor of laboring. Li Yao has two children. His oldest, 27, attended university and works in the provincial capital. However, he estimates that only 10% of his son’s contemporaries from Kuning went to university (*shang daxue*). His daughter, 24, completed middle school, then began working as an attendant (*fuwuyuan*) in a restaurant in the county seat. At 21, she married a soldier, and now lives at home in Kuning with her parents, who help her care for her one-year-old son. She estimates that 15% of her village contemporaries went to university.

Kuning residents have retained a number of village traditions, customs, and activities, which villagers noted enhances the village’s feeling of community. Villagers organize and host annual Dragon Light (*longdeng*) and Arhat Light (*luohandeng*) performances during Lantern Festival (Figure 3), a semi-annual Earth God Festival (*tudihui*), and nightly public dancing (*guangwu*).



Figure 3. Kuning dragon light parade, Lantern Festival. *Photo by Shen Xiuhua, January 2019.*

When construction crews threatened to demolish their irrigation ponds in 2012, Kuning villagers collectively protested and saved all but one. Land consolidation work, however, left their farmland overturned and unlevel. In response, Kuning villagers worked together to re-level the land by hand and continued to farm. Among Kuning natural village residents, around 86 of 130 households, or 66%, continue to farm their contracted land in 2018. Asked why they value farming and community to the extent they are willing to defy the local government, a number of Kuning villagers evoked the famine. Ma Guo, 53, farms 10 mu. He offered the following justification:

During the Great Leap, land was all we had. Laboring is not secure, and we can't rely on rent from the *dahu*. So we must fight for the land.

Others stated that the village's tradition of resistance and solidarity inspired the collective action necessary to continue farming. Asked what distinguishes her village from others in the area that

largely leased their land, Guo Ting immediately noted its strength of solidarity: “We look out for each other here. Not like in Little Gongru and other places.” Small farmer Guo Qiren echoed this sentiment when I told him about the methods officials used to bully and intimidate residents in other villages: “We wouldn’t let that happen here. We look out for each other.”

Asked why they continue to stay in Kuning when residents of other villages increasingly depart for the cities, a number of Kuning residents’ responses suggested they associate their home with freedom and security. For Shen Liqiang, while his childhood in Kuning was difficult, it was also full of joyful memories:

When I was a kid, we would play while the adults worked. We were very free. I remember swimming in the ponds and playing in the field where the water buffalo grazed. We were wild just like those animals.

Guo Ting and Shen Liqiang’s daughter Shen Xiuhua, 25, works as a salesperson for a clothing company in Shanghai. But she makes the six hour trip home as often as she can. Reflecting on her village, she wrote the following text message:

You asked me about the meaning of home. When I woke up just now after sleeping for a bit on the train, I was surrounded by strangers. I’m happy with nothing much. Seeing my house in the sun, looking at the clouds, looking at my nephews, looking at my paternal grandmother, looking at my maternal grandmother, looking at my father working with his hands. Fish bones and red-crowned cranes. That is happiness. This can make a person feel more satisfied than materials and money. It is this kind of longing thought that can support me on my long journey. I leave in order to better return back. This is the most honest answer I can give to your question.



Figure 4. Shen Xiuhua and Guo Ting, 1996. *Photo by Shen Liqiang, 1996. Used with permission.*

Gongru Village

In contrast, Gongru people are aware of no written record of their history. Their history is instead retained by a few elders. One of them, Huang Jin, 68, learned his history from the stories his father and grandfather told him. These stories begin in the early Ming Dynasty with the naming of the village by the Gong lineage and solidarity group after their violent displacement of the Wu lineage and solidarity group. It was said that, at the height of Gong power, the air was filled with the smoke of 100 chimneys. Given that chimneys were rare feature of peasant homes, this was an indication of Gong village's relative wealth. One of these families hired a young servant named Li from nearby Nianping Village to the north. After some years Li borrowed land from a wealthy family and built a home. To accommodate his travels to Nianping Village, Li built a road. Eventually, Li's new lands became a village of its own, which he called Tiwujiage.

Li's new road, however, disturbed Ruilin's fengshui, cutting a line across the tortoise shape of the terrain. The fortunes of Gong Village, along with rest of the township, began to decline thereafter, culminating in the slaughter, starvation, and migration that accompanied the Taiping Rebellion of 1851-1864. By the end of the Qing Dynasty, only two Gong remained, a blind man and his elderly mother. Both were dependent on a servant. The servant tricked the blind man into selling the family's land to him and then fled. Both the blind man and his mother died soon thereafter. In the wake of the Taiping Rebellion and the demise of the Gong, families migrated to claim the newly empty land. Xue Ping's and Huang Jin's forefathers, the Xue were among the first. They crossed the Yangzi River from Xubei county to escape the famine there. In the following years they were joined by other lineage groups: the Deng and Ma from Yumei County; the Wang and Xu both from Duqing City to the immediate southeast; and the Huang from Hubei Province. Bandits also arrived. One group formed a village they called Wujingguo, which they abandoned about 100 years ago. Zhang's father recalled exploring the abandoned site.

All that remains of these villages are memories. Each fell into ruin and washed away in floods. Remaining structures were razed either by newly arriving migrants or to make way for collectivized farming in the 1950s. Zhang walked along the road south of his home to point out the sites of the villages: the collection of bushes where Gong Village once stood; the grove of trees marking the site of Tiwujiage (Figure 5).



Figure 5. Left to right: site of the former Gong Village and Tiwujiage village. *Photos by the author, December 2017.*

The Mao era established the egalitarian economic conditions of collectivism, but disparities in inter-village livelihood conditions emerged. The original 1954 embankment planned called for extending the embankment around all of the township's territory on the plain, creating a barrier around villages there and the township's most fertile farmland. Such a plan would have extended the Shan River to run in front of Gongya Village, which rests on a slight elevation at the base of the Tang Mountains. But the township head at the time, a native of nearby Gongya village, feared that this plan would increase his town's flood risk. Thus – while he enlisted the labor of every other able-bodied person in the township, including Gongru people to construct the embankment – the township head approved a plan to extend the embankment just north of the flatland villages of Gongru and Gongdi, leaving them exposed. As a result, prior to the completion of the Three Gorges Dam in 2006, the Gong villages faced significant flooding an average of once every three years. Flooding damaged homes and waterlogged rice crops, burying whole sections and reducing affected yields by 10-40% from those within the embankment.

Disparities in inter-village power relations were also evident during the Mao era. Gong Villagers perceived the Big Four villages as violent and hostile to outsiders. But among those villages, they considered Kuning, their northern neighbor, the most fierce and dangerous. Elders told children to avoid Kuning and its people. For Gongru native Xue Ping, 53, most of her perception of Kuning was based on these kinds of statements and the accompanying stories her relatives and neighbors told of beatings and intimidation. But as a child she also experienced that intimidation firsthand on her way to the township elementary school one morning:

Once, we walked through Kuning on our way to school. Some older Kuning children blocked our way. They said, “we’re going to beat you,” and they hit us. There was no reason. We had done nothing wrong. They just wanted to. After that, we were very afraid. We always were careful to take side roads and small paths to school.

Asked if she saw Gongru as a similarly powerful village as a child, Xue Ping laughed:

We had no power. They have so many households there! We have so few. We are just a small village with few men. The men we do have are not fighters. We can’t fight them. If we try to, we will lose.

Those disparities widened after the post-1978 Reform and Opening. Droughts in the early 1980s caused the lower Shan River – their primary source of irrigation water – to fall beneath irrigation access culverts. The Kuning Guo and Shen families began working together to irrigate their crops by using portable pumps to harvest water from the base of the river itself. Doing so, however, left scant amounts for their downstream neighbors in Gongru, who also relied on the Shan River for crop irrigation. When Gongru farmers complained to Kuning leaders and asked them to reduce their water use, they were met by the eight brothers of the Shen family, who dismissed the Gongru farmers, telling them to “go back to little Gongru.”

In Gongru people's estimation, incidents like this, which evidenced the new post-Mao social hierarchy in Ruilin, were a turning point. The Guo and Shen families increasingly allied. In the mid-1980s, the head of the Guo family "sent" his daughter to marry Shen Liqiang's oldest brother, cementing the union. While other Kuning villagers did not necessarily like the two united families and their most senior members, they both saw little alternative and welcomed the benefits to security and wealth. In Xue Zi's view, while these families have never been considered rich, their combined physical strength makes them formidable:

They have so many brothers. If you fight against them, you will be beaten... So people will not disobey them. Other Kuning people may think, "on the one hand, I hate them. On the other, I am afraid of them..." Some families with little realized that they can get richer by cooperating with the powerful families to take resources.

At the same time, Gongru households became increasingly atomized. Families cooperated in farming less and began to focus on their own operations and affairs. Xue Ping's older brother, Xue Gui, 60, was the first Gongru resident in the Reform era to attend university. He became a math teacher in the county seat of Yangchun, and he and his wife gave birth to their first child, Guo Ting, in 1983. But when, on his insistence, he and his wife broke the family planning law to have a second child, a son, he was fired from his job. Forced to return home and work as a farmer, he dedicated himself to earning enough to allow his children to attend university and leave the village: "I began farming when I was seven years old. To stay here is to repeat the mistakes of our ancestors: a life of hardship and uncertainty." Xue Gui accepts that some Gongru people have an attachment to or feeling for (*liulian*) the land. But he believes it is based entirely on a feeling of desperation born of a lack of alternatives:

People with nothing else to do for a living have a connection with the land. But it is a forced feeling, not one they are willing to have. Those who are busy have no such affection. If people have another choice of livelihood, they will leave the land.

That atomization in turn diminished township security. As villagers in Kuning and the Big Four increasingly built solidarity networks, made investments in their villages, and saw the township government invest in their villages, Gongru villagers turned inward. In the 1990s and 2000s villages throughout Ruilin were targeted by thieves. But while Kuning villagers formed watch groups to patrol the village at all hours, Gongru households organized no such defenses.

The sense of security felt by villagers in Kuning came at the cost of that of others, including Gongru villagers. As Kuning villagers' confidence grew and Gongru's waned, Gongru villagers all but acquiesced to their position. Gongru villagers never again confronted Kuning villagers about water use. At the same time, incidents of intimidation and bullying became more common and more brazen. These included acts of violence. In 2014, the teenage son of a neighbor came to owe a gambling debt to a senior Kuning man. Two cars full of Kuning men entered Gongru village and beat the boy. But most incidents were mundane and petty. Xue Gui's daughter, Guo Ting, 36, grew up in Gongru and now works as an engineer in the municipal capital. Recounting her own experience walking to school in the 1990s, she echoed her aunt Xue Ping's story doing the same 20 years prior:

I used to walk along the road to school through Kuning. One day, some kids from that village told me, "You're from Little Gongru. You can't come through here." The next day I walked on the road just outside of Kuning. The same kids blocked my way and told me that this road also belonged to their village. Eventually I had to walk in a wide loop around Kuning to get to school.

Beginning in the late 1990s, some Gongru villagers began going out to work in the cities to with the purpose of investing in their children's education. By 2008, around half of Gongru household heads had labored outside at least temporarily, and around 25% had become full-time laborers outside the township. Encouraged in 1999 by her brother Xue Gui, Xue Ping asked her husband to join her brother in Suzhou, where he was working as a bricklayer, so that he could support their son Xue Zi's studies. Four years later, Xue Ping joined her husband in Suzhou. There, they lived in a corrugated shack in a shantytown on the outskirts of the city. The town had no running water or sewage, and theft and prostitution were common. She and her husband worked outside on job sites every day regardless of the weather. But unlike so many in Kuning, they returned home only once annually to celebrate Spring Festival. In 2004, Xue Ping sold all of her farming supplies and gave up farming for good.

Driven in part by example of young people like Xue Zi and Guo Ting to enter university and find white collar jobs, the number of migrant laborers and university students increased over time. Gongru native Xu Min, who was attending university in 2018, estimates that 70% of his contemporaries from Gongru entered university. As more people left for work and school, village activities, celebrations, and gatherings in Gongru began to disappear. Community-organized Spring Festival activities ended in the mid-2000s. After years of declining attendance Gongru's customary "land festival" (*tudihui*) was cancelled in 2011. Gongru people stopped participating in the annual basketball tournament, which placed in competition teams from the middle and southern villages, around 2005. The tournament itself ended two years after. This correlated with the end of other extra-village activities, such as the performances in the town surrounding Spring Festival as well as those of itinerant opera and circus troupes.

When officials from the administrative village first presented Gongru villagers with the option of leasing their land to a professional farmer in the summer of 2017, around half initially refused. Officials later told them that the offered annual rental rate of 450 jin per mu was likely to drop in the future. Thus, if villagers waited until they could no longer farm to lease their land, they might be offered little to nothing in return. In response, all but one household acquiesced. When asked why he leased his land, Xue Gui evoked the Great Leap Forward:

During the Great Leap Forward we suffered a great deal. The land was not enough to save us. We remember this. We always want to leave the land as soon as we can.

Asked why she and her husband stayed in Suzhou to work while people in Kuning preferred to stay home, Xu Min stated that the two villages had different understandings of security:

Farming life for them is comfortable. It's convenient. They feel secure. We don't have that feeling of security. For us, making money provided some security. Once we began making money, we could not go back to farming. Xue Zi's education is another kind of security.

Xue Zi, 30, elaborated his mother's statement. For him, Gongru and Kuning villagers have different identities:

Kuning people have solidarity. In my village each family looks after itself, looks after its own business. If people here need help from those outside their family, of course we feel we can ask for it. But this is rare. Each family resolves its own problems.

By 2018, around half of the homes in Gongru were abandoned the majority of the year. Of Gongdi village's 10 households, eight were abandoned. One former resident, Deng Xia, 66, used

her old home only for storage. Deng Xia's husband built their home from bricks in the early 1970s (Figure 6). On a visit, she showed me the bed where her two daughters and one son were born, and where two other newborns died. She showed me the dark line in the cement where the water rose, and the corner where the family stacked wood high to escape rising flood waters. But she showed no sentimentality. She heard that the government might demolish all of Gongdi to consolidate the farmland. She said hoped she can receive a generous amount of compensation for her land so that she never has to farm it again.



Figure 6. Deng Xia's house, Gongdi Village. *Photo by the author, April 2018.*



Figure 7. Southern Gongru undergoing land consolidation. *Photo by the author, February 2018.*

Less than two months after I first spoke to Huang Jin about Gongru history, even the markers of the ancient villages were gone, lost to the work of land grading and consolidation (Figure 7). For Huang Jin, there is nothing to be mourned about this loss:

These are just stories my father and grandfather used to tell to pass the time. The government keeps all of the important history in books. If later generations need to know something, they can find it there. In the future, I hope my grandchildren's children visit the tombs of their ancestors in the hills during Chuxi.

Asked if future generations will visit Gongru, Xue Gui reiterates Huang Jin's sentiment:

In 30 years, Gongru won't exist. I hope it doesn't. If future generations spend a lot of time here, it will mean that they have failed. Some may care about whether this village survives. For me, I don't care. This is a sad place. I think perhaps it is better if we forget it.

Conclusion

Critical place studies-related theories suggest that the concept of place has a dialectical potential. Aligned with safety, place may invite the free exploration of its multifaceted historical and ongoing constitutive process. Viewed from the lens of insecurity, however, and the concept of place may be used to discourage that exploration process by positing a static and consistent identity and, along with it, groups that do and do not belong. For so much of the past 200 years Ruilin has been a place of insecurity, beset by waves of war, famine, and migration. Some communities responded to this by strengthening bonds of solidarity, while other have turned inward by strengthening their households. But such reactions do not take place in a vacuum. Rather, they are relational formations. In Ruilin, solidarity villages defended their interests in part by imposing their will onto their weaker neighbors. Solidarity villagers' feeling of security thus came at the expense of that of their neighbors.

While these struggles over territory took place in everyday life, they also took place discursively. Stronger villagers created place narratives to justify their village-focused way of life, including the violence used to secure it. Weaker villagers created different place narratives, though not to defend their belonging in Ruilin, but often rather their not belonging there. In both cases, place making relied on selectively interpreting the past to establish a sense of consistency and thus an essential identity. These narratives work in dialogue with everyday experience. As residents in weaker villagers withdrew from the village and residents of stronger villagers united, their place narratives and their actions mutually reinforced. Throughout Ruilin, villagers' ability and willingness to mount a collective defense of the land when confronted with officials' bullying, or the lack thereof both reflected and reinforced villagers' feelings about their land. By evoking the memory of the Great Leap Forward and a collective notion of village identity, villagers replace the messy, painful, often shameful particularities that constitute place with order, reason, and thus hope. But by effacing that complex history, villagers inadvertently allow the dangerous teleological discourses of development espoused by leaders in – among many other places – the World Bank, the Chinese central government, and the Ruilin township government to go uncontested. Ruilin shows that urbanization and industrial farming is far from an inevitability. The pain of village life that so often drives it has deep roots in the accumulation of profound and mundane history – imperialism, failed policies, petty cruelty. But none of this history was necessary or unavoidable. Ruilin's past suggests that there is much that can be decided about its future.

3. Agricultural Modernization Policy, Adaptive Resilience, and the Future of Farming in Ruilin

Summary: Since it was initiated in the mid-2000s, the Chinese central government's agricultural modernization policy has helped bring about fundamental changes to China's agricultural system. Premised on creating a foundation for long-term sustainable development, modernization has broadly expanded large-scale, mechanized farming. Historically however, China's Yangzi River Delta achieved long-term sustainable development without capital-intensifying and mechanizing technological innovation. Rather, diverse and autonomous land use and grassroots governance practices facilitated knowledge-sharing, knowledge-building, and adaptation. Drawing on this history as a reference point for analysis, in this paper I examine the influence of agricultural modernization policy on adaptive resilience. I use as a case study a Yangzi Delta township that was an early recipient of central government funding in support of its contemporary effort to expand large-scale farming. I find that the implementation of agricultural modernization policy reform in Ruilin has undermined its resilient practices and features, rendering the township vulnerable to disturbance.

Introduction

Beginning in the mid-2000s, the Chinese central government began funding the expansion of domestic large-scale grain production. Government support for that goal has only grown in intervening years, with the state investing US \$500 billion between 2013 and 2020 alone (*China Daily* 2016). The state's efforts have helped bring about rapid changes to China's countryside: from 2008 to 2014 the percentage of arable land transferred increased from 8.6% to 28.8%, while

the percentage of mechanically sown arable land increased from about 42% to 62% (Li 2017; Wang et al. 2016).

The state has argued that this reform is necessary given the shift of workers and investment capital from China's countryside to its cities. State leaders assert that by turning farming over to subsidized and labor efficient *dahu* ("big households", but denoting state-subsidized, large-scale, often family-run farms), agricultural modernization will offer the countryside and nation a basis for long-term sustainable development (see Wen 2006).

Historically however, China's states and rural societies achieved long-term sustainable development via alternative practices aligned with resilience agroecology. In the Yangzi River Delta region, farmers and leaders maintained agricultural surpluses from approximately 1000 AD to the 1950s without capital-intensifying and mechanizing technological innovation. This occurred despite population levels increasing by perhaps 700% (Ellis and Wang 1997). Yangzi river farming regions were typically autonomous and diverse at the levels of species, horizontal and vertical spatiality, marketing, governance, and community relations. These characteristics in turn facilitated sharing, learning, adaption, and the building of knowledge. The state played a critical role, ensuring the sustainability of this development both by providing sub-systems with protection, and by adapting its policies based on communication across governance and spatial scales.

Drawing on this history as a reference point for analysis (see Whiting et al. 2019), in this paper I examine the influence of agricultural modernization policy on adaptive resilience, or the capacity

to buffer disturbances and maintain productivity. I use as a case study Ruilin, a Yangzi Delta township that was among the earliest recipients of central government funding in support of scale farming. Between 2007 and 2018 Ruilin received over US \$100 million in state funds. In that time, it has been transformed: 99% of its arable land had been consolidated while 61% of that land has been transferred to 135 large-scale enterprises.

I conducted 12 months of ethnographic fieldwork in Ruilin in 2014, 2017, and 2018. Fieldwork consisted of participant observation and 220 formal and informal interviews with *nongmin* (rural people, or the peasantry), *dahu*, township and county officials, and retailers and producers involved in agricultural marketing, processing, and supply. Based on this work, I find that changes to land use practices that occurred following the 1978 Reform and Opening policy undermined Ruilin's adaptive resilience capacity. At the time the township government initiated modernization reform in 2007, Ruilin farmers largely devoted their farmland to double-crop two seasons of rice, for which they relied heavily on industrially produced fertilizers and pesticides. Yet many of the features, practices, and adaptations that sustained Delta communities at various times over the previous 1,000 years remained in some form. Ruilin farmers used portions of their land for subsistence agriculture and cash cropping, growing vegetables and raising poultry, livestock, and fish. Households' relatively limited landholdings – which averaged 6-7 mu (.4-.46 ha) often spread across 7-10 different plots – created a patchy landscape that helped facilitate these diverse land use practices. These conditions allowed farmers to supplement their incomes and hedge against loss. They also allowed farmers to quickly identify and respond to natural disasters such as pest infestations and crop diseases. In addition, the practice of spontaneous land transfer that arose in the mid-1990s precipitated the rise of invested grassroots leaders. These

leaders advocated for the interests of their communities and preserved customs, traditions, and farming knowledge.

The implementation of agricultural modernization policy reform in Ruilin has undermined all of these practices, conditions, and features. The creation of consolidated, contiguous plots for large-scale and mechanized farming has reduced landscape patchiness and land cover diversity.

Government standards and support for large-scale farming enterprises have consolidated land in the hands of elites and outsiders with little or no local farming experience. This land consolidation has marginalized Ruilin's grassroots leaders. While the new large-scale farms are more labor-efficient than small-scale farmers, their large sizes – averaging 200 mu (13.3 ha) – and often complex management structures render them less productive on a per-mu basis, as well as less responsive to natural disasters. Finally, the new *dahu* are more reliant on industrially produced chemical and mechanical inputs. Taken as a whole, agricultural modernization reform has reduced the township's ability to adapt to disturbances in both the short and long term.

This paper proceeds in five sections. In the following section, I outline key points of resilience ecology theory. In section III, I describe the resilient agroecological features of the traditional Yangzi Delta agricultural system. In section IV I turn to the case study of Ruilin and the influence of Mao-era policy reform on the township's agriculture system. Section V starts with an overview of the state's contemporary agricultural modernization policy. I then describe its implementation in Ruilin, and its influence on resilient practices and hallmarks there. In section VI, I offer concluding thoughts. I argue that the state's efforts to consolidate power have encouraged rural officials to adopt approaches to governance misaligned with the needs of the

societies and ecologies they govern. At the same time, by reducing links between and within societies and ecologies, the material effects of these approaches have potentially self-reinforcing and thus long-term consequences.

Theorizing resilience ecology

Researchers of agricultural societies have found in Gunderson and Holling's (2002) theories salient means of conceptualizing the reasons why farming systems persist and decline. These theories have informed principles of agroecology, understood here as the application of ecological principles to agricultural systems and practices. Adaptive farming systems – those able to buffer disturbances and continue producing – are protected by higher level governments from disturbances, which monitor and restrict potential sources of vulnerability, such as markets for lending, input, and land. At the same time, in adaptive systems states have limited authority. Farmers possess a high degree of autonomy, including on the levels of governance and marketing. Finally, adaptive systems are diverse vertically (intercropping), horizontally (“patchy” landscapes), as well as on the levels of marketing, oversight, and community relations. These characteristics expand the potential for novel interactions, experimentation, and sensitivity to environmental change. These systems also retain that knowledge, including through record-keeping, seed-saving, and soil regeneration (Table 2; Apeldoorn et al. 2011, Belfrage and Tango 2004, Berkes et al. 2000, Cabell and Oelofse 2012, Kremen et al. 2012). Ultimately, these factors self-reinforce: an understanding of place-based vulnerabilities encourages diverse connections as contingencies for disturbance, and vice-versa.

Indicator	Adaptive cycle phase	Practices and hallmarks			
		Land use and farming techniques	Markets	Traditional governance and institutions	State governance and institutions
Self-organization/regulation	Refers to a system's degree of autonomy, as it relates to governance and decision-making, reliance on "outside" inputs and markets, and its capacity to regenerate ecosystem services.	<i>Green manure; presence of perennials</i>	<i>Limited reliance on extra regionally-based input suppliers and commodity markets</i>	<i>Existence of/ability to form grassroots/non-state-led farmer and consumer networks such as associations, co-ops, markets and advisory boards; social protection of pest predators; temporal restriction of harvests; succession management; range reserves; conservation incentives</i>	Protection of pest predators; temporal restriction of harvests; succession management; range reserves; conservation incentives
Ecological/spatial/temporal diversity and connectivity	Refers to the degree of heterogeneity in a system, which allows for system exchange and development, as well as insurance-providing redundancy. The elements composing agroecologically resilient systems are diverse, as well as diversely and weakly connected. Connectivity refers to the elements required for system function, as well as the presence and capacity of channels for feedback between them.	<i>Polycultures; adaptable land use; crop rotation; intercropping; crop variety redundancy; catch crops; under sown crops; insectary strips; living fences and hedgerows; patchiness; fallow fields; pastures; meadows; woodlots; ponds; marshes; streams; rivers; lakes</i>	Direct supplier, consumer and farmer collaboration and knowledge-sharing; multiple supply and product markets; <i>globally autonomous and locally interdependent</i>	<i>Flexible management rules; informal extension services; spaces for interaction and learning</i>	Direct research center and farmer collaboration and knowledge-sharing; formal (state-led) and informal extension services; spaces for interaction and learning
Builds socio-ecological capital	Refers to the system's ability to regenerate, including through the building of soil organic matter and the transference of knowledge and organic supplies, as well as the ability to strengthen adaptability through biological and managed species selection.	<i>Seed saving; non-tillage farming; creating small-scale disturbances through pest management and selecting plants based on their responses</i>		Record keeping; cross-scale institutional interaction and learning; carriers of folklore and knowledge; presence of traditional leaders; presence of taboos and rituals encouraging of socio-ecological capital-building farming practices	<i>Record keeping; cross-scale institutional interaction and learning</i>

Adapted from Berkes et al. (2000), Tengo and Belfrage (2004), van Apeldoorn et al. (2011), Cabell and Oelofse (2012), Kremen et al. (2012).

Italics: Broadly present in 1000 AD-1950 Yangzi Delta

Bold: Broadly present in 2006 Ruilin

Underline: Broadly present in 2018 Ruilin

Table 2. Indicators of agroecosystem resilience.

Critically, Gunderson and Holling emphasize that maladaptive systems of all kinds can also achieve high levels of resilience.¹² Wealthy, tightly regulated systems – in resilience terms, those where potential is high and connectedness is great – may be able to apply these resources, capital, and political command to resist external disturbances and internal variance. But the resilience capacity of such systems masks their vulnerability. Having consolidated power, system components have little incentive to engage outside of small homogeneous networks. They become complacent, settling into uncoordinated, predictable routines. Communication, learning, and adaptation slow (see Sen 1989). As a result, such systems may fail to anticipate disturbances, and may lack the creative capacity to adequately respond to disturbances, leading to “rigidity traps”. They may also interpret disturbances not as warnings of structural failings, but as threats to existing power structures, and respond by imposing more centralized order. Rigid systems – having grown unaware of spatial diversity and given little incentive to consider alternatives to governing orthodoxy – are prone to creating environmental management policies misaligned with diverse conditions or competing interests (Cumming et al. 2006). For these reasons, “all such systems are likely to have the seeds of their own destruction built in” (Holling 2001: 400-401).

Technology may help constitute and entrench such maladaptive resilient systems. Boserup’s assertion that technology has historically played the role of escape route from the Malthusian overpopulation trap is countered by Wood (1998), who argues that the very innovations that

¹² Critics have noted key shortcomings of Gunderson and Holling’s resilience conceptual framework. Given that seemingly “outside” elements – such as those associated with colonization and globalization – can trigger rapid and fundamental system change, what defines the borders of a system, and how can systems “adapt” as though possessing cohesiveness or will? Others have noted that system change is often unpredictable and fails to conform to cyclical patterns (Gotts 2007). Acknowledging such shortcomings, Gunderson and Holling emphasize the metaphorical rather than literal nature of the resilience conceptual framework.

address short-term immiseration also set in motion a self-reinforcing and compounding problems. By promoting societal well-being and population growth, innovations generate additional rounds of immiseration, which necessitate more innovation. Furthermore, this “MaB (Malthus-and-Boserup) ratchet” of episodic population growth places additional strain on the food production system. As a result, the time separating each additional cycle of gain and decline shortens, overall gains in well-being caused by innovation decrease, while the scale of immiseration caused by declines increases. The Bosrupian “escape”, then, is both only temporary and self-limited.

Echoing Gunderson and Holling, the vulnerability of such an increasingly fragile agricultural system is masked both by its persistence and by the degree to which that persistence depends on the increasing discoordination of its component parts. Consumers and farmers rely on global commodity chain networks for supplies. Industrial farming increases yields at the cost of soil exhaustion, soil contamination, diminishing returns on investment, and ecological degradation. States respond to increased farming costs by intervening through subsidies. At the same time, increased farming costs promote landholding stratification. The innovations of increased commodity chain networking, chemical input application, and state subsidies may “succeed” in meeting societies’ consumption demands at the cost of masking the system’s growing vulnerabilities. These vulnerable conditions are produced by relationships between material and discursive elements across time and space. It is not inevitable that they will form or produce catastrophes. But once in place, they increase the *potential* for catastrophe. A tightly connected system becomes increasingly disconnected in its awareness of the complex materiality undergirding its functioning: the component refineries, factories, container ships, and destroyer

fleets without which the system would collapse. Populations may subsequently increase at the cost of heightening dependence and thus vulnerability. To the extent that societies may become aware of the vulnerabilities of their innovation-dependent agricultural system, the very scale of the problem encourages path dependence or rigidity traps, deepening the problem. In other words, alternatives become both un-thought and unthinkable.

It was the presence of such high degrees of connection that both strengthened the resilience of the late feudal Chinese state and introduced key vulnerabilities.

Resilient practices and hallmarks of the historic Yangzi Delta agroecosystem

Practices and hallmarks of resilience agroecology were critical to the ability of Yangzi Delta farmers to increase productivity for over 1,000 years. State leaders drew on the peasantry as a tax base, and rural society was in general highly stratified. As a result of its dependence on peasant agriculture and rural society more broadly, however, the state also protected it and worked to enhance its productivity. Empires during this time invested heavily to promote Yangzi Delta agriculture as well as famine prevention, in particular the Song and Qing states. Qing measures focused on constructing and maintaining county ever-normal granaries (*changpingcang*). The state ensured their supply by reviewing required detailed monthly agricultural reports from county magistrates. The Qing state re-supplied granaries in emergencies via a state-subsidized grain tribute system, which it maintained by state-supported transport networks (Davis 2000; Li 1982). In addition, states in this era introduced inputs such as new seed varieties and promoted water control and production through building and maintaining canals, dykes, and irrigation systems (Bray 1986; Shih 1992).

State leaders worked to protect peasant societies and agricultural production from exploitation by rural elites. When wealthy Delta families took advantage of a rural leadership vacuum in the 15th century to appropriate control over irrigation systems, Ming leaders deployed the military to restore peasant access (Huang 1990). Qing emperors used monthly reports and ever-normal granaries to monitor and suppress grain speculation. This level of scrutiny encouraged accuracy in reporting and led to reforms (Davis 2000). Such state interventions provided stability and a foundation for prosperity not just for the Delta region but the country as a whole.

While they tended to retain connections with the countryside and occasionally intervened in the rural economy, state leaders afforded Yangzi Delta rural governments high degrees of autonomy in day to day governance. During the Song Dynasty, the work of maintaining and improving grain production and adjudicating disputes fell to powerful county-level tax captains (Shih 1992). They were replaced in the Ming Dynasty by landlords, who maintained canals and dykes in the fields immediately adjacent to them (Huang 1990). In the aftermath of the 15th century peasant tax revolts and the subsequent flight of the landlords to the cities, peasant lineage and solidarity groups assumed water control management responsibilities. In general, during this long historical period rural Delta society “was independent of state initiative in maintaining a favorable condition for agricultural production” (Shih 1992: 179).

Grassroots village governance also helped reduce rates of peasant landlessness and immiseration. Shih (1992) characterizes the organizing that took place after the gentry fled to cities in the 15th century as both vertical and horizontal. Vertical organizing occurred along lineage and solidarity lines in response to tax increases in the 16th century. It included social security initiatives such as

the establishment of charity lands (Shih 1992). Horizontal organizing occurred in response to usurious landlord lending, resulting in property confiscation, bond service and widespread peasant impoverishment. A succession of coastal raids by Japanese pirates delegitimized gentry and state power, while the ensuing peasant militias “enabled individual peasants and bondservants to exchange ideas and information and to work together with their fellows for common goals” (Shih 1992: 66). Peasants in turn began collectively refusing to pay rent (Huang 1990; Shih 1992). After increasing from around 29% in the 14th century to 40% in the 15th century, landlessness rates decreased to between 3% and 22% by the 1930s (Shih 1992).

These levels of governance protection, connection, and autonomy shaped, and were shaped by, Delta peasant farming practices and market exchanges. Delta villagers commonly cultivated polycultures, engaged in double cropping and intercropping, and applied compost and canal sludge as fertilizers. These methods worked to control pests, regenerate soil, and safeguard against crop diseases. Scattered and patchy plots, networks of canals and ditches, ponds, dykes, living mulberry plant fences and wasteland all contributed to vertical and horizontal landscape heterogeneity, which built knowledge and soil capital (Bray 1986; Ellis and Wang 1997). As late as the 1930s peasants predominantly produced and consumed household goods and farm inputs on-site (Ellis and Wang 1997; Huang 1990; Skinner 1995). Exceptions were bought or sold in what Skinner (1995) refers to as standard-market towns, typically located no more than three miles from any village (Eastman 1988). By providing peasants with a means of hedging against short-term shortage and an exchange information with diverse actors, these markets increased resilience.

Regionalism, colonialism, and system decline

The success of the Qing state's policies set in motion a compounding series of unintended consequences. State antifamine measures encouraged migration and fertility throughout the country (Will 1991). With the custom of partible inheritance, new families came to rely on increasingly small plots of land, as well as marginal land in flood-prone areas. Peasants encountered "high-level equilibrium traps" wherein additional labor inputs produced diminishing returns (Elvin 1973). They turned to cotton growing to pay land rent and money lenders. Yet commercialization compounded the risks associated with reducing grain-growing land.

Landlords increased rents to reflect potential cotton incomes. Further, cotton farming was expensive and demanding. It required commercial inputs, such as soybean cake fertilizers, and heavy rainfalls, heightening peasant household vulnerabilities. This in turn produced boom and bust cycles that enhanced social stratification (Davis 2000). Echoing Wood's "MaB ratchet" theory, quality of life improvements in turn increased households' expectations for consumption, placing more demands on the land. The state's policies discouraged awareness of the resilience of place-based ecologies. In resilience theory terms, the national system was accumulating potential at the cost of high levels of connectivity. This took the form of dependence on the central government's fiscal capacity to distribute food, particularly to places that had exceeded their capacity to self-sustain.

A series of disturbances in the 19th century depleted that fiscal capacity, with disastrous results. The 1842 Treaty of Nanking following the First Opium Wars expanded Chinese demand for narcotics and eliminated import tariffs. It also granted Britain favored nation trading status and required that the Qing state pay wartime reparations and taxes on Opium import. The 1858

Treaty of Tientsin following the Second Opium War further enlarged Western access to Chinese trade and legalized the opium market. Subsequent imports of British Indian factory spun textiles devastated China's folk cotton industry (Fei 1946). Coupled with growing international competition in tea and silk production, these losses drained the revenue of the Qing state, which faced consistent trade deficits from 1884 until the end of the 19th century.

The Yangzi Delta's ties to market-based inter-regional trade networks, easy access to water transport, and proximity to treaty ports protected it from ruin. But more peripheral regions were devastated. Incidents of flood-produced famine – rare in previous centuries – substantially increased in the 19th century. The resulting recession and instability in turn inspired violent uprisings, which widened the crisis. The Taiping Rebellion and Muslim Revolts cut Beijing off from critical transport routes. In some years, wartime costs drained well over half of the budget. Surrounded by urgent sovereign threats, the Qing government prioritized protecting the coastal areas at the cost of abandoning the inland provinces. The state ceased to maintain transport routes and ever-normal granaries. The West's shift to the gold standard compounded these effects by causing the depreciation of China's silver-based currency. Currency depreciation discouraged technology imports and foreign investment. Further, depreciation weakened peasant savings by devaluing the copper coinage upon which the rural economy was based (Davis 2000). The Delta's relative economic prosperity provided insufficient insulation from the ripple effects caused by these conditions. Taiping armies overran farming communities in places like Ruilin, to horrific effect. Due largely to the Taiping Rebellion, the Delta experienced the first catastrophic drop in population in centuries (Huang 1990).

Delta communities regrouped in the aftermath of the Taiping Rebellion. But while evidence suggests that rural incomes and consumption increased, they did so at the cost of continued high-level equilibrium traps (Brandt and Sands 1990). Driven by rising rents, input costs, and living standards, Delta farmers increasingly relied on imported soybean cake fertilizers, and – primarily – dyke and canal maintenance and sludge application to facilitate their cash cropping (Elvin 2004). These labor-intensive practices increased household income at the expense of diminished returns for labor, grain yields, and household self-sufficiency (Huang 1990; Shih 1992). In resilience terms, changes to politics, economics, and culture reduced system security, diversity, autonomy, and exchange, and thus opportunities for experimentation, learning, and adaptation. Atomization and myopia self-reinforced as households worked themselves and their ecologies to exhaustion. This pattern of “involution” changed with a shock in the form of the 1949 Communist Revolution.

CCP Agricultural Policy Reforms and Their Influence in Ruilin, 1949-2006

It was in this context – 200 years of instability and declining livelihood security, broadly associated with and attributed to expanding Western imperialism – that the Chinese Communist Party (CCP) assumed power. In response, the state sought to restore autonomy both expediently and free of Western influence. But its use of a Marxist-Leninist-development model to achieve these goals introduced critical contradictions to its policies. The state adopted a Soviet-style command economy to quickly build industrial capacity via channeling surpluses from the rural sector to industry. To maximize its extraction of peasant grain, the state relied on a trinity of tools: it organized peasants into collectives, fixed the enormous rural labor force in place via a repressive household registration system, and instituted a compulsory grain procurement (Chan

and Wei 2019). To support the command economy, the state relied on a vast bureaucracy. It adapted the imperial-era administrative hierarchy to organize spatial units and disburse resources. It also established a quantitative evaluation system to manage officials (Chan 2010; Whiting 2001).

Yet this governing structure also posed a threat to the state's development goals and very legitimacy. Inspired by Marxist Leninism, leadership understood change as produced by a dialectical materialist exchange between humans and their relations of production. By liberating the people from exploitative class structures, socialism would unlock the limits of their material and creative potential. Within this logic, leadership both embraced and rejected science. On the one hand, the Marxist-Leninist conception of materialist historical progress perceived science as an expression of this teleological process and a means of achieving it. On the other, leadership understood the dangerous potential of uncritically venerating rational empiricism as a purely objective quest for truth. In particular, it viewed in this a means of legitimizing counterrevolutionary ideas, including ecology and demography. Thus, to be acceptable, the practice needed to serve the most fundamental truth, that of revolution. Both embodiments and extensions of rational empiricist thinking, bureaucracies posed an ideological threat to the legitimacy of the Party. But beyond that, bureaucracies incubated and empowered armies of bureaucrats whose professional interests often placed them at odds with each other as well as the precepts and goals of Marxist-Leninism. These conditions led to conservatism, rigidity, and the application of panacea solutions (Harrell 2020).

Mao sought to counter these bureaucratic effects with campaign governance. Intermittent campaigns would terrorize and punish critics, interrupt routines, refocus governance on revolutionary goals, and mobilize labor. The campaign approach produced its own crises, however. Not only did campaigns result in waves of instability and chaos, they instilled ideological fervor that engendered precisely the dogmatic approach to problem solving they were intended to discourage. This was most dramatically expressed by the events of 1957-1961. The Anti-Rightist Campaign (1957-1959) targeted critics of Mao's development policies, primarily scientists and rationally-minded cadres. The following year, Mao responded to downturns in agricultural productivity with the Great Leap Forward (1958-61), a mass labor mobilization effort. Collectives were organized into people's communes made up of tens of thousands of peasants. Communes were instructed to apply a common set of techniques to improve agricultural production, most prominently close planting and deep tilling. These techniques resulted in widespread damage to soil conditions and crops. But both the Great Leap and the Anti-Rightist campaigns discouraged farmers and officials from communicating on-the-ground conditions to superiors (Harrell in this issue). In addition, regional planners placed significant pressure on cadres in grain growing areas adjacent to rail lines and ports. This context, along with the ongoing Anti-Rightist campaign, discouraged farmers and officials from communicating on-the-ground conditions to superiors. Approximately 20-40 million people died from starvation (Becker 1996; Dikotter 2010; Smil 1999; Yang 2007). Agricultural Anhui Province, upriver from the central Delta industrial centers, was severely impacted, with birth rates dropping to 42% of their projected trend (Garnaut 2014). Garnaut (2014) estimates that 10-30% of Ruilin residents died as a result of the famine, while fertility rates dropped by as much as 66%.

In the wake of the Great Leap Forward, decision-making power was once again decentralized. Production teams, or village groups – in Ruilin typically composed of 10-30 households – became the most basic level of administration. In place of mass labor mobilization, the state began promoting Green Revolution-style technology and mechanization: improved seed varieties, the tractor plow, monocropping, and chemical inputs. Nationally, the use of chemical fertilizers increased over threefold between 1970 and 1981 (Muldavin 2000; Smil 1999. Tong et al. 2003). The use of chemical fertilizers increased in the 1980s and 1990s, as household farming and market logics encouraged short-term approaches to land and resource use (Jiang 2003; Patton 2015; Yan 2008). In Ruilin, the expanded use of chemical fertilizers in the 1990s led farmers to reduce the practice of growing a soil-regenerating third season begun in the 1950s. In addition, the state's efforts to ensure equitable household landholdings required periodic land readjustments, which in turn resulted in the dispersal of households' landholdings. By the late 1990s, Ruilin households' contracted landholdings range from 2-7 mu (.13-.46 ha) and averaged 6 mu (.4 ha), but that land was commonly scattered across 7-10 plots throughout the village. The difficulty of farming under these conditions was a frequent source of complaint among Ruilin villagers.

But state reforms also helped to sustain many adaptive resilient practices in some form. Much as corvee labor did in the imperial era, collectivization provided the state with virtually cost-free labor for building and maintenance, which it used to install elaborate irrigation and drainage canals and dykes, build rural infrastructure, and introduce electrified pumping (Bray 1986; Huang 1990; Muldavin 2000; Stavis 1974). In Ruilin, collectivization led to immediate improvements in water management. Beginning in the mid-1950s, the rural government

organized Ruilin villagers to build a levee along the Zhang River to the east of the township, along with a series of water pumping stations. The Shan River, which bisects the town from north to south, was also created and connected to the Zhang, along with a dam south of Ruilin town. Between the Zhang and the Shan villagers built elaborate irrigation and drainage canals. All of these helped to substantially decrease incidents of flooding and drought, which historically had troubled the township on near-annual basis. In the 1950s, Ruilin farmers began broadly double-cropping rice as well as a third season of safflower, purple sage, or rape to help regenerate the soil.

Decentralized governance after the Great Leap gave production teams the autonomy to decide critical matters, including members' water use. Collectivization encouraged cooperation. Households pooled labor to maintain or improve public goods. They also pooled money to purchase shared inputs, such as tractors and electric pumping stations, reforms that produced the bumper harvests of the early and mid-1980s (Huang 1990; Muldavin 2000). Finally, in restoring collectives as a basic administration unit, the state also removed restrictions on household garden plots, which *nongmin* (rural people, or the peasantry) used for subsistence and cash-cropping (Huang 1990).

Given the importance of grain production to the state's development command economic model, the state supported an extensive agricultural technology extension service system. In addition, the "Four-Class Agricultural Science Network" of 1974 created agricultural science stations at every rural governance level. Together, these services introduced farmers to new products, techniques, pests, and diseases and facilitated guidance, training, discussion, and

experimentation (Yun 2006; Zhang 2005). The state adjusted the agricultural technology service system for dispersed households by establishing both village-level technicians and science and technology demonstration households. In addition, beginning in the 1980s the township agricultural technology station organized annual multi-day trainings for technicians and demonstration households, who were responsible for conveying what they learned to the households in their villages.

Unlike many parts of the country, Ruilin's relative remoteness limited its ability to develop rural enterprises. Beginning in the 1980s, a small number of residents began migrating to urban centers to labor temporarily, primarily as factory workers, waiters, and care workers in Nanjing, Hangzhou, Wuhu, and Shanghai. The number of migrant workers increased substantially in the 1990s along with the rise of the urban-based export economy and widening urban-rural economic gaps. By 2007, 6,873 of Ruilin's 30,000 people labored full-time outside the township (Yangchun County Local Record Compiling Committee 2003). With the increase in migrant workers, a practice of spontaneous land leasing began. Migrant households established informal arrangements with friends and neighbors to caretake their land and pay agricultural taxes – and sometimes a nominal rent – in exchange for the right to cultivate it. These farmers were typically 50-70, having aged out of hire-ability in urban labor market. They accumulated landholdings based on economies of scale, typically between 15 and 30 mu (1-2 ha) (He 2011, Sun 2017). This amount was restricted in part by the difficulty of irrigating, planting, harvesting, and tilling dispersed plots.

The rural sociologist He Xuefeng refers to these farmers as *zhongnong* (middle farmers). By combining their farming incomes with part-time laboring, *zhongnong* households could earn salaries commensurate with those of their neighbors laboring in the cities. Due in part to their investments in their land, *zhongnong* often took leadership roles, acting as production team leaders, advocating for the rights of their communities, and maintaining customs and traditions (He 2011). These traditions include the annual land festival (*tudihui*), during which villagers convene to pay tribute to the god of the soil and ground (*tudishen*).

While the small overall farm holdings of Ruilin *nongmin* limited their profitability, they also offered significant advantages. Based on local conditions, Ruilin farmers typically had only a two-week window in July between the time when they could harvest their early rice and needed to complete the transplanting of their late rice. Ruilin's intense summer heat only added to farmers' task. Mid-day July temperatures in Ruilin reach 40 degrees Celsius. This necessitated that farmers concentrate their work in morning and evening shifts: starting at 4 am, pausing at 10 am to sleep, then working again from 5-10 pm. Small scales of landholding rendered such productivity possible. Further, small scales reduced rural people's vulnerability. According to Ruilin's agritech station head, when his office historically issued warnings of impending pest, disease, or extreme weather-related threats, farmers often had only 1-2 days to respond. Such immediate response times are also necessary in the wake of disasters. The relatively small sizes of *xiaohu* ("small household") and *zhongnong* holdings allow them to adapt quickly, thoroughly, and carefully. Limited landholdings allow *nongmin* to retain familiarity with the conditions of their fields, which in turn allowed them to quickly notice and respond to problems, such as those related to pests, diseases, and extreme weather. As a result, the station chief reports that prior to

2007, crop losses in Ruilin were typically minor and contained. Finally, farmers' small plots were conducive to productive rice farming when assessed on a per-mu unit basis, which relies on even water levels to avoid waterlogged or dried plants.

As they did historically, irrigation ponds remained critical to Ruilin rice farming. Each of Ruilin's 13 administrative villages contains an average of 100 such ponds, which farmers accessed using motorized pumps. In interviews, Ruilin *nongmin* often equated the condition of irrigation ponds – their depth, size, and the quality of their water – with that of the land and its harvests. So critical was the perceived link between irrigation ponds and the surrounding land that in interviews *nongmin* often did not consider them separable. For this reason, *nongmin* established informal but strictly enforced pond use rights. *Nongmin* also used their land for subsistence farming, growing vegetables and raising poultry, livestock, and fish. These practices allowed them to reduce their expenses and sustain themselves during years of poor harvests.

Ruilin: Agricultural modernization policy reform and its influence in Ruilin

Background

In the view of many state leaders, the farming structure that arose under the household responsibility system represented a barrier to national development. Deng Xiaoping wrote in 1990 that the “small, scattered, and weak” condition of China's farmers rendered them unable and unwilling to invest in the kind of large-scale, mechanized farming that could maximize their profits and securely feed the population (Zhang and Donaldson 2008). The need for reform gained new momentum in 1994, when state-fiscal reforms reduced rural government revenue. Rural officials responded by extracting more from *nongmin* in the form of agricultural taxes and

fees as well as land expropriation, which led to widespread protests. The state in turn gradually began to eliminate agricultural taxes and fees beginning in the late 1990s, a process formally completed in 2006 (Looney 2015).

The state also began pursuing initiatives intended to promote capitalized agriculture. These focused on linking China's small family farms pre- and post-production purchasing, processing and marketing activities with industry and consumers. To this end, the state promoted the expansion of leading enterprises and professional cooperatives in villages. By acting as supply and marketing agents for their surrounding farming households, these enterprises would allow small-scale farmers to increase profits by overcoming middlemen. At the same time, the state argued that these companies would act as modern farming models for *nongmin*, thus encouraging them to take investment risks. To facilitate investment in mechanized, large-scale agriculture, the state began providing subsidies and tax cuts to certified leading enterprises and professional cooperatives. It also increasingly eased restrictions on land marketization, removing laws prohibiting village outsiders from contracting arable land, extending land contracting terms to 30 years, and restricting periodic land adjustments (Gurel 2014; Schneider 2017).

By the mid-2000s, central leaders began articulating the need for foundational changes to China's agricultural production system. Under the banner of the "Building a New Socialist Countryside" policy unveiled in 2005, the state pledged to solve the problems of growing urban-rural economic inequality, an aging base of farmers, and sanitation by encouraging urban capital to invest in the countryside. That same year, the central government first proposed the idea of broadly cultivating new business entities and develop modern agriculture. The Fifth Plenary

Session of the 16th Central Committee of 2005 approved the Eleventh Five-Year Plan Recommendations, wherein it proposed the development of modern agriculture as the industrial basis for new rural construction. The 2005 No. 1 Document outlining the central government's annual policy priorities proposed that officials cultivate new business entities and develop modern agriculture. The 2007 No. 1 Document called for the development of large-scale farming enterprises to not just support small-scale farmers, but to supplant them by engaging in farming themselves. The 2008 No. 1 Document was more explicit, calling for the state to “accelerate the transformation of agricultural management methods” and “strengthen the management and transfer of land contractual management rights”. In turn, the central ministries of Land and Resources and Finance earmarked funds for construction projects in the areas of land consolidation; increase-decrease linked projects; reconstruction of low and medium-yield fields; and high standard farmland demonstration.

Agricultural modernization reform in Ruilin

The then-deputy head of agriculture in Ruilin's governing county of Yangchun took notice of the central government's embrace of large-scale farming and applied to the Land and Resources Bureau for land consolidation project funding. The county's bid focused on the Ruilin villages of Lin, Wang, and Mei, and proposed to build irrigation facilities, roads, and to redesign fields to facilitate large-scale farming there. The county and township governments coordinated with the provincial design institute on blueprints. In the view of the county deputy head, the bigger the farming scale, the better. To this end, plans called for increasing the size of plots to between 10 and 50 mu (.66-3.3 ha). It also included land transfer ratio targets on township officials' evaluations, which are linked with promotions and funding. Based on practices in neighboring

townships as well as the financial needs of *dahu* (“large households”, but denoting state-subsidized large-scale farmers) and *nongmin*, the county and township settled on a standard annual rental rate of 400 jin (200 kg) of rice per mu.

The county and township government sought out a Ruilin businessman named Zheng Feiyu to act as the county’s first large-scale farmer. Zheng owned the largest grain processing and input retail business in Ruilin. Officials requested that Zheng contract 2000 mu (133.3 ha) on a nine-year basis. Given his lack of large-scale farming experience, Zheng was reluctant. To encourage Zheng in this role, officials both threatened Zheng with punishments and enticed him by offering to pay one-quarter of his land rent as well as future rewards and compensation. In addition, Zheng could collect subsidies as a certified leading enterprise. Zheng then immediately sub-contracted almost all of his land to friends and relatives, most of whom were from outside the township, and with whom he established exclusive supply and marketing relationships. Yet because these relationships were informal, the township could continue to claim that Zheng operated a large-scale, modern farm.

The township tasked village committees with carrying out negotiations with Lin, Wang, and Mei villagers. Villagers greeted the officials’ plans with enthusiasm. Approximately half – most of whom were already leasing their land to a *zhongnong* – were happy to transfer their land to *dahu* in exchange for substantially higher rent. The majority of the remainder supported the plan to consolidate their farmland, thus easing their labor. Construction began in the middle of 2007. In order to compensate for a harvest of late rice lost due to construction, most farmers left to labor outside Ruilin. Upon their return during the 2008 Lunar New Year, they discovered that nearly

all of their irrigation ponds had been filled in and removed. The township retained only a handful to allow for laundry and firefighting. In addition, villagers' newly consolidated land was unlevel. As a result, the only way for most farmers to access water was through a pump connected to a new irrigation canal. Intended for large-scale production, these pumps irrigate hundreds and even thousands of mu per day, or the equivalent of a production team or administrative village. Thus, the use of such pumps requires a high degree of villager coordination. Further, access to them requires permission from township officials. Observing these conditions, many villagers abandoned their plans and signed their land over to *dahu*, primarily Zheng. Those who protested faced intense pressure and coercion from village officials. Ultimately, over 90% of farmers in Lin, Wang, and Mei villages transferred their land – amounting to almost 7,000 mu (466 ha) – to *dahu*.

The Yangchun county government redoubled its commitment to large-scale farming after the central government formally expressed its support in its 2008 Third Plenary Session. All farmers contracting over 100 mu (6.6 ha) through the government were eligible to receive 80 yuan/mu in government subsidies, up to 100,000 yuan in low-interest loans from the county rural credit union, and the subsidized coverage of 50% of their insurance. These subsidies attracted considerable interest from investors, and only one-third of all bids were awarded land. The township government formally tasked village committees with selecting *dahu*, with villagers and then Ruilin locals given priority. But the county and township governments also made it known that they prioritized bids of over 1,000 mu (66.6 ha) and required 500 yuan/mu security deposits. Ultimately, all five successful bidders contracted over 1000 mu, with the exception of one that contracted 925 mu (61.6 ha). Yet the capital requirements of contracting at these scales – over

RMB 1 million including security deposit, rent, and production costs – excluded the vast majority of Ruilin people.

These “mega *dahu*” – state subsidized farmers contracting over 1000 mu – experienced significant operational and financial struggles. Most of these *dahu* initially attempted to follow the practice of *nongmin* and use their land to double-crop rice. Harvesting and transplanting at such production scales within the two-week July window requires substantial labor. Yet the transfer process reduced the pool of potential laborers, as many of the dispossessed had left the town to pursue higher paying work in the cities. Other potential laborers were engaged in their own harvesting and planting. As a result, mega *dahu* initially had little choice other than to leave substantial portions of their fields unplanted. In 2009, *nongmin* output of late rice averaged 1000 kg/mu, while *dahu* harvested averaged only 500 kg/mu, and some produced no yields at all. *Dahu* responded by changing their planting pattern to the double-cropping of medium rice and winter wheat. Unlike late rice, medium rice has the advantage of not requiring transplanting, thus significantly reducing labor needs. But based on data compiled through fieldwork interviews, *dahu* rice production remained 200-400 kg lower than average per mu *nongmin* medium rice outputs.

Farm management issues are key to the problem. Even with reduced labor needs, mega *dahu* still require dozens of laborers to work hundreds of mu, rendering constant supervision impossible. Given low wages and little accountability, laborers have little incentive to work hard. Instead, they take shortcuts, such as pulling weeds and leaving roots behind and dumping heavy buckets of fertilizer. With little ability to supervise their landholdings, *dahu* farmers are unable to quickly

respond to natural disasters. As Sun (2017) points out, this is consistently reflected in insurance data. For example, a 2014 fungus outbreak affected 51.4% of *dahu* land, but only 35.9% of Ruilin *xiaohu*-farmed land. Similarly, severe weather in 2013 caused lodging (the weakening and collapse of stems) across 69.4% of *dahu* early rice land, but only 35.7% of *xiaohu* land (Sun 2017: 185). Finally, large-scale plots are typically less evenly graded than *nongmin* plots, and thus more susceptible to waterlogging and drying. As a result, mega *dahu* have averaged annual losses of 128 yuan per mu. In response, other mega *dahu* began following Zheng Feiyu's example and subleasing their land.

Rates of *nongmin* to *dahu* land leasing declined in many villages after the initial push of 2007-2008. Key to this decline was *nongmin* response. *Nongmin* farmers in most villages protested the potential loss of their ponds and – in the case of villages targeted for increase-decrease linked projects – their homes by registering collective complaints at village, township, and county offices and physically blocking bulldozers. When these efforts failed, some used hammers to break into irrigation canals or graded the unlevel land allocated to them by hand. A few villages were highly successful using these methods, with all or almost all of those willing to continue farming ultimately retaining their contracted land. I spoke with one villager who engaged in a successful collective protest:

The government must consider the common people. If you eliminate ponds, where will we get water? They are only concerned with elimination. They don't care if you live or die. Actually, the government plans it this way because they don't think about the possibility of us farming. All of the land is given to the *dahu*. When they reformed the land, we held a small group meeting to discuss the division of the land. In the meeting, the village cadres encouraged us all to stop farming and give the land to the *dahu*. They said we would be happier laboring outside. But some can go out to labor, and some cannot. Laboring is not as good as farming your own land.

But in most cases wherein, as in the initial stage, the project was of particular political or economic significance to the rural government, officials met *nongmin* resistance with overwhelming pressure. These efforts included threats to eliminate the businesses of holdouts' families, destroy holdouts' property and homes, and deny holdouts access to government services such as the state's minimum government subsistence allowance (*dibao*). One holdout villager told me that a village official threatened him, telling him "If you need something from us, you should die, and you will die!"

Many gave up their resistance in the face of these conditions. Fifty-eight year-old Zhang's land was targeted for land consolidation in 2012. He leased his land after a construction company filled in his irrigation ponds:

After the land was demolished, returning to farm again was really not easy. For many there was nothing else to do but give the land to the *dahu*. From the government's perspective, whether or not [the *dahu*] make money or manage the land well, whether or not the people that have been hired [to manage reconstruction] are responsible, these sorts of things are not important.

I spoke with a villager who initially resisted the pressure village officials gave him to lease:

But after they filled in the ponds I gave up. I could have fought. I could have continued. But it wasn't worth it. Things had changed. I knew I couldn't succeed in farming here.

In response to mega *dahu* production problems and the central government's promotion of smaller scale "family farms" in 2014, the rural government began prioritizing contracting at scales between 100 and 400 mu (6.6-26.6 ha), and restricted incoming *dahu* to landholdings of

600 mu (40 ha). Farming smaller scales has allowed family farms to largely overcome the mega *dahu* land and labor supervision problems. By doing so, family farms middle rice production averages 25% more than that of mega *dahu*. In spite of this, 100 mu (6.6 ha) landholdings remain still too large to accommodate early and late rice double-cropping. As a result, family farms, like mega *dahu*, also double crop medium rice and winter wheat. But winter wheat has proven unsuitable for Ruilin's wet and humid climate. Every year from 2014-2018 Ruilin *dahu* experienced extensive wheat crop losses due to fungus. According to the head of Ruilin's agritech station, over 90% of Ruilin *dahu* either lost money or broke even during those years. Of the 40 *dahu* with whom I spoke in 2017-2018, 25 stated that they were either not planning to renew their land contracts or were strongly considering doing so. Eight of these *dahu* stated that they were either reducing their scale of wheat farming or forgoing it altogether. The agritech station chief estimated that *dahu* farmers were leaving 15% of the township's arable land fallow for at least half of the year.

The state's 2006 elimination of agricultural taxes and fees reshaped rural governance. The state eliminated the primary source of rural government finance, replacing it with competitive development project funds, including those intended to promote large scale farming. Yet on average these funds filled only a fraction of the new finance gap. In turn, village, township, and county government budgets and staffs were reduced and redirected towards procuring project funds, enticing investment, and developing business links. In addition, the state centralized control over rural government budgets and staffing (Fock and Wong 2008, Zhao 2007). This led to considerable changes to the state's extension service system. The township reduced the full-time staff of its agritech station office from an average of five to one. Village governments

retained agricultural technicians, but also tasked them with other full-time jobs. Overworked village technicians ceased networking with households and simply posted new information on village government office bulletin boards.

The expansion of scale farming exacerbated these effects. What remained of Ruilin's government-provided extension services was entirely redirected to *dahu*. Township training courses shifted their focus to cater to *dahu* management interests and needs. The township assigned demonstration households status to *dahu* alone. The work of village government agricultural technicians was transferred to *dahu*. One such training *dahu* told me he was compensated a few hundred yuan annually for this extension work, and while the village government instructed him to educate *nongmin* on new information, he admitted that he rarely fulfilled his duties. In the place of linking with households, the understaffed township extension office sends information to Ruilin farmers on official QQ, WeChat, and SMS accounts – platforms that tend to exclude Ruilin's predominantly poor, elderly, and illiterate *nongmin* population. As a Ruilin villager put it, “*Nongmin* don't have any rural services. Everything is for the *dahu*”.

Input retailers have filled the void created by the departure of the state from extension work. The township agritech station provides information on pests and diseases to retailers, and most *nongmin* report that they rely on input retailers for information on new products, varieties, and techniques. Yet according to the township agritech chief, many retailers abuse their position, disregarding government advice in favor of recommending *nongmin* apply excessive quantities of the most expensive products. In the absence of effective guidance, Ruilin *nongmin* commonly

overuse pesticides and fertilizers. For example, the county government suggests that area farmers apply pesticides to their middle and late rice 4-5 times per season. Yet half of all Ruilin *nongmin* apply twice that amount. This in turn not only unnecessarily increases *nongmin* costs, it also leaves poisonous residues on rice, and increases pest resistance, which in turn requires greater pesticide use.

The expansion of scale farming in Ruilin has correlated with exponential increases in the use of petrochemicals and mechanized inputs. Between 2011 and 2013 the number of Ruilin *dahu* increased from 26 to 60, while their production area grew by over 80% from 13,616 kg/mu to 24,558 kg/mu. During that time, annual pesticide use among Ruilin farmers increased from 19 to 52 tons, while chemical fertilizer use increased from 3,255 tons to 4,482 tons. Between 2007 and 2013 the number of medium and large-sized tractors in the township increased from 4 to 201, while the number of threshers increased from 111 to 197.

These policies and their outcomes have resulted in the transfer of land to elites and non-Ruilin residents. In 2014 the township reduced the maximum contractable *dahu* landholding to 600 mu. But that year it also increased the security deposit to 600 yuan/mu. As a result, prospective *dahu* still require at least 100,000 yuan (US \$15,000) in initial capital, an amount still well outside the reach of most Ruilin *nongmin*. By 2014, the township had transferred 53% of its arable land to 65 *dahu*, but 80% of the total consolidated land. Ruilin villagers and *zhongnong* represented 11 of 65 *dahu*, but they held only 7.3% of all the township land transferred to *dahu*. *Dahu* from outside of Ruilin held around 5%. Of the remaining land, 46% went to those who earned their start-up capital working in industries outside Ruilin, 26% to those in township-based non-farm

industries, 6.7% to village cadres, and 8.5% to wealthy villagers. In addition, while by 2014 *hukou*-defined residents of Ruilin represented 40 of the 65 official *dahu*, 40 households were subcontracting at least 100 mu (6.6 ha). Of these unofficial *dahu*, all were *hukou*-defined outsiders. As a former *zhongnong* told me:

“No one who was a *zhongnong* in the past has become a *dahu*. If you want to contract land, you need social connections. We *nongmin* don’t have a social network, so the government won’t let us contract land. You might want to contract but you can’t. If I could contract land, I wouldn’t go out to do manual labor.”

Within only a matter of seven years, Ruilin has been fundamentally altered. While 6,873 residents were working as migrant laborers in 2007, that number more than doubled to 15,450 by 2012. By 2014, the pre-reform number of *zhongnong* had decreased by 80%. Along with the emptying out of villages and the loss of *zhongnong*, customs have also waned. Where every village organized a land festival up until the late 2000s, by 2018 only the largest three of Ruilin’s villages still continued the tradition. As evidenced in Tai Village (Figure 8), land consolidation has reduced vertical and horizontal landscape diversity. In the 2007-2008 phase of land consolidation alone over 320 irrigation ponds were eliminated.



2013	2015
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Figure 8. Tai Village, Ruilin Township, before and after land consolidation, 2013-2015 (Map data: Google, CNES/Airbus).

Conclusion

My fieldwork indicates that agricultural modernization reform has brought about the decline of Ruilin’s adaptive resilient features. Reform has homogenized land use and farming techniques, increased reliance on industrially produced inputs, drastically reduced grassroots leadership, and directed the priorities of rural officials away from the majority of those they govern. These outcomes have reduced Ruilin’s autonomy, diversity, and ability to learn and build knowledge capital (Table 2).

These changes do not necessarily portend imminent disaster. Gunderson and Holling (2002) note that maladaptive systems can also achieve high levels of resilience. Wealthy, tightly regulated systems – in resilience terms, those where potential is high and connectedness is great – may be able to apply resources, capital, and political command to resist external disturbances and internal variance. Ruilin, like its higher-level governing systems, may be able to muddle though.

But the resilience capacity of such systems masks their vulnerability. Having consolidated power, system components have little incentive to engage outside of small homogeneous networks. They become complacent, settling into uncoordinated, predictable routines. Communication, learning, and adaptation slow (see Sen 1989). As a result, such systems may fail to anticipate disturbances, and may lack the creative capacity to adequately respond to disturbances, leading to “rigidity traps”. They may also interpret disturbances not as warnings of structural failings, but as threats to existing power structures, and respond by imposing more centralized order. Rigid systems – having grown unaware of spatial diversity and given little incentive to consider alternatives to governing orthodoxy – are prone to creating environmental management policies misaligned with diverse conditions or competing interests (Cumming et al. 2006). For these reasons, “all such systems are likely to have the seeds of their own destruction built in” (Holling 2001: 400-401).

Ruilin’s own not-so-distant past suggests alternatives. For almost 1,000 years rural societies in the historical Yangzi Delta buffered disturbances and increased agricultural productivity, all without the aid of capital-intensifying and mechanizing technological innovation. The presence of land use, governance, and economic hallmarks and practices that fostered and reflected diversity, autonomy, knowledge exchange and protection were essential to this success. These societies persisted and thrived through their ability to recognize and interpret place-specific ecological bellwethers of disaster. In Ruilin’s new, homogenous landscape, there are increasingly few signs and interpreters.

CONCLUSION

The week before I departed Ruilin to return home, I took the bus to the municipal capital to visit a colleague. When I boarded, I saw Li Yao of Kuning village. Li was the first person I interviewed during in my second iteration of fieldwork, which had begun almost 10 months prior. I had not seen him since then. He told me he was visiting the city to help his son with some household repair work. When I first spoke to Li, we were sitting in Imperial Censor Square outside of Grace and Honor Temple. When I asked him about his response to agricultural modernization then, he told me of his dismissal of officials' thought work and the rebuilding he did of his demolished land. He seemed proud of his community's ability to retain their land against what he described as selfish township officials. "When they come around talking, we don't listen," he said. "They only care for themselves."

That day on the bus however, he looked exhausted. I told him that I found it interesting how, during the course of my interviews, villagers throughout Ruilin spoke of their respect for Kuning villagers' unity and ferocity. He smiled. "But life is very hard for us too," he said. "There are many poor people in Kuning. Very few wealthy people. Very few stable people. We're all just holding on." I told him about the township mayor's plans for economic development via organic farming and tourism. Li was unimpressed:

I've seen so many mayors come and go, all with big ideas. They all talk and serve themselves. He'll be gone in 2-3 years. They all leave.

I asked Li if he would consider moving to the municipal capital in the future to join his son.

"No," he said. "There are no jobs there, and what jobs there are aren't good. I will stay in

Kuning.” After a few minutes I let him rest. He folded his hands on his crossed knee, stared out the window, and did not move until we arrived in the city.

On my way home the following week, I arrived in Shanghai and hired a taxi to take me from the train station to my hotel. The driver, Mr. Xu, asked me what I was doing in China. When I told him I was conducting research in Ruilin, he looked at me amazed. He told me he was from neighboring Yaomei Township. He had come to Shanghai after Yaomei officials began consolidation there in 2012. He said he was happy to give up farming, but life in Shanghai was hard. He and his wife moved with his daughter and her family in an apartment on the outskirts of the city. They pay over RMB 2,000 per month for their share of the rent, which leaves with little for savings. He said he and his wife often feel in the way in their daughter’s cramped apartment, but that they can’t afford to live on their own. He resented his job as a taxi driver:

It’s terrible! People here are so rude. Just earlier today a man was yelling at me because he was late for an appointment and he wanted me to drive recklessly. He called me stupid. When we stopped in traffic on the freeway he got out of the car and never paid me.

But his life in Shanghai was still better than the one he had in the countryside, he insisted. “Life there is too poor,” he said. “There is no future there.”

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When I first arrived in Ruilin in March of 2014, the township officials with whom I met clearly laid out for me the picture of change unfolding there. Everyone was leaving farming to the new

large-scale farmers, and they were happy to be doing so. In this respect, Ruilin’s experience seemed to align with that of the rapidly urbanizing country as a whole. Ruilin and China were developing, officials told me, and transitioning to large-scale industrial agriculture was what developing countries did. Many villagers supported this narrative in my early interviews. They often responded to my questions about leasing with variations of the same answer: “Farming is dirty and difficult. There is no money to be made, and thus no future. It is better to lease.” The landscape also reinforced the officials’ statements. Looking out the window to the east while driving north along the highway connecting the township to the municipal capital I saw nothing but an expanse of large-scale farms (Figure 9).



Figure 9. Large-scale farms in Yuancun, Ruilin township. *Photo by the author, March 2014.*

But I have argued here that the story of Ruilin’s modernization is much more complex one. When Ruilin officials presented their offer of land leasing to villagers and backed it up with persuasion and coercion, they were encountering villagers with differing and conflicting perceptions of the land and modernization. These were informed by a range of experiences as well as – among other factors – received stories and discourses of value and development. For all, trauma, the land, and modernization were essential to their understanding of their homes – regardless of the extent of their direct personal experience with these things. Ruilin was decimated during the Taiping Rebellion, along with most of its population. Those who relocated to Ruilin after the war were fleeing hunger in provinces such as Hubei and Henan. When modernization came in the form of the Great Leap Forward, it too resulted in tragedy. The opening of Ruilin to Westernized modernizing reforms in the 1980s also caused instability.

But this common history did not result in a common response to agricultural modernization. Rather, villagers responded to the instability of the post-Reform era differently and in relationship to one another. While a handful of villages joined together to provide the security lost by the state’s retreat, households in other villages turned inward to seek security for their families through wage employment and education. But these responses were in large part co-productions. Many villagers’ sense of insecurity stemmed not only from their abandonment by the state, but also by the intimidation they experienced at the hands of their neighbors in “solidarity villages.” These contrasting and co-constituting experiences shaped differing perceptions of the value of land, farming, and the village, which in turn shaped competing interpretations of the meaning of common historical experiences as well as collective identities. By aligning Ruilin history and memory with development politics and by constructing common

village identities, villagers are engaging in place making – defining the essence of place, in this case often to rationalize *not* belonging. More than just a post facto response, place making has determinative potential, reasoning a collective response.

But this place-making also took place in dialogue with officials' persuasion and coercion, as well as the changing landscape. Many villagers' sense of belonging on the land is tied to an understanding of value derived from their role as contributors to the national project of restoration. Officials undermined these claims through thought work that sought to frame the state's policy vision as hinging upon the withdrawal of villagers from the land, thus framing holdouts as selfish obstacles to collective improvement. They also sought to undermine the value of the village and subsistence farming by aligning personal value with wage work and using state development discourse to argue for the inevitable replacement of villagers by large-scale and mechanized producers. When this failed, officials threatened holdouts, demolished their land, and filled in their irrigation ponds. While this succeeded in opening the land in a number of villages to large-scale farming, many early villagers impacted expressed to me their intention to return at the end of the lease term. As modernization expanded to villages throughout Ruilin, officials referenced the changed landscape as evidence to support their thought work. As holdout rates declined and almost no villagers returned to retake their land, many reasoned their decisions by echoing officials' thought work in conjunction with the changed landscape.

Contrary to the story of unqualified success offered by officials, agricultural modernization has been a failure. Tasked with generating revenue by working to enact their interpretation of the state's development vision, understaffed and with little experience in Ruilin, the Ruilin

government implemented a development plan with little consideration for its suitability given the township's ecological conditions. Beyond the short-term failings, agricultural modernization undermined Ruilin's long-term capacity to buffer disturbances by reducing its grassroots leaders and land use diversity.

Common to these outcomes is the influence of place-making as a form of territorializing. The state's approach to rural governance and administration reflects its rational empiricist understanding of the countryside as a transient development phase rather than a varied and resilient space. Officials then drew on this discourse in their development blueprints and thought work. In constructing their own place narrative of Ruilin, they rendered Ruilin's material, cultural, and historical particularities meaningless. The modernized landscape then became an independent signifier of that thought, naturalizing the inevitability of industrial farming and the disappearance of small-scale subsistence farming. Challenges to security such as that posed by the arrival of agricultural modernization prompted villagers to engage in their own place-making. Place making here is about more than rationalizing a decision. As Mills (2010) argues, it is about establishing a sense of order and, along with it, hope. These competing narratives of the essence of Ruilin in turn represent their own kind of threat to communities' identities and order. By entrenching these place narratives in selective readings of the past as well as the material landscape, these stories become powerful, taking on a determining potential. Narrative is essential to understanding why agricultural modernization unfolded despite its poor suitability in Ruilin; why it has unfolded so unevenly across Ruilin's space; and why the state at large has perceived it as a success.

As Li Yao and Mr. Xu's stories make clear, for many villagers "winning" in this fight – whether defined as retaining land or gaining liberation from it – brings little glory. For so many rural people, whether they labor in the city or work the land, making ends meet and even retaining dignity remains a struggle – though that condition, this study shows, is neither necessary nor inevitable.

Contributions to the literature

In these chapters, and in the dissertation as a whole, I draw on and contribute to the following literatures:

Political Ecology and Political Economy of Development

Key studies in these fields explore the influence of modernist discourse and administration on social and ecological change. I contribute to this literature through the notion of potential, which I use to explore the causes of both rapid change and extreme variation between villages. Where prominent studies in these fields posit that the legitimizing premise of modern states necessitates that they sparingly employ coercion, I take an opposite view. Applying concepts from immanent materialism and Foucauldian biopower, I argue that Ruilin officials' use of coercion is not exceptional to China's authoritarian context. Rather, it stems from modernist governance features, which isolate officials and allow them to flexibly position themselves as both subjects and embodiments of the state. This study also contributes to this literature by showing how completed development projects – discursively embodied in the material landscape – exert powerful influence on perceptions and practices over the long term.

Critical Agrarian Studies

Studies in this field are often concerned with the question of peasant persistence. In so doing, prominent studies have considered the influence of memories and historically and materially-based notions of identity, often constructed in response to threats. Drawing on work aligned with critical place studies, I contribute to this literature by highlighting how rural communities also construct such notions of place and identity in dialogue with one another over time. In Ruilin, communities elided the influence of their often shameful local histories on their decisions to retain or give up their land by framing them in terms of identity and memory. In making this contribution, I trouble the notions of agency and value often referred to in literature on these fields. In this study I also contribute to this literature by adapting the resilience analytical framework using contextualized historical data.

Critical Place Studies

Work in this field arose in part in the context of growing anxiety in the West brought on by the expansion of globalization, inequality, and gentrification. In reaction to the perceived threats posed by these phenomena to security, belonging, and entitlement, some groups constructed essentialist, historically-based narratives in an effort to determine the direction of development in their communities. By applying this lens to the context of rural China, I contribute to this field by showing that place-making can also emerge in the context of a top-down state led development campaign. But when the threat to order takes the form of the state, this has implications for how peasants perceive themselves as belonging within a broader national project of renewal, and thus for their place-making and resistance.

China Studies

Literature in this field often focuses on the role of central government policy, administration, and development discourse on social and environmental, or the rural government acting as a kind of power broker between enterprises. This study contributes to this literature by highlighting the role of villagers themselves in interpreting and co-producing the state's development discourse. Echoing my earlier comment, it also shows the long-term influence of the material landscape on both officials' ability to implement policy and villagers' long-term decision-making. Finally, it contributes to studies of resistance in rural China. Where these often posit the role of villagers' perceptions of rightful claims to land, I show the importance of notions of collective belonging in driving responses to land development projects.

Outstanding questions and plans for future research

Over the course of this research I explored a number of topics that are unaddressed here. These include the influence of modernization on household gender relations; the experience of professional farmers; post-farming life for elderly acquiescing villagers, including the influence of gambling on savings and security; and the influence of village customs on solidarity bonds. I plan to write about all of these topics in the coming years.

This study also raises questions needing more research. Among them, is there a relationship between village-level responses to the Great Leap Forward famine – including resistance to officials' demands for grain acquisition – and their resistance to modernization? While I know that Tangcun village has lineage connections with Kuning village, do other solidarity villages have similarly deep familial roots in Ruilin?

Finally, where are Ruilin's reforms headed? With agricultural modernization work largely completed, township officials are looking for new sources of investment. In response to the central government's promotion of sustainable development, Ruilin officials are collaborating with investors and select large-scale farmers to remake the township as a tourist hub and organic farming area. Plans call for a recreational area that draws its theme from Ruilin's connection to the Three Kingdoms era; an herb garden and horticulture center; u-pick farms; and the construction of hotels and restaurants. An accompanying marketing campaign works to promote Ruilin as a place of purity and respite by highlighting its historical ties to Buddhism, its modernized farming facilities, and the name of the township itself. If implemented, what influence will this project have on Ruilin's uneven development geography and its resilience practices and features? How will this new conception of Ruilin-as-place and organic farming influence villagers' perception of the village, the land, and farming? How will participating farmers link with consumers? Will there be a role for villagers? All of these questions demand exploration, including through follow-up research.

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