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Culture Or Institution: The Dual Nature of Clan Influence in China

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Abstract Cover Page

Culture Or Institution: The Dual Nature of Clan Influence in China

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Abstract

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By Christopher (Kefu) Cao

This study reevaluates the influence of clan networks on rural Chinese society by addressing the dual role of clans as both cultural and institutional entities. Previous research has struggled to disentangle these aspects, as clans can operate as cultural agents in some contexts and as institutions in others due to historical Communist intervention and geological differences. By introducing a series of novel datasets that incorporate measures of red culture and regional cleavages, this study offers a new perspective on understanding clan influence both methodologically and substantively. The findings reveal that the positive effect of clan networks is not robust and unconditional when treated as a form of institution. This study also provides an example of using this dataset to investigate micro-level norms and beliefs thereby providing support to macro-level observations. This analysis contributes to the broader literature on Chinese politics by offering a more differentiated understanding of clans' roles while also speaks to an emerging literature of revolutionary legacy.

Dissertation Cover Page

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Contents

1 Introduction

The functioning of society relies on cooperation and coordination, which may be fostered through various means. Among many approaches, Greif and Tabellini (2017) emphasizes the prominence of clan networks as a way of facilitating such pro-social behaviors, particularly in East Asian societies. Such clans were bound by familial ties and served important functions in promoting collective economy and maintaining order. In this paper, I illustrate the dual nature of clan networks. On the one hand, clan networks are historically the governing institutions of rural communities that had almost unanimous and universal power. On the other hand, clan networks serve as the basis for the transmission and preservation of Confucian teachings, traditional cultures, and social norms.

Prior works on clan networks emphasize their roles in promoting rural governance. Most such studies rely on regression frameworks with a national sample. I argue that this approach is problematic. Tracing the history of modern China, several political parties and factions sought to establish direct control in villages, with only the CCP succeeding in certain areas by removing both the institutional foundation and moral supremacy of clan networks, effectively dividing the country into two distinct parts. The dividing line also coincides with a geological division between Northern and Southern China. As such, regressions using a national sample can yield false positive results that conflate the effects.

In this paper, I propose a new dataset and a new framework to analyze the effect of both clan networks and CCP influence. First, I hand-collected a dataset on the date of liberation for all 2,957 counties in China as of 1955 from county-level gazettes. I calculate the log number of days between CCP occupation and the start of the Korean War on October 8, 1950, as the primary measure of red influence. Based on war history, the CCP conducted careful reforms in parts of the country it occupied prior to December 1948. With this fact, I label counties liberated before this date as red counties. Second, Northern and Southern China differ in many aspects due to historical and natural reasons, as emphasized by Hsiao (1967)

and Fei and ui Jung Liu (1982). Such structural differences have many manifestations in key measures such as genealogy records (clan books) (Cao, Xu and Zhang, 2022), rice suitability (Noblit, 2022), clan temples (i Miquel et al., 2015), and other measures of Confucian culture (Chen, Kung and Ma, 2020). Instead of taking a stand on any particular measure, I extract two principal components using Principal Component Analysis (PCA) from a range of eight variables that are expressions of this cleavage.

In the first application, I replicate the results from Wang and Lu (2020), in which the authors study the effect of clan networks on rural public goods provision, an effect observed by many other works. I find that this alleged effect is not robust to the addition of variables measuring red influence and principal components. Specifically, while the effect is significant and substantive in the original regression, it disappears after the inclusion of new variables. This false positive result is likely driven by the CCP's withdrawal from village politics rather than reflecting the effect of clan networks *per se*. Treating clan as mere culture in places where it indeed serves as institutions can lead to confusing results.

Next, I use the framework from Chen and Lan (2017), where the authors find that clan networks contribute to excessive killings of livestock during the collectivization reform in China from 1952 to 1957. The authors suggest a possible elite capture mechanism, where clan heads force their members to kill livestock to resist the reform. Their results are robust to the addition of principal components as well as measures of red culture. I argue that the scope of this study occurs in an era where part of China was under red institutions and the other part under clan institutions. The comparison they make is therefore valid.

Having stated the institutional side of clan networks, I move on to provide a use case of the new dataset from the perspective of culture. Using survey data from 2012 and 2014, I found that people who live in regions with higher levels of red culture are more likely to exhibit trust towards public agencies and individuals with public posts. In the meantime, they are also more likely to distrust private agencies that might carry a public function, such as religious organizations. Finally, I show that respondents from red regions have more

egalitarian attitudes on gender issues, supporting the division of housework while disdaining traditional gender roles. These micro-level evidence provide support for the observation that the CCP reformed both the institutional side of clans and the cultural side of traditional norms, which emphasized sexism and reliance on family networks. It is also congruent with a view on the complementarity of public goods provision with stronger formal government presence.

Finally, I compare the new dataset with other existing datasets on red culture and revolutionary spirit. I argue that these measures do not adequately capture either red culture or revolutionary spirit based on historical facts. Scholars who use these measures either in their main specification or in robustness checks should reevaluate the validity of doing so.

This paper contributes to a sizeable literature that explores the consequences of clan networks for a range of outcomes, both political and economic. Earlier studies tended to mix the dual nature of clan networks even when using the same dataset (i Miquel et al., 2015; Li, Wang and Xue, 2024; Zhang, 2020; Cheng et al., 2021; Greif and Tabellini, 2017), which is problematic both theoretically and empirically. This work also contributes to our understanding of the consequences of revolution in Chinese history that warrant detailed analysis in their own right, speaking to the emerging academic interests in the legacy of revolution set forth by Liu, Lu and Yuan (2025), Chen and Xie (2025), and Chen et al. (2020). Finally, the dataset on red culture and North-South cleavage should be of use to scholars who utilize within-country variation in the presence of other variables and policy reforms.

The rest of the paper is organized as follows. Section 2 provides a brief overview of the dual nature of clan networks and political efforts to reform and incorporate them, paying attention to the successful experience by the CCP. Section 3 provides a critique of existing works that fail to distinguish this dual nature, following a framework that potentially amends these issues. Section 4 presents an overview of the data. Section 5 discusses the replication results of the institutional and cultural impact of clan networks and red reform. Section 6

briefly discusses the advantages of the dataset compared to alternatives.

2 Background

2.1 Clan and Local Control

The prominence of kinship associations or lineage groups in East Asian societies is well documented. Many studies show that these organizations promote public goods provision through cooperation and coordination, particularly in environments with weak formal institutions (Tsai, 2007; Xu and Yao, 2015; Greif and Tabellini, 2017, 2010). In China, a clan is a consolidated patrilineal group made up of component families that trace their descent from a shared ancestor. The compilation and publication of genealogy books documenting clan membership can be traced back to the *Zhou* Dynasty (Hsiao, 1967). A more "modern" form of clan organization emerged during the *Song* dynasty (960 - 1279 AD), following the transition of official selection from hereditary succession to civil service examinations. Land-owning scholars formed clans to preserve intergenerational transmission of wealth and privileges, and these new clans strengthened their positions by monopolizing the interpretation of neo-Confucian moral and political teachings, which became the basis for civil service exams.

Although clan organizations varied in size and routines in post-Song China, they shared several common characteristics. First, ancestral halls were constructed to honor ancestors and served as the central locations for preserving clan culture, conducting ritual ceremonies, and maintaining discipline. Named after the founder of the clan's lineage, ancestral halls symbolized the collective identity of the clan (Freedman, 2021). Their construction and maintenance often required collective contributions, either voluntary or coerced, which made these structures targets during armed conflicts between clans (Huang, 1985).

Second, clan ties were evident in the clan's ability to mobilize labor and promote mutual support. Clan members were required to provide labor for public land, often surrounding ancestral halls, and engage in other forms of communal labor, including maintaining livestock, building roads, and constructing irrigation systems and reservoirs. These activities fostered cooperation within the clan, supporting the economic well-being of the community.

Third, male clan members gained recognition by having their names recorded in genealogies, which detailed the accomplishments of eminent members, such as war heroes and government officials, as well as notable clan events. Thus, clans were more than social arrangements—they played significant economic and governance roles. Though clan values emphasized moral codes like loyalty, honesty, and filial piety, these organizations also carried elements of sexism and extreme conservatism (Fei and ui Jung Liu, 1982).

The relationship between clan leadership and formal governmental control has received historical attentio. Under imperial China, (Wen, 2007) famously stated, "the emperor's power does not reach below the county level." Villages relied on self-governance for centuries while the emperor's bureaucracy ruled only symbolically. Fei et al. (1953) described this as "dual-track governance" where the emperor ruled through a hierarchical bureaucracy at county and above, while clan leaders and local elites exercised real power in rural parts, which contained 90% of the population. These two sources of power converged at the county level *xian*, where imperial officials often had to seek the approval of clan leaders for policy implementation and rely on them for resource extraction. Thus, there was little distinction between clan leadership and village governance, and clan leaders acted as tax-farming agents of the emperor. This governance system, though efficient for reducing administrative costs, allowed larger clans to evade taxation and hide population figures from the central government, occasionally leading to violent uprisings (Chen, Fan and Hao, 2023).

The system of dual control, in which the imperial court only reached the county level and relied on local clan networks for governance, had a logic of its own. On one hand, it minimized governance costs for the emperor, aligning with his moral obligation to levy

fewer taxes. The imperial court allowed clan leaders to wield local power in exchange for assistance in conflict resolution and resource extraction in exchange, thereby forming a stable alliance (Wang, 2024). On the other hand, the supreme power would bear with the fact that local societies were in fact autonomous. As such, the rotation of county-level officials is extremely frequent as these people must handle the clash between provincial-level leaders and local elites (Li, 2005). Local autonomy in rural China was ensured through two mechanisms. First, the imperial court depended on clan networks and elites for raising funds, resolving local conflicts, and providing relief during major disasters. In return, local elites were formally recognized by the emperor. Second, villagers turned to clan leaders, elders, and educated members for local governance, creating a self-organized system where clan and village leaders wielded considerable influence over the daily lives of their communities. As such, Zhang (2007) argued that clan elites were a combination of “economic capital, social capital and symbolic capital”.

2.2 Failed Attempts to Replace Clans

After the Opium War in 1840, local powers eroded the tax extraction capacity of the Imperial Qing dynasty. Sensing the weakening of the central government, local tax-collecting agencies, typically clan heads, often ignored central orders to raise tax rates or refused to turn in taxes altogether. The weak administrative capacity and the need to suppress uprisings, such as the *Taiping* Rebellion, forced the Imperial court to abandon local control and turn to customs and tariffs as the primary sources of revenue (Ma and Rubin, 2017; Chen, Fan and Hao, 2023). By doing so, the Imperial court effectively relinquished both economic and social control over rural China to rural elites.

Following the downfall of the dynasty in 1911, China entered a period of warring factions until the Nationalist Party (Kuomintang, KMT) nominally unified all factions in the late 1920s and made Chiang Kai-shek the military dictator to "supervise" the country

(*xunzheng*). Borrowing from the Soviet experience, the KMT established a hierarchical party cadre system and subjected political matters to both governmental oversight and party control. As Chiang Kai-shek famously put it: "One party, one ideology, and one leader." In his vision, every central directive would reach all citizens if party organizations extended to every village. He specifically instructed grassroots party organizations to incorporate as many local clan heads as possible into the party. While this unconditional inclusion allowed the KMT to rapidly expand sixfold in the 1930s, it also affected the party's implementation mechanisms by legitimizing the power of clan heads (Wang, 2003).

When the government sought to curb rice price gouging during a major shortage in 1940, land-owning clan heads resisted the policy by formally stalling the process and informally hiding information on price-gouging behaviors even when facing inspections from central party (Chen, 2023). Lacking necessary apparatus to implement policies, the inclusion of clan heads into party system serves more as empowering rural elites. The same scenario occurred in 1941 when the KMT announced a transition to taxation in kind in response to sky-high inflation. The KMT further incorporated clan heads into the system by granting them seats in county-level legislatures and acquiescing to their provisional powers in exchange for their aid in implementing the reform. Clan heads were able to set tax rates at will and charge extra fees as long as they delivered the required amount to the higher authorities (Yin, 2017). The formal recognition of clan power undermined the extraction capacity of the KMT government; the more a brokerage class retained in rents, fees, and other outgoings, the less the government received to fund its military when fixing the total output of agriculture (Duara, 1991). Chiang Kai-shek's party eventually failed to raise an army of five million and relied almost exclusively on U.S. aid during the Second Chinese Civil War.

While the official KMT government fully conceded to clan powers in local politics, early CCP experimentation was no better. After being purged by the KMT in 1927 and 1929, the CCP central leadership similarly ordered the unconditional absorption of peasants

and workers to strengthen the party. Some branches even set quotas for each sub-branch. Pressure from above forced local branches to rely on existing social networks, such as clan. As a result, several villages in Guangdong province became "commie villages," where almost every villager was a CCP member, and the village head served as the sub-branch party secretary. When clan networks co-opted party networks, party secretaries used their power for clan interests, organizing attacks on rival villages and refusing to conduct land reform when it targeted land-owning individuals from their own clan (Wang, 2002).

Clans began to decline in some regions as early as the eighteenth century (Huang, 1985), but their nationwide demise has not been complete even today. Like many other early Chinese Communist Party (CCP) leaders, Mao Zedong belonged to a major clan in Hunan province and was highly critical of clans and the economic and governing systems they represented. He was devoted to replacing the clan system with modern political institutions and promoting a narrative of class struggle over feudal protectionism. In 1952, the legal dismantling of clans coincided with agricultural collectivization. Local ruling units were replaced by People's Communes, which reported to district-level party organizations and were often led by outsiders (Yu, 2001). These governing bodies confiscated ancestral halls and other clan-owned properties while banning collective ritual ceremonies, among other actions.

Nevertheless, clan networks proved resilient. Many ancestral halls were recovered, and genealogy books were recompiled after the People's Commune system ended in 1982. Clan heads largely restored their positions in various ways. For example, Tsai (2007) documented that 14 percent of villages in her sample retained at least one ancestral hall. A recent report from *The Collection of Genealogies: 1239 - 2014* claims that out of the 4,064 clans who compiled their genealogy books after 1949, 1,125 had genealogy books before 1949, whereas 2,939 clans compiled for the first time after 1949. Of the 1,125 who recompiled, 761 did so again after 1982.

2.3 CCP's Efforts

In accounting for its success in winning the Second Chinese Civil War and establishing a regime, the CCP offered a narrative linking economic inequality and revolution. The CCP argued that the unequal distribution of land and other important means of production in rural China led to general poverty. Peasants who suffered from grievances had a natural motivation to join the revolution and support land reform. As a result, when CCP forces entered a locality, long-oppressed peasants joined the revolution to overthrow the existing social order.

This argument is challenged by scholars who offered detailed accounts of the correlation between land distribution and revolutionary behavior. Historians and anthropologists provided ample evidence that clan institutions—and thus land concentration—were strongest in Southeast China and well-developed in Central China, while Northern China was less prone to such influence (Ai-li, Freedman et al., 1970; Levy, 1951; Liu, 1959; Fei, 1946). Huang (1985) pointed out that Northern China, on average, was economically more equal compared to the *Yangtze River Delta*, with land-owning elites charging lower rents. Yet communist strongholds were more likely to be established in the north rather than in the south, where inequality was more severe and prevalent.

Huang (1990) further argued that most attempts to establish strongholds in the south, where more than 70% of peasants were tenants and paid excessive rents to landlords, ultimately failed. Esherick (1998) also noted that even in *Shaanxi* province, where the CCP central agencies were located, the development of party organizations, measured by the number of party members, was inversely correlated with the level of land concentration. Similar situations occurred in other parts where the CCP established formal control (Huang, 2005). Wang (2002) agreed that even in rare cases where party branches infiltrated regions with stronger clans, smaller clans and villages were much more likely to join the revolution than larger ones. Founding Four-Star General *Su Yu* also wrote in his memoir that although

clans in *Jiangsu* Province provided substantial financial and intelligence support to the CCP's army during the Japanese invasion, they were reluctant to let CCP officials interfere with local businesses. Therefore, the primary factor determining whether a communist organization could exist and thrive in a locality was unlikely to be economic inequality.

To provide a better understanding of rural power dynamics, He (1997) offered a formal framework distinguishing between a moral peasant and a rational peasant. On one hand, peasants feared that any benefits they received from CCP reforms, ranging from land redistribution to rent reductions, would not endure. These benefits could even lead to retaliation once CCP troops left the area. On the other hand, the moral authority of clan networks intimidated peasants from disrupting the existing order. Hinton and Magdoff (2008) documented many instances of peasants cooperating with the CCP during the day while secretly returning whatever they received to clan heads at night. Even moderate rent reductions drew disapproval from poor tenants, who argued that the changes "violated traditional morality" or were "unreasonable since it did not happen to older generations" (Li, 2006). Thus, class conflicts and economic inequality in rural China were absorbed and dissolved by norms and clan networks.

Following this line of research, Li (2008) argued that land reform was more a social and cultural reform than an economic one. The CCP's success in establishing its own extractive apparatus to fund the war depended on how effectively it replaced traditional rural elites and norms. Without such measures, even iron-fist policies supported by troops can very easily fail. The payoff structure of governing rural matters dictates that any intention to direct governance cannot sustain under existing rural power structures. The power of clans is endogenous and sponteneous. Earlier KMT and CCP failures to establish direct control over villages demonstrated that purely economic and institutional approaches were insufficient.

Learning from earlier failures across party lines that focused exclusively on institutions, the CCP began to reform villages with an emphasis on norms in Northern China after the Japanese invasion. This process combined military actions and political mobilizations that

eventually engulfed entire village populations. When the 115th division of the CCP's army first entered *Hebei* Province in 1938, for example, they quickly dispersed into smaller units across villages, accompanied by party officials. In each village, party officials conducted economic reforms and trials of "bad" landlords. During these initial movements, officials selected enthusiastic and "good" elites to replace the old ones. These new elites further organized villagers to join pro-Communist associations, ranging from peasants' associations to patriotic children's associations, until the CCP constructed an all-encompassing "network of power" (Huang, 2014).

To ensure the survival of this new village order, the CCP also employed campaign-style mobilization techniques on both ordinary people and officials—a term familiar to modern Chinese scholars (Huang, 2007; Li, 2015, 2010, 2013). In *Zhangjia* village of *Wendeng* County in *Shandong* Province, for instance, local documents show that campaign-style movements were conducted almost annually under various pretexts after the first party branch was established in 1942: tax and interest cuts in 1942, liquidation in 1944, civil-military support in 1945, land reform in 1946, land review in 1947, etc.

Continuous mobilizations served several functions. First, each campaign was a process of wealth and power readjustment. Traditional elites were stripped of both their moral authority under Confucianism and their institutional endorsement from the Imperial court or KMT central party. The legitimacy of new ruling elites—who were often economically and socially inferior—stemmed from their active participation in these campaigns and subsequent CCP recognition. The solidity of their power determined solely on how well they carried out central wishes. Second, these campaigns redefined a core question of the CCP revolution: "Who is our friend and who is our enemy?" according to Mao. In autonomous rural societies, villagers had no inclination to rebel against clan heads due to moral and traditional constraints. These norms helped elites to absorb and dissolve conflicts. CCP campaigns reshaped people's identities into a dichotomy of exploiters versus exploited, removing any constraints from the past (Li, 2013). This strategy proved effective, as for the

first time in centuries, the central government was "actively present" in rural societies (Li, 2015).

By the founding of the People's Republic of China (PRC) in 1949, most regions of Northern China had replaced old norms and clan networks with new norms and Communist networks. However, Southern China lacked this experience. At the time, the CCP was on a tight budget to fund both its state-led Stalinist heavy-industry-oriented development model (Li and Yang, 2005; Lin, 2009) and the Korean War in 1950. Moreover, taking over major cities in the South left the CCP short on trained officials to guide comprehensive reforms in Southern village societies. Even after several rounds of repression, the CCP could only appoint clan members who were at least willing to cooperate with resource extraction (Zhang et al., 2021).

3 Culture Or Institution

Studies on the effect of clan networks on various outcomes through the lens of institutions abound in political science. To name a few, Xu and Yao (2015) uses the population share of the three largest family names to measure the "concentration of village power." Tsai (2007) relied on indicators such as the existence of ancestral halls and genealogy books. More recently, Wang and Lu (2020) counted the number of family names for each county and constructed an index of family name diversity. All of these studies find a somewhat positive correlation between various measures of clan intensity and better public goods and services. Economists have also studied the impact of clan culture by examining its influence on corporate behavior (Li, Wang and Xue, 2024; Fan et al., 2023).

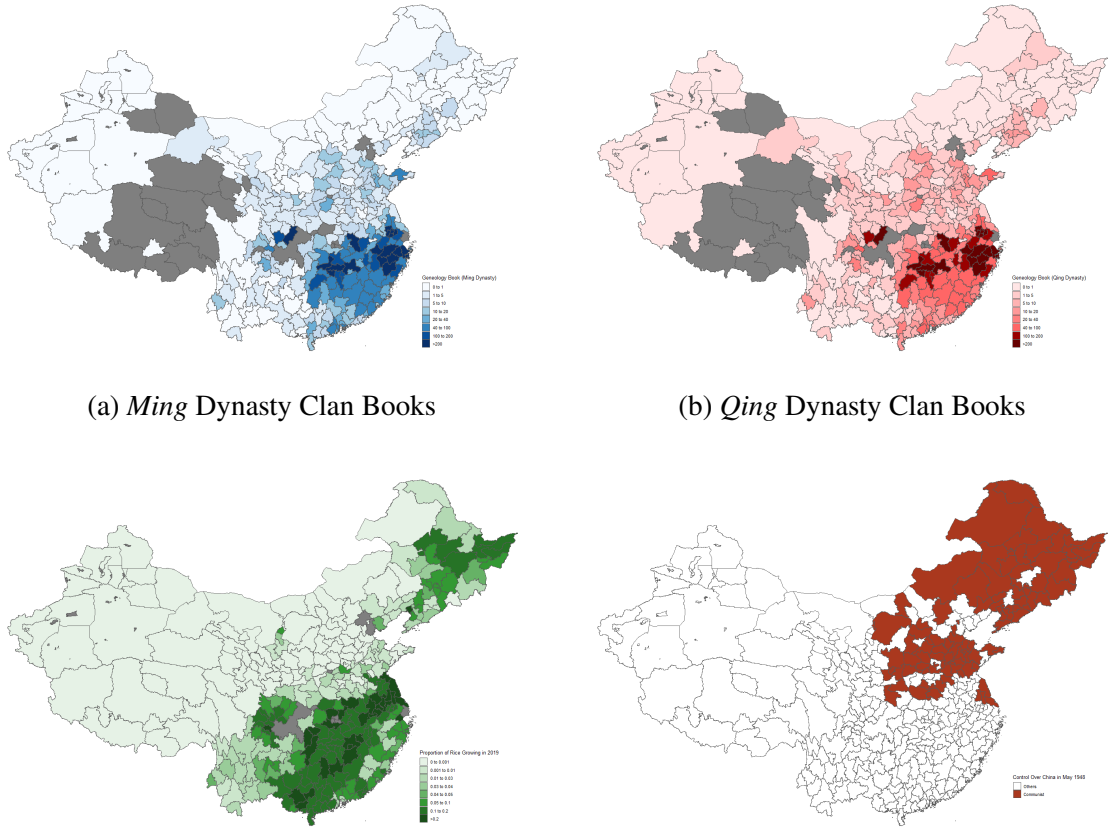
I argue that these studies are flawed both substantively and methodologically. First, none of these studies clearly indicate whether clans should be treated as an institution that was left untouched during the CCP's revolution or as a cultural norm whose institutional

legitimacy had already been removed. The widely used dataset of clan books (genealogy books) is seen by some as a proxy for clan culture and by others as an institution. And only in rare cases do authors consider the institutional aspect. For example, Cheng et al. (2021) noted that many corporations in places with allegedly higher levels of "clan culture" received funding from village collectives and that early founding members often belonged to the same clan. The existence of modern clan networks and supporting economic structures that mimic traditional ones especially in Southern regions is better viewed as an institution rather than culture.

Second, none of these studies successfully address the issue of endogeneity. Historically, the distribution and existence of clans have been determined by a series of factors that have attracted attention from both within and outside the realm of social sciences. The first major confounder is represented by geographical factors. Many scholars have noticed that clans were far less common in Northern China historically (Freedman, 2021; Huang, 1985; Wittfogel, 1938; Fei and ui Jung Liu, 1982). This phenomenon has both societal and geographical explanations. Recently, scholars have shown that the prevalence of rice versus wheat as the major type of crop likely determines not only modes of production (individualistic vs. collective) but also individual pro-social tendencies within one generation (Noblit, 2022; Talhelm, 2022). Since rice production involves advanced and sometimes luxurious irrigation systems, stronger clan cultures and representative economic systems are required for rice-growing. Natural endowments such as weather conditions and soil quality are likely to determine rural order. Faure (2007) also pointed out that economic prosperity is a likely necessary condition for clan activities, as maintaining ancestral halls requires a certain level of development. Historians argue that invasions by nomadic groups from the north led to migrations to the south throughout Chinese history, with several waves of resettlement in the south being strategically located (Hsiao, 1967). These factors also influenced communist activities after the First Chinese Civil War, when communists were forced to move north and establish their regime in places with less local order. Finally, as I have shown above,

the proliferation of CCP reform in rural China also indicated a cleavage between north and south, whether by strategic selection or external shocks.

The inherent issue of confounding leads to a more serious question. The linkage between empirical findings and theoretical claims is less than ideal. The structural differences between Northern and Southern China are complex phenomena with many manifestations. While these studies claim to have discovered a causal pathway, it is more likely that they found a new expression of such structural differences unless supported by stronger causal designs. A visual representation of such widely-existed correlation is provided in Figure 1. Finally, since the above-mentioned studies relied on outcome variables from after 1949,



(a) *Ming* Dynasty Clan Books

(b) *Qing* Dynasty Clan Books

(c) Proportion of Rice Among 3 Crops in 2019

(d) Control of CCP in May 1948

Figure 1: Geological Distribution of Relevant Variables

when the CCP's land reform was completed, and independent variables collected from historical accounts documented several hundred years ago, existing works essentially treated

any events that occurred between the time clan books were first written in the 14th century and the outcomes in the 1950s or 1980s as independent from various measures of clan networks. Any effect recovered from regression analyses should be seen as the sum of the effect of clan networks and any other social changes that occurred after the treatment was assigned but before the outcome was realized. More formally, assume the outcome we care about is a measure of public goods provision, past works claim that they are estimating:

$$\mathbb{E}[provision|clan = 1, formal_t = 0, \mathbf{X}] - \mathbb{E}[provision|clan = 0, formal_t = 0, \mathbf{X}] \quad (1)$$

whereas in fact they are estimating:

$$\begin{aligned} &\mathbb{E}[provision|clan = 1, formal_{t-1,1}, \mathbf{X}] - \mathbb{E}[provision|clan = 0, formal_{t-1,0}, \mathbf{X}] \\ =& \underbrace{\mathbb{E}[provision|clan = 1, formal_{t-1,1}, \mathbf{X}] - \mathbb{E}[provision|clan = 0, formal_{t-1,1}, \mathbf{X}]}_{\text{Effect of clan networks}} \\ +& \underbrace{\mathbb{E}[provision|clan = 0, formal_{t-1,1}, \mathbf{X}] - \mathbb{E}[provision|clan = 0, formal_{t-1,0}, \mathbf{X}]}_{\text{bias: Effect of other past interventions}} \end{aligned} \quad (2)$$

We can further decompose the bias term and simplify as follows:

$$\text{Provision} = \text{Effect of Clan (Culture)} + \text{Effect of CCP} + \text{Structural Difference N v. S} \quad (3)$$

A simple analysis of the above formula shows why past works are likely to yield false positive results. The estimated effect of clan culture (institution) can be driven by a true effect of clan, a latent effect from the CCP intervention during land reform, and a structural difference between North and South China. Despite the rich literature on how informal institutions promote public goods provision, there is an equally significant body of literature documenting the elite capture mechanism (Gupta, 2005; Malesky, Nguyen and Tran, 2014). Most notably, in Meng, Qian and Yared (2015) and Chen and Lan (2017), the authors argue that clan leaders were more adept at coercing their members to surrender their livestock to the collective, often against the strong wishes of individual members during initial waves

of agricultural collectivization. Some clan leaders were also observed to be more effective in coercing villagers to surrender their food, even from the village public stock, under state procurement policies, leading to excessive deaths during the Great Famine.

Emerging new evidence seems to suggest that the alleged effects of clan networks on public goods provision and responsiveness in China should not be understood as universal and unconditional. These findings are more interpretable using Equation 3, as these authors limit their scope of analysis to a specific region in Southern China where clan networks still function as local governing (informal) institutions. Measures of clan power in these regions reflect the efficiency of clan networks in controlling local social and political matters even when facing a new communist regime. Stronger clan power translates to better capacity at coercing cooperation among villagers. Similar effects on elite capture also appear in Mattingly (2016), where the author studies only one Southern province. Therefore, even if these authors did not make a formal distinction between clan as culture vs. clan as institution, by limiting the scope of study, they free themselves from endogeneity.

I argue that it is important both theoretically and methodologically to distinguish between regions where clans only exist as social norms (culture) and where they exist as institutions. Substantively, the form of existence of clans determines the analytical lens through which scholars should analyze the results. In areas where clan networks were wiped out and replaced with CCP networks, the revival of clans in the 1980s should be understood as a cultural phenomenon and interpreted with micro-level evidence on people's attitudes and behaviors (Guiso, Sapienza and Zingales, 2006; Nunn, 2012). In places where clan networks remained intact throughout, scholarly work should instead focus on how these networks function as institutions and interact with the formal government (Casson, Della Giusta and Kambhampati, 2010). Methodologically, neglecting key variables representing the CCP's influence on rural norms and structural differences between Northern and Southern China confounds the results without refined causal designs.

In the Chinese case, after years of learning and trials, the CCP developed its own

methodology for organizing rural life, which proved quite effective in projecting power and extracting resources. These places should be viewed as directly governed by *Red Institution*. In parts of the country that the CCP only occupied later and did not fully reform, villagers were still governed by *Clan Institution*. Therefore, using a measure of economic outcome on a national sample is problematic because it essentially compares places where clans serve as an institution with those where clan cultures and norms are merely remnants. I propose that when treated as a cultural phenomenon, scholars should evaluate the impact of clans on people's norms while controlling for geological cleavages and CCP influence. In the next section, I offer my approach in handling the problem.

4 Data and Empirical Strategy

4.1 Measure Red Influence

During the Second Chinese Civil War between the KMT and the CCP, which began in late 1945 shortly after the surrender of the Japanese invasion and ended with a Communist victory in late 1949, the conflict can be roughly divided into three phases. In 1946, with advantages in troop numbers and weaponry, the KMT launched full-scale attacks on CCP-controlled regions. After suffering major defeats due to a lack of intelligence and poor command, the KMT shifted its focus to attacking key regions like northern *Shaanxi* and *Shandong* provinces, the political and economic centers of the CCP, respectively. These attacks were unsuccessful, forcing the KMT into defensive actions. Following the campaigns of *Yudong* in July 1948 and *Jinan* in September 1948, Communist leaders determined that the opportunity had come for a final offensive to eliminate most of the KMT's mobilization forces in central China.

At the core of this decisive and final attack was the campaign of *Huaihai*. Mao Zedong and the commander of the 3rd Field Army *Su Yu*, planned to deploy a portion of the 3rd

Field Army, which had not been engaged during the campaign of *Jinan*, to eliminate the elite 7th Legion and reoccupy the former Communist capitals of *Huaiyin* and *Haizhou* in central China—hence the name *Huaihai*. Logistics work to support this campaign began on October 29th, although local governments did not initially feel much pressure as the 3rd Field Army had not yet exhausted supplies from previous preparations. The 7th Legion, comprising 100,000 soldiers, was completely surrounded at *Nianzhuang* on November 12th. However, the campaign soon escalated as KMT leader Chiang Kai-shek could not afford further losses to his elite troops. He ordered the 5th and 13th Legions to mount a rescue from the west, the 6th and 8th Legions to attack from the south, and the motorized 12th Legion to rush to the battlefield from the southwest. The CCP also mobilized the 2nd Field Army to resist and stall the enemy. By November 23rd, the CCP and KMT had 600,000 and 800,000 soldiers engaged, respectively (Hall, 2013).

Before this campaign, local CCP governments closely cooperated with Field Armies to spread CCP institutions. Immediately after occupying a county or village, CCP officials entered and conducted institutional and cultural reforms, including mobilizing peasants, reducing rents, and redistributing land. Villagers were taken off their identities in the clan networks and received new identities stressing class conflicts. New village norms were strengthened by repeated mobilizations and political campaigns, including supporting the frontline as workers. However, the scale of the *Huaihai* campaign soon became unanticipated and unprecedented. During a meeting on November 16th, the Central Military Committee estimated that the campaign would last 3 to 5 months, and local governments were instructed to collect and transport enough food, ammunition, and other supplies to support 1.3 million soldiers and standing peasant workers, in addition to feeding 5.3 million voluntary peasant workers. Given the extreme pressure, local formal governments ceased expanding by mid-November, and all party members were ordered to aid the frontline[1].

[1]In fact, even later rounds of land reforms were greatly paused in some regions. The Party Committee of Mid-South Shandong, for example, required local governments to "prioritize supporting the war and harvesting" and stated that "while land reforms are important, the current situation is not suitable for continuing this mission."

The first round of county-level gazettes (*xianzhi*) of the PRC was compiled in the 1990s to document and synthesize information from 1949 to 1990. These gazettes contained key information on the specific dates of liberation of each county. While the jurisdictions of counties and prefectures were readjusted after 1949, the gazettes used the updated jurisdictions from 1991. Counties and prefectures that did not match those in other variables were omitted from the analysis, constituting less than 1% of the entire county sample. I hand-collected a dataset of over 3,000 counties and their specific dates of occupation by CCP forces[2]. In cases where counties were occupied by Communist troops multiple times, I used the first instance as it provided a better indication of CCP presence and influence in the area[3]. Then, I calculated the logarithm of the number of days from liberation to the start of the Chinese involvement in the Korean War on October 8th, 1950, to measure the intensity or strength of CCP reform[4].

The CCP did not begin conquering large cities until after the final victory of campaign of *Huaihai* On Jan 10 1949. Therefore, the liberation dates of cities and prefectures are not accurate for measuring Communist influence. I weighted the number of days for each county belonging to the same prefecture by the population size to determine the number of days for the prefecture. County-level population data came from the first-ever Chinese census in 1955. Formally, given the population P_c and corresponding number of days D_c for county c belonging to each prefecture p, the number of days to the Korean War D_p is calculated as follows:

$$D_p = \sum_{c \in C} \frac{P_c}{\sum P_c} D_c$$

I call this variable $RedProxy$ in subsequent analysis.

In Figure 2, I present the number of counties liberated each month by CCP forces after

[2]This includes field armies, armed militias, and local guerrilla forces.

[3]For example, the city of *Zhangjiakou* was first liberated in August 1945 soon after the Japanese surrender. Although the CCP handed over control in mid-1947, they maintained firm control over neighboring counties and villages to launch harassment attacks on the city and keep the enemy occupied.

[4]The isle of *Hainan* was the last to be liberated in May 1950, apart from Tibet, so the logarithmic function is defined.

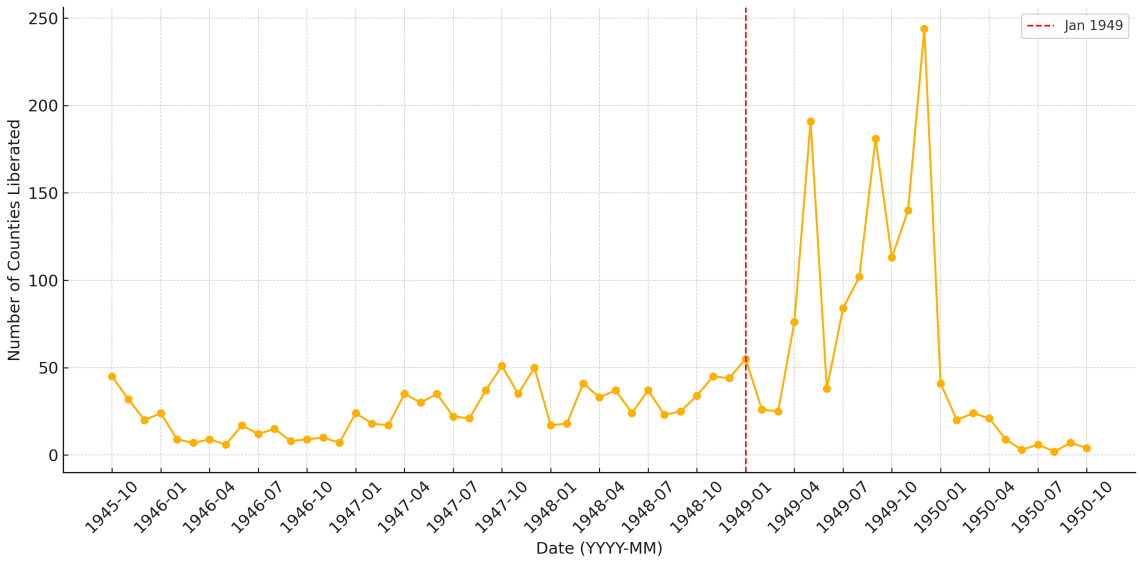


Figure 2: Number of Counties Liberated Each Month After Sept 1945

the Japanese surrender in August 1945. While the number was quite steady and low prior to the end of the *Huaihai* campaign in mid-January 1949, it surged after the campaign was over when the army finished their preparation for the next stage of war. This fact also supports my claim that while the CCP removed clan networks and supporting norms in parts of China, this influence was largely limited to the northern part, where clan networks were not as strong. The CCP's patience and carefulness in reforming rural Northern China did not keep pace with its rapid military expansion during the end of war. Therefore, places liberated prior to Feb 1949 received a full set of social and political reform and places liberated after that suffered only from military occupation.

The PLA crossed the *Yangtze River* in April 1950, a traditional dividing line between Northern and Southern China, and occupied all major cities in the South within less than eight months. Thus, the country was effectively divided into two parts both institutionally and culturally. CCP strongholds in Northern China effectively established local autonomous governments with full mobilization patterns and party control. Ruling elites were primarily peasants educated by the party and trained during several waves of mass campaigns. These regions provided key resources during the war and officials to take over Southern cities when the army marched south. Zhang et al. (2021) recently provided an account of how

revolutionary experience shaped economic liberalization in the 1980s using counties from the same province.

Based on this knowledge, I divide the country into two parts: places liberated prior to the end of the *Huaihai* campaign and those liberated after the end of the *Huaihai* campaign, as shown in Figure 3. The northern red part of the country is considered to have been treated by CCP land reforms and therefore lacks clans as local governing institutions. Here, I generate an indicator variable $RedDummy$. Measures of clan strength in this region should primarily be interpreted as indicators of cultural strength. Such variables impact individual behaviors by shaping people's norms and beliefs. The southern blue part of the country retained local clan structures both institutionally and culturally. Clan existence should therefore be viewed in contrast with formal institutions, preferably under a model of delegation. Any cross-border comparisons should then be subject to a higher level of methodological scrutiny.

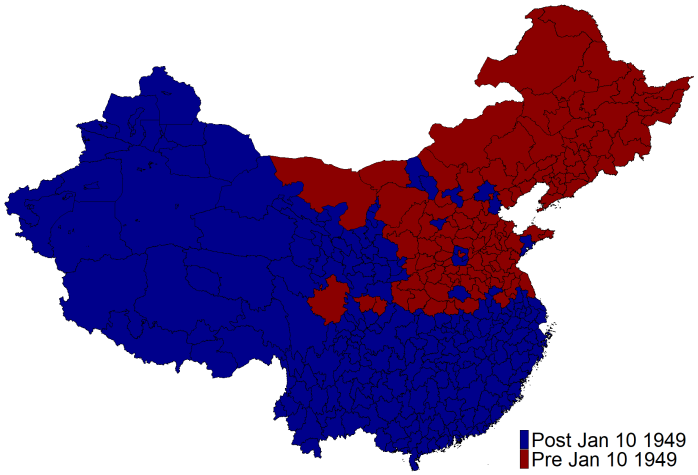


Figure 3: Liberated Regions Prior to and after the End of *Huaihai* Campaign

4.2 North vs. South

Following Equation 3, I also leverage the structural differences between Northern and Southern China. Historically, repeated warfare between northern regimes and ethnic minorities from the 8th century to the 14th century caused continuous population decline in the north and migration to the south. This trend was further exacerbated by breaches of banks along the *Huanghe* River (Liang, 2022)[5]. In *Qinyang* Prefecture of *Hunan* Province, for example, the official population was 241,000 households in 73 BC. The number declined to 8,900 in 1313. The migration from the north led to prosperity in the south both economically and culturally. Newly formed clans invested heavily in human capital to ensure their positions in the imperial court and local governance. While the legacy of such investment is quantitatively estimated in Chen, Kung and Ma (2020) among many other good works (Cheng, Pan and Wang, 2016; Jin, Xu and Ma, 2017), it also caught the attention of the founding Emperor of the *Ming* dynasty. In the 1397 civil service examination, all of the Confucian scholars (*jinshi*) admitted during the final imperial exam were from the southern part of the country. Several years later in 1425, the examination system switched to a quota system by separating test-takers from the north and south until replaced by a more rigorous quota-by-province system in 1713 (Li, 1991).

The cleavage between Northern and Southern China has both natural and human-made roots, many of which accumulated over a long period of time. This cleavage also existed in different forms. Focusing exclusively on political and social factors, we observe structural differences in human or social capital: the number of Confucian scholars admitted, Confucian temples built, clan books written, clan temples built; and in Communist influence: date of liberation, number of red monuments, etc. Here, I do not provide a theory or stance on whether developmental paths are more likely to be affected by geography, cultural factors, or human institutions however defined (Acemoglu, Johnson and Robinson, 2002). I simply

[5]Historical flooded regions along the *Huanghe* River are actually commonly used as instrumental variables in recent studies. However, I have my doubts, as political leaders sometimes chose to artificially and strategically breach the banks for military and other goals, despite the humanitarian disaster it could cause.

assume that all factors are present in the Chinese case and collect the following variables to capture the idea of cleavage.

The first set of three variables measures historical investment in human capital and the strength of Confucian culture. The dataset on Confucian scholars is compiled by the Confucian Culture Database, which collected detailed information on the lives of all individuals admitted in Civil Service Exams from 1368 to 1905. It contained a total of 50,061 observations. I matched the number of scholars to each county and prefecture using CHGIS. Following that, I collected another dataset on the number of Confucian academies recorded in the Chinese Encyclopedia on Academies for each locality. These academies were private schools typically started by rural clans and elites who retired from civil service. Third, I also documented the number of Confucian temples where educated people in Imperial China venerated and paid respect to Confucius. I identified these places by searching for keywords "WenMiao" in Chinese via Baidu searches and manually checked for accuracy.

The next two variables are alternatives to clan strength. The first is the number of clan temples. I follow Chen et al. (2024) by identifying keywords "ZongCi" and "JiaMiao" in Baidu searches. The second variable is the proportion of the three largest surnames in a given locality. Using local gazettes from 1990, I recorded the population size associated with each surname and divided it by the total population in that locality in 1990.

Finally, I added two additional variables to account for natural and exogenous influences. First, I measured the rice suitability of a given locality using the proportion of land that grows rice among three major crops: rice, wheat, and corn, using county-level data from official statistical annuals. Second, I accounted for shocks caused by historical warfare by counting the number of wars during the *Song* dynasty using of Chinese War History (2003) for each locality.

Instead of relying on any single variable to represent the cleavage, I view each variable as capturing a latent factor of structural difference with some random noise. To that end, I

employ principal component analysis (PCA) after applying a log transformation with one plus and extract the first two components to generate $Cleavage1$ and $Cleavage2$ at the county and prefecture levels. Individually, the pairwise correlations are in the range of 0.32 – 0.46. As shown in Figure 4, the first two components together account for roughly 70% of total variation.

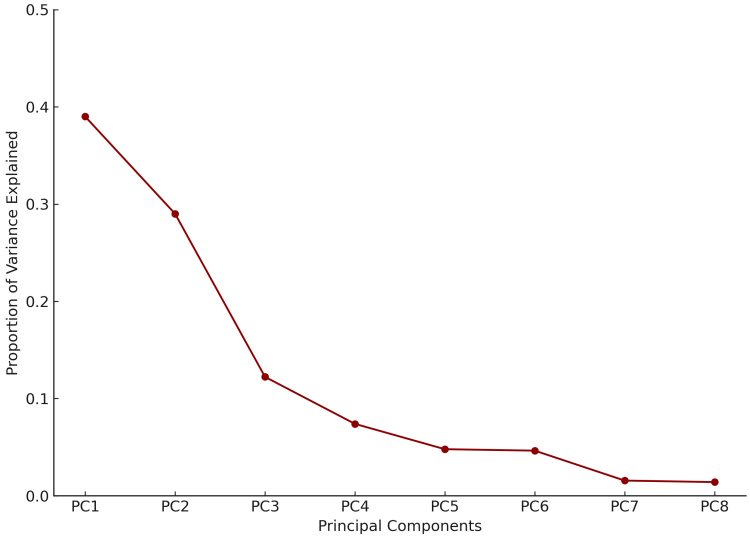


Figure 4: Scree Plot of Eight Variables Measuring North v. Sounth Cleavage

4.3 Clan

Following Greif and Tabellini (2017) I measure clan intensity use the number of clan books compiled for each locality. Shanghai Library initiated the project of Comprehensive Catalogue of Chinese Genealogy which collected by far the largest clan book dossier. I scrape this dataset using `Selenium` package in Python which yields a total number of 46,790 entries. For each locality, I calculate the number of clan books and scale by local population size in 1990. I generate variable $ClanProxy$ by taking the log plus one transformation on number of clan books per million people[6].

[6]Many people use various versions of this dataset, but I did not find any open versions online even if the library allowed for it.

Table 1: Descriptive Statistics on Independent Variables

Variable Name	N	Mean	SD	Min	Max
$RedProxy$	2623	7.105	4.307	2.032	11.539
$RedDummy$	2829	0.412	0.450	0.000	1.000
$ClanProxy$	2192	2.608	3.505	0.000	11.248
$Cleavage1$	2829	2.162	3.398	1.000	6.639
$Cleavage2$	2444	0.477	0.208	0.001	1.827

4.4 Empirical Strategy

I divide the empirical analysis into two parts. First, I re-examine several existing studies by replacing their main independent variable with my measure of $RedProxy$ and report the results. Second, I estimate the effects of clan and red culture on people's beliefs, treating these as cultural influences.

I start by estimating the effect of institutions on public goods provision following the specification and dataset of Wang and Lu (2020). Also, using the framework from Chen and Lan (2017), I estimate the effect of institutions on livestock decline during collectivization in 1950s. The general OLS framework is as follows:

$$outcome_{i,p} = \beta_0 + \beta_1 institution\ proxy_{i,p} + \mathbf{X}_{i,p}\beta_2 + \alpha_p + \varepsilon_{i,p} \tag{4}$$

where $outcome_{i,p}$ represents various outcomes. α_p is the provincial-level fixed effects which captures in-province variation and $\mathbf{X}_{i,p}$ provides a set of county-level dummies.

Lastly, I estimate the impact of culture on individual beliefs and norms using either OLS or an ordered probit model, depending on the type of outcome:

$$outcome_{i,c} = \beta_0 + \beta_1 culture\ proxy_{i,c} + \mathbf{X}_{i,c}\beta_2 + \alpha_c + \varepsilon_{i,c} \tag{5}$$

where $outcome_{i,c}$ represents a measure of belief for individual i in county c. $\mathbf{X}_{i,c}$ is a vector

of characteritics at the individual, household and village level.

A detailed description and summary statistics of the outcome and additional control variables are provided in the Appendix. For all regressions, I exclude the provinces of *Jilin*, *Liaoning*, and *Heilongjiang* in Northeastern China. These areas were not traditionally under Imperial Chinese control and were heavily impacted by both Soviet and CCP influences. Including these three provinces could potentially produce false positive results when estimating the effects of red culture (institution).

5 Results

5.1 Socioeconomic Outcomes

Table 2 reports the results from Equation 4. Column (1) presents a simple model estimating the effect of $ClanProxy$ on donations made to public projects by villagers, either voluntarily or involuntarily, with basic socioeconomic controls and provincial-level fixed effects. The coefficient on $ClanProxy$ is positive, substantial, and statistically significant, indicating that clan networks are positively correlated with increased private contributions to public goods. This suggests that clans play an important role in mobilizing resources for rural public projects, potentially due to their social capital and community influence.

Private funds in Imperial China were a critical, if not the sole, source of rural public goods provision. The ability to collect such funds was particularly important in rice-growing regions where irrigation facilities were essential for agricultural productivity (Talhelm, 2022). The significant positive coefficient on $ClanProxy$ in Column (1) highlights the potential utility of clan networks in mobilizing these resources, especially in areas requiring cooperative investments like irrigation.

In Column (2), I add the $RedDummy$ variable, which indicates whether the locality was

liberated before or after the *Huaihai* Campaign and thus whether it underwent early reforms. The coefficient on $RedDummy$ is strongly negative and statistically significant, suggesting that regions that experienced early red reforms performed worse in terms of collecting private donations compared to regions without such reforms. This may reflect the ideological and structural changes brought about by the reforms, which could have weakened traditional clan structures or shifted emphasis away from private funding mechanisms. Importantly, the addition of $RedDummy$ reduces the magnitude of the effect of $ClanProxy$, implying that part of the positive effect initially observed could be confounded by differences between reformed and non-reformed regions. This points to the diminishing robustness of clan influence once additional historical and political controls are introduced.

Column (3) further investigates the interaction between clan networks and red reforms by including the interaction term $RedDummy \times ClanProxy$. The interaction coefficient is negative and statistically significant, indicating that the positive effect of clan networks on donations is attenuated in regions that underwent red reforms. This suggests that the effectiveness of clan networks in mobilizing resources for public goods is context-dependent and influenced by political reforms. The negative interaction term implies that red reforms may have disrupted or restructured the role of clans in rural areas, potentially by introducing alternative governance structures or altering incentives for collective action. Since local government spending per capita on infrastructure is included in the control variables, this result is unlikely to be due to a complementary provision mechanism. Instead, it is more plausible that reformed regions required less infrastructure, either because their needs had already been met or due to lower demand.

In Column (4), $RedProxy$ is introduced as an additional explanatory variable to capture broader CCP influence. The coefficient on $RedProxy$ is negative and statistically significant, suggesting that the presence of red influence in a region is associated with a decline in private donations to public goods. This may be attributed to the collectivist ideology that discouraged individual or community-level initiatives in favor of state-led solutions. Micro-

level evidence on this claim is provided in the next section. Despite this, the persistence of the significant positive effect of $ClanProxy$ in this column underscores the resilience of clan networks in mobilizing resources even in the face of major political shifts.

Column (5) incorporates two principal components, $Cleavage1$ and $Cleavage2$, which are derived from eight variables measuring structural differences between North and South China using PCA. The introduction of these components drastically reduces the effect of $ClanProxy$, rendering it statistically insignificant. The coefficient for $Cleavage1$ is positive and significant, while $Cleavage2$ is negative and significant. These results indicate that structural differences between regions—likely reflecting economic, social, or cultural divides—play a substantial role in shaping the ability to mobilize private funds for public purposes. The disappearance of the clan effect suggests that what initially appeared to be the influence of clan networks may actually be driven by these deeper structural differences between regions. This finding highlights the importance of accounting for structural differences when analyzing the role of clan networks in socioeconomic outcomes.

Overall, the initial positive effect of clan networks on private donations to public goods appears to be contingent upon several factors, including red influence and regional structural differences. The robustness of the clan effect diminishes as more controls are added, particularly when accounting for regional cleavages in Column (5). This suggests that the alleged effects of clan networks may not be causal but rather reflective of broader socio-political and structural characteristics inherent in different regions of China. Therefore, the observed association between clan networks and public goods provision is likely not due solely to the existence of clan networks but may instead capture deeper regional dynamics that affect collective action. This interpretation aligns with earlier qualitative observations that clan networks in rural China served not only as moral symbols but also as economic actors capable of fostering cooperation or, at times, coercing contributions. These roles are shaped by broader historical and regional contexts, and their impact is not universally positive or robust once these factors are properly accounted for.

Table 2: Results Using Private Donations and Collections

	Private Donations to Public Goods 1982 (logged)				
	(1)	(2)	(3)	(4)	(5)
ClanProxy	4.116***	1.051*	0.351	7.731***	0.456
	(0.651)	(0.420)	(0.235)	(0.935)	(0.604)
RedDummy		−6.334***	−4.467***		
		(1.565)	(1.396)		
RedDummy×			−1.201*		
ClanProxy			(2.371)		
RedProxy				−3.380***	
				(1.266)	
*Cleavage*1					3.657***
					(1.017)
*Cleavage*2					−11.827***
					(3.173)
Controls	Yes	Yes	Yes	Yes	Yes
Province FEs	Yes	Yes	Yes	Yes	Yes
Observations	707	758	753	702	702
Adjusted R^2	0.0905	0.0982	0.0923	0.0868	0.0925

Notes: This table presents results from OLS regression using county-level gazette data. The dependent variable is the size of donations and collections individuals contribute either voluntarily or involuntarily for public purposes in rural China (in 10,000 CNY). Marginal effects are reported in all columns. Constants and province fixed effects are included but not reported. Standard errors, reported in parentheses, are clustered at province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

Table 3 presents the analysis of the effects of clan networks and red reforms on livestock reduction during collectiviation from 1952-1957 following the framework in Chen and Lan (2017). The coefficient on $ClanProxy$ is positive and statistically significant in Column (1), suggesting that regions with stronger clan networks experienced a greater decline in livestock. This result implies that to resist state collectivization efforts, clan heads can effectively coerce clan members to kill their own livestock at the expense of their well-being.

In Column (2) and (3), with the addition of red variables, we observe a negative and statistically significant effect. This suggests that regions with early Communist reforms saw a smaller decline in livestock compared to areas without such reforms. The likely explanation is that red reforms weakened the traditional authority of clan leaders both economically and morally, thereby diminishing their power and incentive to resist state policies. This result is also likely a consequence of the fact that reformed regions already had substantial level of collectivization. The transition from a quasi-collectivization to full cocllectivization was smoother comparing to newly occupied southern villages.

Comparing two regression results, the differing robustness between Table 3 and Table 10 is indeed revealing. I argue that the dividing factor is in the periods each scholar study. In Chen and Lan (2017), the authors pick outcome variables in the 1950s when clan networks in CCP strongholds were replaced by CCP networks. The effect the authors study, therefore, is the difference between red institutions dominating CCP strongholds and clan institutions dominating the rest when CCP pushes for collectivization. In Wang and Lu (2020) however, the authors use outcome variables in 1990s, a time where red institutions already collapsed and clan institutions were still dominating. The observed positive effects on clan networks is more likely driven by other social changes that coincided with a geological divide. The superficial association is also likely to be explained by Li, Zhang and Liu (2019) in which the authors noticed that localities whose governments were established by CCP during revolutionary era were likely to have smaller governmental sizes and higher spending on

public goods.

Table 3: Results Using Livestock Reduction

	Reduction in Livestock Population 1952 vs. 1957 (logged)				
	(1)	(2)	(3)	(4)	(5)
ClanProxy	0.044**	0.161*	0.217***	0.168***	0.215***
	(0.014)	(0.055)	(0.033)	(0.035)	(0.038)
RedDummy		−0.026***	−0.034***		
		(0.006)	(0.015)		
RedDummy×			−0.014*		
ClanProxy			(0.006)		
RedProxy				0.067**	
				(0.033)	
*Cleavage*1					0.397***
					(0.061)
*Cleavage*2					−0.041
					(0.173)
Controls	Yes	Yes	Yes	Yes	Yes
Province FEs	Yes	Yes	Yes	Yes	Yes
Observations	2,349	2,623	2,379	2,201	2,201
Adjusted R^2	0.0685	0.0686	0.0684	0.0683	0.0686

Notes: This table presents results from OLS regression using livestock data from Chen and Lan (2017). The dependent variable is the change in population of livestock from 1952 to 1957. Marginal effects are reported in all columns. Constants and province fixed effects are included but not reported. Standard errors, reported in parentheses, are clustered at province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

5.2 Beliefs and Norms

In this section, I report results on how *RedProxy* can be used to measure people's beliefs and community norms by using outcome variables from survey data.

Table 4 presents regression results on the effects of CCP influence on individual trust attitudes, measuring trust toward different social groups, including parents, strangers, local government, and religious organizations. Outcome variables are collected from wave 2010

of CFPS and individual-level controls are indicated in the Appendix. The results for trust in parents show no significant effect of CCP influence, suggesting that the presence of CCP influence did not impact the strength of familial trust. This may indicate that family relationships remained relatively insulated from political reforms and still serve as the building block of rural relations. In contrast, trust in strangers is negatively associated with CCP influence, albeit weakly. This suggests that regions with stronger CCP presence experienced a decline in generalized trust, potentially due to the divisive nature of CCP campaigns and political mobilizations, which often created tensions among community members.

The positive and significant coefficient for trust in local governments indicates that CCP influence increased trust in local authorities mildly. CCP presence succeeded in legitimizing local governance structures, possibly by replacing traditional clan authorities with party-aligned associations, thereby fostering confidence in formal institutions. For trust in religious organizations, CCP influence is associated with significantly lower levels of trust. This is consistent with CCP's reform on traditionanl and non-CCP-affiliated networks. The moral and economic functions of religions that are vital in traditional societies are subsumed by CCP governments. Table 5 presents regression results on the effects of CCP influence on individual attitudes toward gender roles using ordered probit model using CGSS data, focusing on beliefs about women's participation in the workforce, men's abilities, the division of household labor, and women's roles in family matters. The findings for women's participation in the workforce suggest that CCP influence had no statistically significant effect on support for women joining the labor force. This may indicate that while the CCP actively promoted gender equality in principle, the impact of these policies on individual attitudes was limited, particularly in rural areas where traditional gender norms were deeply entrenched.

For beliefs about men's innate abilities, the results show a negative, though insignificant, association with CCP influence. This suggests that CCP influence did not substantially

Table 4: Red Culture and Trust Attitudes

	To What Extent Do You Trust the Following? 10 = Most			
	(1) Parents	(2) Strangers	(3) Local Government	(4) Religions
$RedProxy$	0.015	−0.005	0.201*	−0.75***
	(0.037)	(0.024)	(0.014)	(0.030)
Controls	Yes	Yes	Yes	Yes
Province FEs	Yes	Yes	Yes	Yes
Observations	28,251	28,268	28,097	26,292
Adjusted R^2	0.054	0.028	0.050	0.070

Notes: This table reports the estimated marginal effects of red culture on individual's trust attitudes based on the CFPS 2012 data using simple OLS regression. The sample includes only regions where $RedDummy = 1$. Controls included in all regressions are prefecture's log distance to the nearest coastline, log population density in 1820, log land taxes per capita in 1820, log GDP per capita in 2010, treaty port dummy, and the dummy for being a provincial capital in 1820. Constants and province fixed effects are also included in all regressions. Robust standard errors, reported in parentheses, are clustered at the province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

change the perception of men's abilities being superior, highlighting the difficulty of altering deep-seated gender biases through political intervention alone. The positive and significant coefficient for household labor division suggests that CCP influence positively affected support for equal sharing of household tasks. This finding may reflect the CCP's broader emphasis on collectivism and equality, which extended to the domestic sphere and promoted shared responsibilities within the household. It suggests that in regions with stronger CCP presence, some shifts toward more egalitarian attitudes in the domestic context were achieved. For women's roles in family matters, CCP influence is associated with a significant negative effect, indicating that stronger CCP presence led to a reduced emphasis on women being primarily responsible for family matters. This result is consistent with the CCP's ideological push for women's emancipation from traditional domestic roles, aiming to integrate them more fully into public life and economic activities.

Overall, the results in 5 indicate that CCP influence had a impact on attitudes toward gender roles. Although the effects are not crossboard significant, they are quite substantial

in size and supporting the claim that CCP influence successfully removed sexist contents in traditional norms and Confucian culture. This finding resonates with more recent results in Liu, Lu and Yuan (2025) and Chen and Xie (2025) which show that regions with more CCP presence in various stages are likely to have more equal gender norms. Table 6

Table 5: Red Culture and Gender Attitudes

	Do You Agree with the Following?			
	(1) Women should join workforce	(2) Men are born with better ability	(3) Housework should be divided equally	(4) Women should focus more on family matters
$RedProxy$	0.215	−0.211	0.201*	−0.151
	(0.149)	(0.125)	(0.080)	(0.100)
Controls	Yes	Yes	Yes	Yes
Province FEs	Yes	Yes	Yes	Yes
Observations	20,545	34,880	34,835	34,809
Adjusted R^2	0.070	0.020	0.011	0.008

Notes: This table reports the estimated marginal effects of red culture on individual's attitudes towards gender topics based on the CGSS using ordered probit model. The sample includes only regions where $RedDummy = 1$. Controls included in all regressions are prefecture's log distance to the nearest coastline, log population density in 1820, log land taxes per capita in 1820, log GDP per capita in 2010, treaty port dummy, and the dummy for being a provincial capital in 1820. Constants and province fixed effects are also included in all regressions. Robust standard errors, reported in parentheses, are clustered at the province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

presents results on CCP influence and individual attitudes towards various institutions and economic actors The results show that trust in central government and the military increased significantly in regions with stronger CCP influence. This suggests that the CCP successfully built legitimacy for key state institutions through its presence and efforts. The emphasis on party alignment and loyalty likely bolstered positive perceptions of these institutions as reliable sources of authority and protection. Similarly, trust in police and local government was also positively affected, reflecting the CCP's efforts to replace traditional norms of dual-system with its own institutions and culturres.

On the other hand, CCP influence is associated with a significant decline in trust in civil

organizations and religious institutions. This pattern aligns with the broader aims of the CCP, which sought to consolidate power by weakening alternative sources of authority and social cohesion that were outside party control. Civil organizations, which could foster local community engagement independent of the state, and religious institutions, which provided alternative moral and social frameworks, were particularly targeted during CCP reforms to ensure direct party control.

Overall, the findings in Table 6 suggest that CCP influence strengthened trust in public institutions directly under state control, such as the government, military, and police, while undermining trust in private institutions and actors that might challenge or operate outside the party's purview. This dual effect reflects the CCP's broader strategy of creating a more centralized and state-controlled society by promoting public institutions and marginalizing non-state actors.

Table 6: Red Culture and Attitudes Towards Institutions

Panel A	Central Government	National Congress	Police Department	Military	Local Government	Civil Organizations
$RedProxy$	0.272**	0.446***	0.459**	0.703***	0.356*	−0.308**
	(0.116)	(0.172)	(0.180)	(0.151)	(0.211)	(0.130)
Observations	11,761	11,761	11,761	11,761	11,761	11,761
Adjusted R^2	0.053	0.051	0.032	0.041	0.024	0.011
Panel B	Leaders	Corporate Heads	Police People	Doctors	Teachers	Bank Clerks
$RedProxy$	0.297*	0.474*	0.381**	0.753***	1.029***	0.595
	(0.158)	(0.257)	(0.162)	(0.204)	(0.190)	(0.407)
Observations	11,761	5,815	5,815	5,815	5,815	5,815
Adjusted R^2	0.022	0.016	0.027	0.028	0.040	0.025

This table reports the estimated marginal effects of red culture on individual's attitudes towards institutions and individuals based on the CGSS using ordered probit model. The sample includes only regions where $RedDummy = 1$. Controls included in all regressions are prefecture's log distance to the nearest coastline, log population density in 1820, log land taxes per capita in 1820, log GDP per capita in 2010, treaty port dummy, and the dummy for being a provincial capital in 1820. Constants and province fixed effects are also included in all regressions. Robust standard errors, reported in parentheses, are clustered at the province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

The results in this section illustrate the impact of CCP influence on rural Chinese society even decades after the reform. CCP presence created more egalitarian norms on gender issues, while promoting trust in formal public institutions like local government, the police, and the military. However, this influence came at the cost of eroding social cohesion, as evidenced by decreased trust in strangers, religious organizations, and civil groups. The CCP's emphasis on consolidating power led to a weakening of private and community-based institutions, effectively redirecting trust and authority to state-controlled entities. This general tendency might have provided backup to CCP's recent aggressive stance on foreign matters (Xu, 2024; Mattingly and Sundquist, 2023).

6 Alternative Measures of Red Culture

Table 7 presents regression results for three widely used measures of "red culture": whether a county was on the Long March route of the CCP from 1935-1936, the number of patriotic education centers in the locality, and whether the county is a designated revolutionary base. These measures are often adopted in the literature as indicators of red cultural influence and used as either control variables or for robustness checks. However, they are not reliable indicators of actual red cultural influence but are rather outcomes of political and economic considerations.

The table shows that the coefficients for various socioeconomic covariates—such as GDP per capita, government spending per capita, distance to the coast, and urbanization rate—are mostly significant across the three measures, but their directions vary substantially. For example, GDP per capita is negatively associated with being on the Long March route and being designated a revolutionary base, while positively associated with the number of patriotic education centers. Government spending and urbanization rate also show inconsistent relationships across the outcomes. These mixed results suggest that these measures can be well predicted by economic characteristics of the locality.

Table 7: Results on Alternative Measures of Red Culture

	Long March	Patriotic Center	Revolutionary Base
	(1)	(2)	(3)
GDP per capita (logged)	−0.044***	0.461***	−0.102***
	(0.014)	(0.055)	(0.030)
Governmental spending	0.037***	−0.026***	0.048***
per capital (logged)	(0.010)	(0.006)	(0.012)
Distance to coast (logged)	0.050***	−1.032***	0.221***
	(0.009)	(0.008)	(0.007)
Urbanization rate	−0.027***	0.013***	−0.115***
	(0.005)	(0.004)	(0.006)
$RedProxy$	−0.004	0.001	−0.002
	(0.003)	(0.005)	(0.004)
$Cleavage1$	0.018*	0.025**	0.020*
	(0.009)	(0.011)	(0.010)
$Cleavage2$	0.031*	0.022*	0.035**
	(0.015)	(0.012)	(0.014)
Province FEs	Yes	Yes	Yes
Observations	2,501	2,462	2,347
Adjusted R^2	0.525	0.586	0.493

Notes: This table presents results from a linear probability model for Column (1) and OLS regression for Columns (2) and (3) using several measures of red culture as the outcome variable. Independent variables are collected from 2021 county-level statistical annuals. Marginal effects are reported in all columns. Constants and province fixed effects are included but not reported. Standard errors, reported in parentheses, are clustered at the province level. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

These associations have historical logic. When the CCP transported to Northern China after a major military defeat in the south before the Long March, it strategically selected a route that avoided major cities and economically advanced regions which were garrisoned by KMT forces. The same logic applied to revolutionary bases as well. Patriotic Education Center, on the other hand, serve important propaganda functions. The establishment and designation depends should maximize the expected effect of transmitting red ideology. Therefore, localities with more population and better economy are more likely to have more such places.

In addition, the non-significance of the $RedProxy$ variable across all three columns further illustrates that these traditional measures fail to capture the actual influence of red culture. The measures appear to be more aligned with selective political designations and economic subsidies aimed at supporting local political loyalty rather than genuinely representing the cultural legacy of the CCP.

This distinction is crucial for scholars who wish to truly understand the effects of red culture. The reliance on conventional measures risks conflating political attention and economic subsidies with genuine red influence, thus potentially leading to misleading conclusions.

7 Conclusion

The findings of this study provide a more nuanced understanding of clan influence in rural Chinese society by distinguishing between their cultural and institutional roles. Our analysis shows that clans can simultaneously act as cultural symbols and formal governance structures, with their influence on local governance and social outcomes varying accordingly. By tracing the historical efforts of CCP and incorporating measures of red culture and regional cleavages, we provide evidence that CCP influence reshaped clan dynamics, a point

that previous studies on clan influence fail to account for.

The new dataset and subsequent micro-level analyses suggest that CCP interventions successfully removed both the institutional and cultural natures of clans in some areas. Any studies of clan influence fail to recognize this fact should be reconsidered, i.e. comparing places where clan serves as socioeconomic arrangements vs. as culture is inappropriate. Treated as a measure of culture, this dataset can also be used to evaluate norms and beliefs following the rich literature on the impact of culture.

These findings underscore the importance of distinguishing between the cultural and institutional dimensions of clan networks when evaluating their role in rural governance. Future research should further explore how these dual aspects of clans interact with state interventions and contribute to long-term governance outcomes. Additionally, understanding how these dynamics play out in contemporary China can provide insights into the challenges of fostering effective local governance in the face of central state expansion and the ongoing tension between traditional networks and formal institutions. Focusing on the latent red culture in the context of China, future studies can also leverage how this reminant of red shapes local policies and other attitudes. This study contributes to the literature by demonstrating that clan influence is not a monolithic phenomenon and that its effects on governance are contingent on both historical context and the dual roles clans play within rural communities.

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A Description of Variables

Table 8: Definition and Sources of County-level Control Variables

Variable	Definition	Sources
Distance to coast	The distance to the nearest coastline	CHGIS
Population density in 1820	Total population size in 1820, scaled by land area	*Jiaqing Chongqiu Yitongzhi*, CHGIS
GDP per capita in 2021	Nominal GDP per capita in 2021	China City Statistical Yearbook
Treaty port dummy	A dummy for being a treaty port in China's history	Yan (1955)
Dummy for provincial capital in1820	A dummy for being a provincial capital in 1820	CHGIS
Terrain ruggedness	The terrain ruggedness index constructed following Nunn and Puga (2012)	Nunn and Puga (2012), GTOPO30
Average years of schooling	Average years of schooling received by people aged six or above in 2010	China 2010 Census
Literacy rate	The percentage of literate persons in the population aged 15 or above	China 2010 Census
Minority	Percentage of people beloging to ethnic minority group	China 2010 Census

Table 9: Summary Statistics of Control Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
ln(distance to coast)	2,395	4.847	1.788	-1.293	7.309
Longitude	2,395	115.397	5.950	99.162	129.486
Latitude	2,395	32.140	5.977	18.253	45.804
ln(Population density in 1820)	2,395	-4.822	1.760	-13.791	-2.503
Land tax per capita in 1820	2,395	-2.605	0.740	-4.605	0.827
ln(GDP per capita in 2021)	2,395	3.285	0.730	1.281	4.672
Treaty port dummy	2,395	0.294	0.455	0	1
Capital dummy in 1820	2,395	0.174	0.379	0	1
Minority	2,395	0.079	0.212	0	1

Table 10: Summary Statistics on Public Goods

Variables	N	Mean	SD	Min	Max
Total Personal Supply (10k *yuan*)	707	40.103	193.896	0	2137
Total Personal Supply per capita (*yuan*)	707	1.101	5.544	0	78.265
Collection (10k *yuan*)	709	34.548	168.421	0	1800
Collection per capita (*yuan*)	709	0.932	4.766	0	65.923
Donation (10k *yuan*)	754	5.117	50.895	0	1000
Donation per capita (*yuan*)	754	0.0383	0.192	0	1

Table 11: Summary Statistics at Individual Level from CFPS2012

Variables	Obs.	Mean	Std. Dev.	Min	Max
Age	33,435	35.473	1.711	16	91
Ethnic Minority	33,435	0.835	0.371	0	1
Male	33,435	0.537	0.499	0	1
Party	33,435	0.124	0.351	0	1
Rural *Hukou*	33,405	0.772	0.419	0	1
Interprovincial migrant	33,426	0.014	0.116	0	1
Household head is male	33,426	0.758	0.424	0	1
Number of children	33,431	1.824	0.926	1	7
Number of adults	33,431	2.858	1.193	1	11
Household net assets (millions of CNY)	33,238	0.168	0.470	-0.586	29.961
Non-agricultural activities by the family	33,428	0.100	0.299	0	1
Number of relatives visited last spring festival	33,410	5.781	6.458	0	100
Average household net assets in the village/community (millions of CNY)	33,428	0.170	0.224	-0.024	5.313
Average education year of adults in the village/community	33,435	5.838	2.490	0.667	14.231
Population in the village/community	33,378	4186.825	4663.566	170	51,139

B Visualization of Historical Processes

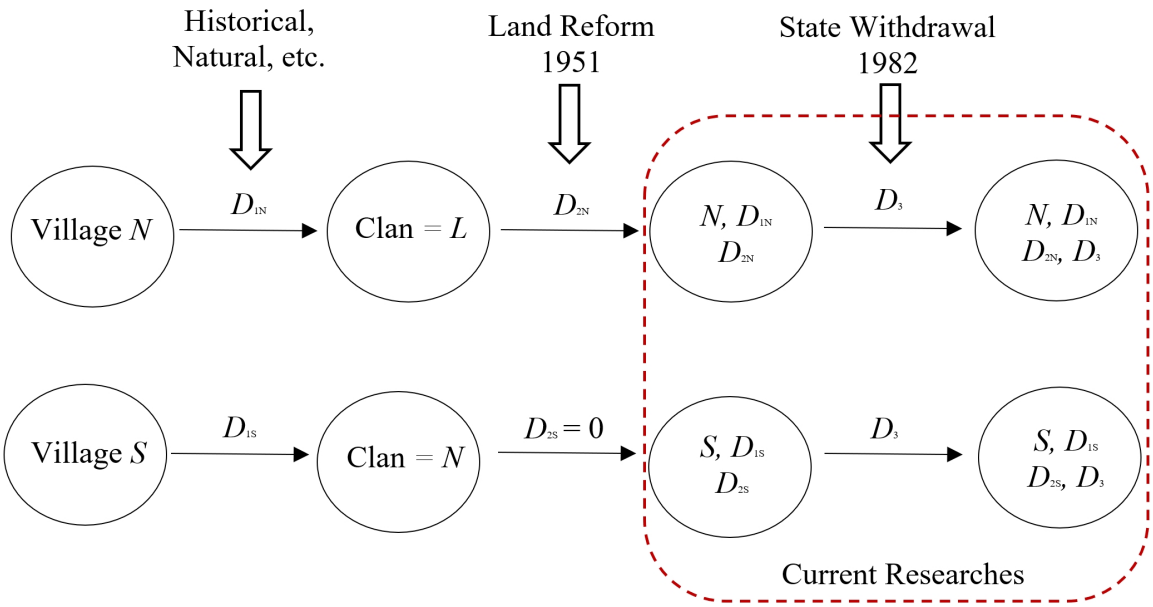

Figure 5: Changes to Local Power Dynamics