

Was There a Revolution?
Stratification Over the Very Long Term in Liaoning, China, 1749-2005.

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ABSTRACT

To assess the impact of political change in China after 1949 on stratification patterns, we examine changes in intergenerational social mobility in Liaoning Province between 1749 and 2004. We analyze a unique 250 year panel dataset that combines household registers for more than 250,000 individuals between 1749 and 1909 with linked data on a sample of more than 10,000 twentieth century descendants of the register population gathered from retrospective surveys. We examine long-term trends in the association between parent's and child's attainment chances to test whether or not policies after 1949 weakened the importance of parental characteristics, as is often claimed. We then examine the effect of the Revolution on the social composition of elites by examining whether or not prominent families after 1949 were 'new' in the sense that they were previously undistinguished, or were 'old' in the sense that they were successful before the twentieth century.

Introduction

One of the central goals of the Chinese Communist Party after its victory in 1949 was to transform the social order. Via the Land Reform and subsequent political campaigns, the Party sought to invert the pre-1949 socioeconomic hierarchy, turning prior elites into pariahs and elevating the once disadvantaged. Through educational and employment policy, it sought to diminish or even reverse the effects of family socioeconomic status on individual attainment chances, and even make political commitment more important a determinant of success than individual ability.

To our knowledge there have been no direct quantitative, empirical tests of the widespread assumption that these efforts were successful, and that stratification patterns after 1949 differed fundamentally from those before. Published studies of trends of stratification in twentieth-century China have been based exclusively on Census and retrospective survey data collected in the late twentieth century, and have been limited by their data to examination of trends from the 1940s to the present. Thus, for example, Deng and Treiman (1997) focused on cohorts born in 1944 or later in examining trends in the effects of family background on attainment. Cheng and Dai (1995) examined trends apparent in cohorts born in 1928 and later years. In these and other studies, the earliest cohorts either reached adulthood after the Revolution in 1949, or during the Civil War and War Against the Japanese that preceded it, thus hardly seem an appropriate baseline for evaluating change after 1949.

To assess the impact of changes after 1949 on stratification in at least one part of China, Liaoning, we analyze a dataset of unique temporal and generational depth. We have compiled a linked dataset comprising household registers that describe more than 250,000 people who lived in more than 600 communities in Liaoning in northeast China between 1749 and 1909, and retrospective survey data on a sample of 10,000 twentieth century descendants of these people who lived in 20 villages. These data include information on attainment of official positions for the entire time period. For the twentieth century sample, they also include other markers of socioeconomic attainment, including educational attainment and Party membership. The twentieth century data are linked to the household register data so that it is not only possible to examine effects of parents' characteristics on children's attainment chances, but follow at least a subset of families from the mid-eighteenth century to the present.

We examine two specific issues. First, we assess whether or not there was a change in intergenerational mobility across the 1949 divide, as reflected in patterns of attainment of official position. First, we examine long-term trends in the relationship between parent's and child's chances of attaining official position. To the extent that fluidity increased as a result of the Party's efforts after 1949, family background, in particular, parental attainment of official position, should have become less important as a determinant of individual attainment chances. Second, we examine whether or not efforts to invert the socioeconomic hierarchy were successful. We take advantage of the generational depth of our data to assess whether the relative statuses of families within their communities

changed after 1949. Specifically, we examine whether there was continuity or change in the composition of elites. If the efforts to invert the hierarchy were successful, the families that dominated official positions after 1949 should have been relatively undistinguished before 1949. If these efforts were unsuccessful, the families that held official positions after 1949 should have been the ones that held them before the twentieth century.

We focus on changes in attainment of official position because of its comparability across the entire period covered by the data. From 1749 to the present, holders of official positions have constituted the local elite in the rural communities covered by the data. In any given cohort, around five percent of males will hold such positions at some point in their lifetime. While the titles, responsibilities, and income associated with particular positions have changed under successive governments, it is safe to assume that at least until the very recent economic reforms unleashed unprecedented economic growth in many parts of Liaoning and elsewhere in China, holders of official positions constituted the local elite in the rural communities covered by our data.

Below, we describe the data we intend to use, the methods, and present some very preliminary results that confirm that the data will support the proposed analysis.

Data

We have assembled one of the longest and largest individual level longitudinal panel data sets. The early implementation of state household and population registration systems in Liaoning province in northeast China allows us to trace individual, residential household, descent group, and community over 150 years for eight or more generations. Historical household registers in this province alone record as many as 2 million individuals who lived in several thousand rural and urban communities between 1749 and 1909 and can be supplemented with contemporary household registers beginning from the mid-twentieth century. In addition, private family documents produced by local traditions of genealogy that provide similar longitudinal information on ten million or more similar individuals including a substantial subset of the original 2 million individuals, some of their seventeenth and early eighteenth-century ancestors, and many of their twentieth and twenty-first-century descendants, extending the data from 1909 to the present and from 150 to 300 years and from eight to sixteen generations or more in length.

From these data we have already constructed a longitudinal individual-level database of 1.3 million individual level observations of 275,000 largely eighteenth, nineteenth and early twentieth-century individuals drawn from 600 historical household registers covering some 600 rural and urban communities. We have also visited 30 of these rural communities to survey the living descendants of the register populations and collected contemporary socioeconomic and demographic data on their family members as well as over 200 private documents including genealogies, family inscriptions, wills and financial documents. Together these materials record over 50,000 individuals longitudinally linked from the mid seventeenth century to the present day. Many more

such sources exist and our comparisons of them with state records are already yielding important information about the nature of social organization, population behavior, and the completeness of population recording in the past and present (Campbell and Lee 2004).

We have been able to do so much because of the internal consistency of the data, their availability through the Genealogical Society of Utah, and the sustained efforts of a team of data entry personnel in the People's Republic of China. We have described the data elsewhere (Lee and Campbell 1997, 223-237). We have a collaboration with the Local History Office of Liaoning Province that allows us to visit Liaoning every year for one month or more of field work with a team of typically 5 to 10 students and researchers from China and abroad to visit these villages, collect auxiliary historical sources, survey specific lineages, and record analogous contemporary information to the historical records. Altogether we have spent over 500 person-days in field work since 1997 visiting almost 30 of the largest villages to collect over 40 bound genealogies and over 50 genealogical charts and lists. We have also collected and transcribed dozens of long historical grave inscriptions, half a dozen other inscriptions, other family documents, and half a dozen contemporary village census or household registers. Most importantly we have completed retrospective and contemporary surveys in over a dozen villages recording each individual born in the village since 1949, their birth, marriage, death dates, education, occupation, and migration history and have linked these contemporary and historical populations.

Table 1. Demographic Sources for Northeast China

Location	Period	Registers	Observations	Coding	Genealogies	Inscriptions etc	Survey
Aerjishan	1813-1909	18	13,622	Done			
Bakeshu	1759-1909	32	48,709	Done	7	5	5
Changzhaizi	1768-1909	25	46,810	Done	10	14	4
Chengnei	1798-1909	24	55,671	Done			
Dadianzi	1756-1909	27	76,984	Done	2	1	
Dami	1759-1909	32	31,544	Done	2		
Daoyitun	1774-1909	35	118,633	Done	20	7	6
Daxintun	1749-1909	29	86,956	Done	10		1
Diaopitun	1768-1909	26	70,153	Done			
Feicheng	1756-1909	39	70,175	Done	8	5	
Gaizhou Manhan	1753-1909	20	50,110	Done			
Gaizhou Mianding	1789-1909	25	56,051	Done			
Gaizhou	1762-1909	27	42,834	Done	4		
Guosantun	1774-1909	34	35,073	Done	4	2	1
Haizhou	1759-1909	26	119,207	Done	14	5	2
Langjiabao	1756-1909	25	47,340	Done	1	3	2
Nianmadahaizhai	1749-1909	29	53,882	Done	4	9	1
Niuzhuang Liuerbao	1780-1906	23	50,253	Done	16	20	5
Wangduoluoshu	1792-1909	16	18,404	Done			
Wangduoluoshu	1864-1910	8	9,043	Done			
Shengding							
Wangzhihuitun	1765-1909	28	60,339	Done		5	
Waziyu	1777-1906	21	55,522	Done			
Wuhu	1789-1906	23		Entering			

Table 1 summarizes the linked data: 1.3 million linked observations of 275,000 individuals who lived between 1749-1909 of which 1,066,004 observations of 114,812 men and 92,084 women have been checked and cleaned, 80 largely patrilineal genealogies with some 25,000 largely male descendents and their spouses who lived between 1650-2000, 100 inscriptions and family documents from 1770-1940 with as many as 1000 linked relatives, and 27 retrospective surveys and 3 contemporary household registers with over 10,000 individuals born between 1880-2002. By supplementing the household registers with genealogical as well as local private sources, we can trace 20,000 individuals from the arrival of their descent group founders in Liaoning in the late seventeenth century forward to the present. In addition, by surveying contemporary descendants from these historical populations and linking them to the registers, we can trace 50,000 people from the present back to the mid-eighteenth century.

The household registers record social outcomes, demographic behavior, and household and kin group organization. They record at three year intervals for each person the following information: village or city of residence; relationship to the household head; name(s) and name changes; marital status; animal birth year; lunar birth month, birth day, and birth hour; age; marriage, migration, and death. Additional information, such as reproductive histories, is available through record linkage and comparison. For adult males, the registers also record official titles and occupations that allow us to measure individual income or wealth. 4 percent of males held such titles at some point in their life; they and their families comprise the rural local elite. For working-age males, the registers also record whether or not they were considered disabled. 10.2 percent of males were classified as disabled. In the late eighteenth and early nineteenth century, the registers actually list what these disabilities were. Since individuals are listed in the same order in successive registers, linkage of entries from one register to the next is straightforward.

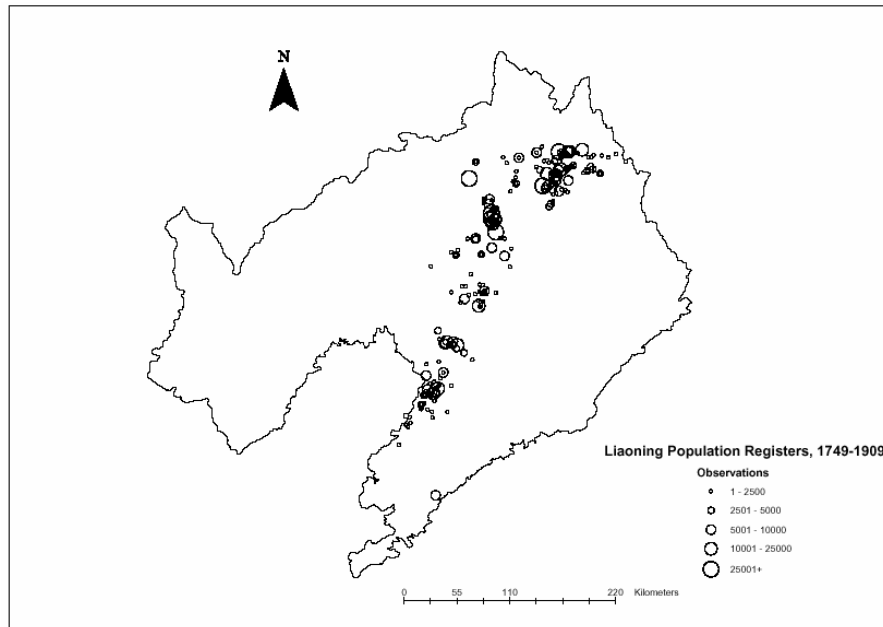
Table 2. Males in Registers by Generations of Traceable Paternal Ancestry (June 2004)

Generations Back	Percent For Whom Specified Paternal Ancestor Is in the Registers		Percent for Whom Kin Descended from Specified Ancestor Can be Identified	
	All males	Born after 1900	All males	Born after 1900
1 (Father)	90.1	93.4	97.3	96.9
2 (Grandfather)	79.5	90.4	92.7	95.3
3 (Great-grandfather)	66.5	88.4	83.1	91.5
4	51.9	84.7	71.1	88.0
5	35.9	75.3	57.8	82.6
6	20.6	53.4	43.0	72.9
7	9.3	26.4	28.6	49.5
8	3.5	10.1	16.6	45.2
N	115125	26637	115125	26637

The registers are distinguished as a demographic source by their completeness, detail, and amenability to various forms of record linkage. In contrast with historical

Chinese demographic sources such as genealogies that only record adult married males, the historical registers record most boys and some girls from childhood, as well as all women from the time of their marriage. Unlike genealogies, they also provide detail on community and household residence. In contrast with the parish registers commonly used in European historical demography, they allow for precise measurement of the population at risk of experiencing most events. The population is closed, in the sense that entries and exits are rare, and when they occur, their timing is recorded. Finally, we can follow families for generations (Lee and Campbell 1997, 223-237; Lee and Wang 1999, 149-153). Table 2 summarizes the linkages we have completed based on material in the historical registers, listing the proportions of men that we have linked to fathers, grandfathers, and more distant ancestors, and in turn brothers, first, second and more distant cousins. For example, one-quarter of the men born after 1900 can have their ancestry traced back seven generations, and through additional linkage based on relationship data in the registers, nearly half of the men born after 1900 be linked to kin who share descent from a common ancestor seven generations previous.

The register data are further distinguished by their spatial breadth and the resulting diversity of community contexts. Our 600 Liaoning villages, as shown in Map 1, are arranged in three distinct regions over an area of 40,000 square kilometers, approximately the size of the Netherlands: a commercialized south from Haicheng to Dalian down the Liaodong peninsula, an administrative center located on the Liaodong Plain around the provincial capital, and an agricultural north in the hills and mountain ranges directly north. Variation between and within these regions enables us to test a variety of hypotheses about community social, economic, and institutional context. While the communities are not representative of China in a formal statistical sense, they are representative of a diversity of specific contexts common to other parts of China, and in some respect other developing countries. Our strategy is not to generalize from these communities to China as a whole, but to communities with similar contexts. To the extent we do find patterns common across communities of widely varying contexts, of course, we will be bolder in our generalizations.



Map 1 Liaoning Historical Study Populations

The twentieth-century data are based on recent retrospective surveys carried out among descendants of the register populations in 20 villages. Since 2001, we have visited Liaoning on a regular basis, located villages covered by the registers, and visited them to survey the surviving descendants of the families in the registers. We have collected basic data on the demographic, economic and social outcomes not only of these living descendants, but also on members of intervening generations who died after the registers ended in 1909 and before the beginning of our fieldwork. Thus far we have collected, coded, and linked data for approximately 10,000 individuals during the twentieth century.

Methods

Our methods will be relatively straightforward. For the assessment of long-term change in patterns of intergenerational mobility, we will treat individual attainment of official position as a dichotomous outcome variable, and estimate logistic regressions that assess the importance of father's attainment on it. For the twentieth century, we will also estimate logistic regressions to examine the determinants of other markers of status such as educational attainment and Party membership. To assess change, we will introduce interactions between birth cohort and the measures of father's attainment.

To assess changes in the composition of elite over the long-term, we will likely apply standard methods for analysis of categorical data. At least initially, we will classify families according to whether they held official position before the twentieth century and whether they held official positions after 1949, and assess whether or not there is any relationship between the two. Obviously the devil will be in the details and the final analysis is likely to be somewhat more complex, to account properly for the extinction of

family lines before the twentieth century, changes over time in the size of families, and so forth.

Preliminary Results

We have already demonstrated the amenability of the historical household registers to the analysis of intergenerational social mobility (Campbell and Lee 2003). That analysis revealed that in Liaoning before the twentieth century, possession of an official position by father roughly doubled the chances that an individual would attain an official position of their own. That analysis took an approach slightly different from the one we plan for this study, in particular, it was an event-history analysis in which the outcome was attainment of official position in the next three years. We will redo the analysis for this study to ensure direct comparability with the results for the twentieth century.

We have recently begun analysis with the twentieth-century data, and so far have been able to confirm that the data will support the proposed analysis. We include some results here to demonstrate the utility of the data for the question at hand, and confirm that we will have final results by the time of PAA. The results are preliminary since we are still cleaning the data, and subject to change. That caveat aside, they are intriguing.

According to the following very preliminary analysis for individuals born between 1930 and 1970, the chances of attaining a leadership position (identified by the dichotomous variable *lingdao*) were more than doubled if a father held such a position. The association, in other words, is very much in the same range as the one apparent before the twentieth century. If this result stands up under additional scrutiny, the implication would be that there was little if any change in fluidity from before the twentieth century to the present, at least when the outcome of interest is attainment of official position.

Logistic regression	Number of obs	=	3943
	LR chi2(1)	=	52.80
	Prob > chi2	=	0.0000
Log likelihood = -517.72602	Pseudo R2	=	0.0485

	lingdao	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
f_lingdao	2.340358	.2666836	8.78	0.000	1.817667	2.863048
_cons	-3.613323	.1008362	-35.83	0.000	-3.810959	-3.415688

REFERENCES

- Campbell, Cameron and James Lee. 2003. "Social mobility from a kinship perspective: Rural Liaoning, 1789-1909." *International Review of Social History*. 47:1-26.
- Lee, James Z., and Cameron Campbell. 1997. *Fate and Fortune in Rural China: Social Organization and Population Behavior in Liaoning, 1774-1873*. Cambridge: Cambridge University Press.
- Lee, James Z., and Wang Feng. 1999. *One Quarter of Humanity: Malthusian Mythology and Chinese Realities 1700-2000*. Cambridge, MA.: Harvard University Press.