

Autocratic Rule and Social Capital: Evidence from Imperial China

Melanie Meng Xue¹ Mark Koyama²

¹Northwestern University

²George Mason University

March 20, 2018

A RESILIENT AUTOCRACY



INTRODUCTION

- Autocratic rule can be highly resilient, notably in China (Nathan, 2003).
- How does political repression fit into the picture?
- Does political repression play a major role in the resilience of autocratic regimes?
- This paper studies a period of intensified autocratic rule during the High Qing period (1660–1788) and its consequences for civil society.

INTRODUCTION

- Uncover a novel mechanism through which political repression can facilitate autocratic rule in the long run, via its effect on social capital.
- Social capital: beliefs, attitudes, norms and perceptions that support cooperation.
- Social capital is a crucial ingredient for liberal democracy and economic development (Putnam, 1994).
- Provide evidence that illiberal institutions can undermine social capital.

INTRODUCTION

- 1 Estimate the effects of political repression on social capital in a historical panel.
 - ▶ DID setup
 - ▶ *Fewer* reputable individuals.
 - ▶ *Fewer* local charities.
- 2 Shows that effects of political repression persist to today.
 - ▶ *Less* generalized trust.
 - ▶ *Worse* basic education under political decentralization.
 - ▶ *Less* political participation and *more* apathy.
- 3 A potential vicious cycle: political repression undermines social capital → legacy of political disengagement.
- 4 *But* no evidence that autocracy has generated greater support for autocracy.

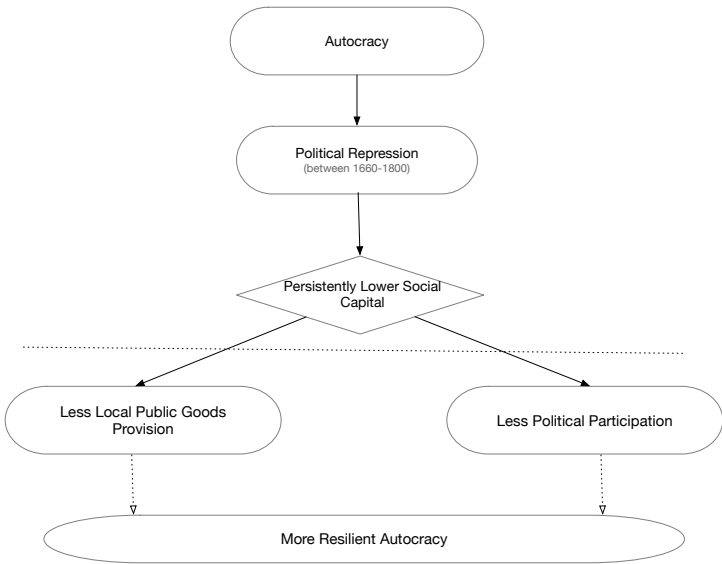


Figure: The structure of our analysis.

LITERATURE I: SOCIAL CAPITAL

- First generation: A positive correlation between social capital and economic activity.
- More recent research: Use historical determinants of social capital to establish causality.

*Nunn and Wantchekon (2011), Guiso, Sapienza and Zingales (2011)
and Guiso et al. (2013)*

- Social Capital and Democracy.
 - ▶ Persson and Tabellini (2009) argue that democracy generates democratic capital and that autocracies can reduce this democratic capital.
 - ▶ Literature on the importance of social capital for liberal democracy.

*Tocqueville (2000), Coleman (1990), Putnam (1994),
Fukuyama (1995), Guiso et al., (2004)*

LITERATURE II: STATE SOCIETY

- Acemoglu & Robinson (2016, 2017, 2018) “goldilocks theory” of state and civil society.
 - ▶ Too weak a state cannot provide basic public goods
 - ▶ Too strong a state can overwhelm civil society
 - ▶ China a quintessential despotic state or “Real Leviathan”.

LITERATURE II: STATE SOCIETY

- The “state” is a bundle of treatments. The impact of the state on social capital and civil society is multi-directional.
 - ▶ Dell et al. (2017) provide evidence that the formation of the centralized and bureaucratic state increased social capital (Vietnam)
 - ▶ Lowes et al. (2017) argue that the presence of a strong state can crowd out social norms (Kuba Kingdom).

HISTORICAL BACKGROUND

The Qing (1644-1912) ruled a large and powerful empire.

- They faced the problem of projecting power over long distances in a world of poor communication technology.
- Qing were relatively successful in governing this vast empire during the High Qing period (1662-1795).
- A period of internal stability and peace and relative economic prosperity (Pomeranz, 2000; Shiue and Keller, 2007)



The Qianlong Emperor (1735-1796)

MANCHU EXPANSION



LITERARY INQUISITIONS

Persecutions were to intimidate entire population.

Reasons for investigation included but were not limited to:

- 1 Cases of factionalism, actual or alleged.
- 2 Cases of taboo words, criticism of the ruler or the dynasty, and insulting allusions to the monarch or the regime.
- 3 Anti-Manchu ideas and activity.
- Emperor's interpretation was decisive (Huang, 1974, 208)
- Wakeman refers to this as “the institutionalization of imperial subjectivity” (Wakeman, 1998, 168) [▶ Imperial Subjectivity](#)

LITERARY INQUISITIONS

- Information on inquisitions collected from the imperial archive by historians [▶ Data](#)
- Procedures of an inquisition case [▶ Procedure](#)
- A detailed example [▶ A Detailed Example](#)
- A simple signaling model of persecutions [▶ Model](#)
- Not linked to conflicts [▶ Conflict 1](#) [▶ Conflict 2](#)

LOCAL CHARITIES

- Local charities provided famine relief, help for the indigent, support of orphans, and as well as helping widows, burying unclaimed dead, establishing soup kitchens, and extending zero-interest credit, organizing fire protection, and providing refuge for the poor during winter (Tsu, 1912; Smith, 1987)
- Compared to other types of organizations, the Qing government was permissive of local charities.
- This philanthropy represents engagement in the “public sphere” (Rowe, 2009)
- Charities required voluntary contributions of money, time, and effort.
- Required organization and leadership.

▶ Quote



LOCAL CHARITIES



Figure: An orphanage in Suzhou. Wet nurses are gathered in front of the orphanage. The orphanage is located near a temple.

SOURCES OF VARIATION

- Bureaucratic idiosyncrasies generate plausibly exogenous variation in timing.
 - ▶ Timing of persecutions was unlikely to be correlated with local characteristics and shocks.
 - ▶ Similar cases could have quite different outcomes.
- For our historical panel, our identification strategy relies on variation in the *timing* of the first persecution.
- For our cross-sectional analysis, we employ two IV strategies.

- Inquisitions may have had a general effect. But the local component of this effect was substantial
 - ▶ In the absence of newspapers or other forms of media, information spread slowly and within a limited geographical range.
 - ▶ Prefectures were self-contained administrative units.

DATA

Historical panel:

- Three levels of administration: the province, the prefecture and the county.
- Prefecture level analysis (18 provinces and 275 prefectures).
- 86 cases (the universe of literary inquisition cases strictly defined).
 - ▶ Distribution of Cases, 1700–1750
 - ▶ Distribution of Cases, 1751–1800
- Panel data on the number of reputable individuals in Chinese history (3,509 individuals). [▶ Reputable Individuals](#)
- Panel data on the number of local charities in the Qing period provided by (Liang, 2001) (3901 charities). [▶ Charities](#)
- Host of historical and geographic control variables.

SAMPLE CONSTRUCTION

- Prefectures are highly heterogeneous.
 - ▶ Non-comparable units may not conform to the various assumptions of a difference-in-differences design.
- To mitigate this concern:
 - ▶ Construct a comparison group following a matching exercise.
 - ▶ Generate propensity scores for all prefectures by running a Logistic regression on pre-treatment covariates.
- Combining propensity score matching and difference-in-differences estimation minimizes bias arising from prefectures following differential trends. [▶ Map](#)
- Matched sample of 109 prefectures. [▶ Before Matching](#) [▶ After Matching](#)
- Balanceness on other pretreatment variables. [▶ Balance](#)
- Summary statistics. [▶ Summary statistics for the historical panel](#)
[▶ Summary statistics for the cross section](#)

PERSECUTIONS AND REPUTABLE INDIVIDUALS

Qualitative evidence suggests that the literary inquisitions had a major impact on intellectual life.

- Kuhn (2002) quotes a Korean visitor to China in 1780:

“Even about the most commonplace affairs, they burn the records of their conversations without leaving a scrap of paper”

Kuhn comments: “[t]here is no doubt that alien rule—particularly under the touchy Qianlong—had made the Han literati fearful and circumspect”.

- Dai Mingshi was studying “the history of the loyalist Southern Ming dynasties, but after his death that personal realm of scholarly curiosity was off-limits for officials who had elected to serve the Qing dynasty” (Wakeman, 1998, 78)
- Joel Mokyr: “what little there was of a stirring of intellectual progress before 1644 could not survive what de Bary has called the ‘Manchu suppression’” (Mokyr 2016, 322).

PERSECUTIONS AND REPUTABLE INDIVIDUALS

To examine the effect of persecutions on the individual level:

- Jiang (2005): data on reputable individuals in the Qing Dynasty.
- Includes individuals known as scholars, artists, writers, and philanthropists.
- Extract all individuals born between 1640 and 1819 who came from prefectures in our matched sample (109 prefectures, 3509 individuals).
- Dependent variable: the number of reputable individuals in a prefecture.
- 10/86 inquisition cases involved reputable individuals.

PERSECUTIONS AND REPUTABLE INDIVIDUALS

Difference-in-differences specification:

$$\text{Reputable Individuals}_{p,d} = \beta \text{Literary Inquisition}_{p,d} + \Omega_p + \Lambda_d + \Lambda_d \mathbf{X}'_p + \epsilon_{p,d},$$

p refers to prefecture; and d to decade. Dependent variable is the number of reputable individuals within a specific age group in Prefecture p , Decade d .

- Literary Inquisition $_{p,d} \in \{0, 1\}$ is an indicator variable that becomes equal to one once a prefecture is affected by an inquisition.
- Ω_p are prefecture fixed effects.
- Λ_d are decade fixed effects.
- $\Lambda_d \mathbf{X}'_p$ are interactions between time-invariant controls and decade FE. \mathbf{X}'_p includes logged initial population density, number of *jinshi* during the Ming period, latitude, longitude and socioeconomic macroregion.

THE IMPACT OF LITERARY INQUISITIONS ON REPUTABLE INDIVIDUALS

	# Reputable Individuals		
	15–30 Years Old (1)	31–45 Years Old (2)	46–60 Years Old (3)
Mean of Dep. Variable	2.48	2.2	2.13
Literary Inquisition	-0.903* (0.468)	-0.563 (0.493)	-0.508 (0.483)
Jinshi	Yes	Yes	Yes
Initial Pop. Density × Decade FE	Yes	Yes	Yes
Ming Jinshi × Decade FE	Yes	Yes	Yes
Latitude/Longitude × Decade FE	Yes	Yes	Yes
Socioeconomic Macroregion × Decade FE	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes
Observations	1417	1417	1417
Adjusted R^2	0.857	0.844	0.815

PERSECUTIONS AND LOCAL CHARITIES

Estimate the following equation:

$$\begin{aligned} \text{Local Charities}_{p,d} = & \beta \text{Literary Inquisition}_{p,d} + \Omega_p + \Lambda_d \\ & + \Lambda_d \mathbf{X}'_p + \epsilon_{p,d}, \end{aligned} \quad (1)$$

- Literary Inquisition $_{p,d} \in \{0, 1\}$ is an indicator variable that becomes equal to one once prefecture p is affected in decade d by an inquisition.
- Ω_p are prefecture fixed effects.
- Λ_d are decade fixed effects.
- $\Lambda_d \mathbf{X}'_p$ are interactions between time-invariant controls and decade FE. In the baseline, \mathbf{X}'_p include logged initial population density, number of *jinshi* during the Ming period, latitude, longitude and socioeconomic macroregion.

PERSECUTIONS AND LOCAL CHARITIES

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.750*	-0.988**	-1.024**	-1.024**
	(0.419)	(0.419)	(0.506)	(0.469)
Initial Pop. Density \times FE	Yes	Yes	Yes	Yes
Ming Jinshi \times FE	No	Yes	Yes	Yes
Latitude/Longitude \times FE	No	No	Yes	Yes
Socioeconomic Macroregion \times FE	No	No	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Clusters	Prefecture	Prefecture	Prefecture	Prefecture Decade
Observations	1417	1417	1417	1417
Adjusted R^2	0.779	0.792	0.828	0.828

Robust standard errors are clustered at the prefectural level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

A literary inquisition reduced the number of local charities by 38% of the sample mean (-1.024/2.679) [Column 3].

► Dynamics

THE IMPACT OF INQUISITIONS

POLITICAL ECONOMY CONTROLS

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.893*	-0.897*	-1.004**	-1.071**
	(0.533)	(0.534)	(0.503)	(0.500)
Resistance to Qing × FE	Yes	No	No	No
Ming-Era Academies × FE	No	Yes	No	No
Ming Loyalists × FE	No	No	Yes	No
Beijing × FE	No	No	No	Yes
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1417	1417	1417	1417
Adjusted R ²	0.829	0.828	0.828	0.840

THE IMPACT OF INQUISITIONS

INITIAL SOCIAL CAPITAL

Controlling for	# Local Charities			
	Initial Charities	Buddhist Temples	Funding Agencies	Fragmentation Index
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.927* (0.494)	-1.056** (0.523)	-1.024** (0.510)	-1.034** (0.491)
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1417	1417	1417	1404
Adjusted R ²	0.841	0.827	0.826	0.829

NO EFFECT ON GOVERNMENT SPONSORED ACADEMIES

	# Government Sponsored Academies			
	(1)	(2)	(3)	(4)
Literary Inquisition	0.0127 (0.407)	-0.117 (0.321)	0.0713 (0.329)	0.0713 (0.284)
Initial Pop. Density \times FE	Yes	Yes	Yes	Yes
Ming Jinishi \times FE	No	Yes	Yes	Yes
Latitude/Longitude \times FE	No	No	Yes	Yes
Socioeconomic Macroregion \times FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Clusters	One-Way	One-Way	One-Way	Two-Way
Observations	14148	1417	1417	1417
Adjusted R^2	0.947	0.953	0.954	0.954

ROBUSTNESS

- Coarsened exact matching ▶ CEM
- A more expansive list of inquiries ▶ Expansive
- Local conditions ▶ Local Conditions
- Time-varying controls ▶ Time Varying Controls
- Different samples. ▶ Different Samples
- 50-year time periods. ▶ 50 year time periods
- Spatially corrected S.E ▶ Conley S.E
- Spatial spillovers ▶ Spatial Lags

GENERALIZED TRUST

- Generalized trust is a widely used measure of social capital.
- We use modern data from the Chinese General Social Survey (CGSS).
- CGSS launched in 2003 is the earliest national representative continuous survey project run by academic institutions in mainland China.
- Controls include both historical and modern correlates of trust.
 - ▶ Historical and modern levels of economic development including log per capita income and the percentage of the population in urban areas, and primary enrollment.

GENERALIZED TRUST

	Generalized Trust			Trust in Family		
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of Dep. Var	3.477	3.477	3.486	4.798	4.798	4.796
Literary Inquisition	-0.187** (0.0845)	-0.168* (0.0882)	-0.272*** (0.0851)	0.0397 (0.0460)	0.0402 (0.0466)	0.00492 (0.0510)
Individual Controls	No	Yes	Yes	No	Yes	Yes
Contemporary Controls	No	No	Yes	No	No	Yes
Socioeconomic Macroregion FE	No	No	Yes	No	No	Yes
Observations	3346	3343	3246	3345	3341	3244
Adjusted R ²	0.00354	0.0294	0.0510	0.000581	-0.00121	0.0115

This table shows the effects of a literary inquisition on modern levels of trust. Columns (1)-(4) examines the impact of persecutions on generalized trust. Columns (5-6) show that there is no impact on trust within the family or on trust in relatives. The dependent variable is a variable with scale 1-5. Contemporary controls include log per capita income and the proportion of the population belong to ethnic minorities, the percentage urban and the percentage enrolled in primary education. In all specifications standard errors are clustered at the prefectural level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

EVIDENCE FROM 20TH CENTURY CHINA: BASIC EDUCATION

- Empirical and experimental research establishes that contributions to local public goods are an outcome of social capital (Ostrom 2002).
- Basic education in Qing China was provided by families and by local schools run by the gentry.
- Assess prefecture-level literacy rates in the early twentieth century using literacy rates of individuals over 70 in 1982 census.

▶ Literacy data

- Data reflect literacy at the end of the Qing dynasty.

▶ Assumptions for unbiased estimates

EMPIRICAL SPECIFICATION: BASIC EDUCATION

Estimate:

$$\text{Literate}_{i,p} = \alpha + \beta \text{Literary Inquisition}_p + \Omega \mathbf{X}_p + \Phi \mathbf{X}_i + \Gamma_{prov} \\ + \Psi_m + \epsilon_{i,p}$$

EMPIRICAL SPECIFICATION: BASIC EDUCATION

Estimate:

$$\text{Literate}_{i,p} = \alpha + \beta \text{Literary Inquisition}_p + \Omega \mathbf{X}_p + \Phi \mathbf{X}_i + \Gamma_{prov} + \Psi_m + \epsilon_{i,p}$$

- $\text{Literate}_{i,p}$ is a dummy variable if an individual aged over 70 is literate in the 1982 census.

- \mathbf{X}_p are prefecture-level controls:

population size, share of 65+, share of Manchu, distance to capital, initial level of human capital, density of exam quota, agricultural tax per capita, on the Grand Canal/Yangtze, on the coast, had a historical courier route, population density in 1820, treaty port, agricultural suitability and ruggedness.

- \mathbf{X}_i are individual level controls including gender, size of household, and marital status.
- Γ_{prov} are province fixed effects.
- Ψ_m are socioeconomic macroregion fixed effects.

IMPACT ON BASIC EDUCATION

	Literate			
	(1)	(2)	(3)	(4)
Mean of Dep. Var.	0.153	0.108	0.153	0.153
Literary Inquisition	-0.0447** (0.0205)	-0.0283* (0.0166)	-0.0453** (0.0206)	-0.0524** (0.0220)
Log Jinshi Density	0.0136 (0.0153)	0.00559 (0.0104)	0.0266 (0.0163)	0.0336** (0.0163)
Over 80 Year Olds Only	No	Yes	No	No
Contemporary Controls	No	No	No	Yes
Individual Controls	No	No	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Socioeconomic Macroregion FE	Yes	Yes	Yes	Yes
Observations	72658	12035	72658	72658
Adjusted R^2	0.0340	0.0244	0.233	0.233

This table shows the effects of a literary inquisition at a prefectural level on the literacy rates of individuals older than 70 years old in 1982. Historical controls include distance to the coast, distance to a historical courier route, whether a prefecture contained a treaty port. Individual level controls include gender, marital status, and the number of couples in the household. Robust standard errors, clustered at the prefecture level, are reported in parentheses. There are 72 clusters. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

INSTRUMENTAL VARIABLE STRATEGIES

IV 1 Implement an instrumental variable strategy based on distance to Shenyang.

- Probability of persecution higher in areas where there was less prior cultural interaction between the Qing government and the local inhabitants.
- Shenyang was the ancestral homelands of the Manchus. On the formation of the Manchu state it became their capital and the base for their invasion of China in 1644.
- Shenyang was not a political or economic center in China proper.

INSTRUMENTAL VARIABLE STRATEGIES

IV 1 Implement an instrumental variable strategy based on distance to Shenyang.

- Probability of persecution higher in areas where there was less prior cultural interaction between the Qing government and the local inhabitants.
- Shenyang was the ancestral homelands of the Manchus. On the formation of the Manchu state it became their capital and the base for their invasion of China in 1644.
- Shenyang was not a political or economic center in China proper.

IV 2 Implement an instrumental variable strategy based on distance to the nearest army base.

- Army bases were alternative sources of political control.
- Condition IVs on baseline controls, distance to Beijing, latitude, and political economy controls.

INSTRUMENTAL VARIABLE STRATEGY: DISTANCE TO SHENYANG

	Second Stage IV Estimates		
	(1)	(2)	(3)
Literary Inquisition	-0.0939 ⁺ (0.0604)	-0.116** (0.0578)	-0.0754 ⁺ (0.0475)
Log Jinshi Density	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes
Contemporary Controls	No	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Adjusted R ²	0.209	0.209	0.211
Observations	72659	72659	72659

	First Stage IV Estimates		
	Literary Inquisition		
Distance to Shenyang	1.0770*** (0.001)	1.0175*** (0.299)	1.2434*** (0.432)
Individual Controls	Yes	Yes	Yes
Contemporary Controls	No	Yes	Yes
Individual Controls	Yes	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Observations	72659	72659	72659
Kleibergen-Paap Wald rk F Statistic	11.10	11.58	8.30

INSTRUMENTAL VARIABLE STRATEGY: DISTANCE TO ARMY BASES

	Second Stage IV Estimates		
	(1)	(2)	(3)
Literary Inquisition	-0.0790*** (0.0301)	-0.101*** (0.0342)	-0.0761*** (0.0253)
Log Jinshi Density	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes
Contemporary Controls	No	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Adjusted R^2	0.209	0.209	0.211
Observations	72659	72659	72659
	First Stage IV Estimates		
	Literary Inquisition		
Distance to Shenyang	0.0024*** (0.001)	0.0025*** (0.299)	0.0030*** (0.432)
Individual Controls	Yes	Yes	Yes
Contemporary Controls	No	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Observations	72659	72659	72659
Kleibergen-Paap Wald rk F Statistic	11.49	10.85	15.37

CONTROLLING FOR POLITICAL AND DEMOGRAPHIC SHOCKS

- Results robust to the inclusion to controlling for occupation by the Taiping troops [▶ Results Controlling for the Taiping](#) .
- More education individuals may have migrated to Taiwan in the wake of the Communist takeover.
 - ▶ Construct estimates for selective migration to Taiwan. [▶ Constructing the Migration Measure](#)
 - ▶ Results robust to the inclusion of estimated migration to Taiwan [▶ Results Using Selective Migration](#) .
- More educated individuals may have been targeted during the Cultural Revolution.
 - ▶ Use data from Walder (2014) to control for deaths during the Cultural Revolution [▶ Results Controlling for the Cultural Discussion](#) .

UNDER CENTRALIZATION AND DECENTRALIZATION

- The effect is concentrated when and where educational institutions were decentralized:
 - ▶ No effect on higher levels of education (middle school or high school) ▶ Higher Levels of Education.
 - ▶ Effects are concentrated on rural individuals ▶ Effect on Rural and Urban Samples.
 - ▶ Results are strongest for individuals educated when institutions were decentralized (born before 1927 and during Cultural Revolution). No effect for when educational institutions were centralized ▶ Effect Under Decentralization.

LONG-TERM EFFECTS AND CONTEMPORARY POLITICAL OUTCOMES

Table: Authoritarian Resilience? Evidence from Political and Social Participation

	Political Apathy		Volunteering on Local Committees		Making Suggestions to Local Committees	
	(1)	(2)	(3)	(4)	(5)	(6)
Literary Inquisition	0.199** (0.0815)	0.134* (0.0746)	-0.753** (0.360)	-1.080*** (0.419)	-0.435* (0.248)	-0.693** (0.290)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Contemporary Controls	No	Yes	No	Yes	No	Yes
Adjusted R^2 / Pseudo R^2	0.0507	0.0543	0.0397	0.0485	0.0495	0.0577
Observations	3320	3224	3280	3184	3335	3238

This table shows the effects of a literary inquisition on modern political and social participation. All specifications include socioeconomic macroregion fixed effects. Columns 1-2 examines the impact of literary inquisitions on political apathy. People are more likely to think that people like themselves cannot have an impact on government. Columns 3-4 studies the impact of inquisitions on whether individuals are willing to volunteer to work on village committees. Column 5-6 examine the impact of inquisitions on whether individuals actively participate and make suggestions in meetings. The dependent variable is scaled between 1-5. In all specifications we include individual controls and control for proportion of individuals who identify as ethnic Manchus. Contemporary controls include log per capita income and the proportion of the population belong to ethnic minorities, the percentage urban and the percentage enrolled in primary education. In all specifications standard errors are clustered at the prefectural level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

POLITICAL APATHY AND DISENGAGEMENT

But persecutions are not associated with more favorable attitudes to autocratic rule

	Multi-Party Systems [§]			Free Speech [‡]		
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of Dep. Var	0.417	0.417	0.417	0.587	0.587	0.587
Literary Inquisition	-0.147*** (0.0302)	-0.139*** (0.0292)	-0.159*** (0.0369)	-0.0962* (0.0545)	-0.0852+ (0.0593)	-0.107** (0.0441)
Individual Controls	Yes	Yes	Yes	No	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic Macroregion FE	Yes	Yes	Yes	No	Yes	Yes
Internet Access	No	Yes	Yes	No	Yes	Yes
Contemporary Controls	No	Yes	Yes	No	Yes	Yes
Historical & Geographical Controls	No	No	Yes	No	No	Yes
Observations	52046	52046	51834	52062	52062	51850
Pseudo R ²	0.0121	0.0123	0.0124	0.0163	0.0165	0.0167

‡ Question: Western-style multiparty systems are not suitable for China[§].

‡ Free speech is “western” and inherently dangerous[‡].

POLITICAL APATHY AND DISENGAGEMENT

But persecutions are not associated with more favorable attitudes to autocratic rule

	Confucianism [†]		
	(7)	(8)	(9)
Mean of Dep. Var	0.238	0.238	0.238
Literary Inquisition	-0.149** (0.0676)	-0.114* (0.0619)	-0.123** (0.0623)
Individual Controls	No	Yes	Yes
Province FE	Yes	Yes	Yes
Survey FE	Yes	Yes	Yes
Socioeconomic Macroregion FE	No	Yes	Yes
Internet Access	No	Yes	Yes
Contemporary Controls	No	Yes	Yes
Historical & Geographical Controls	No	No	Yes
Observations	52075	52075	51863
Pseudo R ²	0.0356	0.0357	0.0359

§ Modern China needs to be guided by wisdom of Confucius/Confucian thinking[†].

CHINA'S AUTHORITARIAN RESILIENCE

- Stability of imperial autocracy in China attributed to the fact that “the Chinese emperors were able to inhibit the formation of autonomous social groups outside the control of the state” (Fu 1994, 141).
- But apparent resilience of autocratic institutions in China may not reflect the popularity of autocracy but rather political apathy—apathy partially induced by a history of autocratic rule.
- Kuran (1995) showed that under autocratic regimes, individuals have an incentive to falsify their true preferences in response to the fear of persecution.
- Speculatively our argument suggests that in China a long legacy of political apathy contributes to apparent regime stability.

CONCLUSIONS

- This paper studies the effects of the intensification of autocratic rule under the Qing dynasty on civil society and social capital.
- As documented in the historical panel, we show that literary inquisitions eroded social capital.
- Political repression led to a permanent decline in social capital and produced a culture of political disengagement and apathy that persists to this day.
- Results indicate a possible vicious cycle in which autocratic rule becomes self-reinforcing through a permanent decline in social capital.

EVIDENCE FROM 20TH CENTURY CHINA: SELECTIVE MIGRATION AND EDUCATIONAL ATTAINMENT

	(1) Middle School or Above	(2) Primary School or Above
Literary Inquisition	-0.00674 (0.00491)	-0.0367** (0.0147)
Migration records	-0.175*** (0.0372)	-0.149 (0.124)
Total Migration Records	-0.00781 (0.00537)	-0.0268 (0.0169)
Historical Controls	Yes	Yes
Individual Controls	Yes	Yes
Socioeconomic macroregion FE	Yes	Yes
Province FE	Yes	Yes
Observations	72658	72658
Adjusted R^2	0.0440	0.234

Notes: This table provides evidence for the validity of our migration variable. In all specifications robust standard errors, clustered at the prefecture level are reported in parentheses. There are 72 clusters. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

SUMMARY STATISTICS FOR HISTORICAL PANEL ANALYSIS

Variable	Mean	Std. Dev.	Min.	Max.	N
Literary Inquisition	0.077	0.267	0	1	1417
Local Charities	2.679	4.218	0	30	1417
Reputable Individuals Aged 15 to 30	2.476	4.819	0	51	1417
Reputable Individuals Aged 31 to 45	2.2	4.283	0	46	1417
Reputable Individuals Aged 46 to 60	2.13	4.11	0	42	1417
Government-Sponsored Academies	6.809	5.647	0	29	1417

▶ Return

SUMMARY STATISTICS II

Variable	Mean	Std. Dev.	Min.	Max.	N
Log Population in 1600	3.498	0.922	1.364	5.37	109
Agricultural Suitability	4.009	1.63	2	8	109
Ruggedness	4.532	3.102	0.103	15.552	109
Longitude	113.729	4.243	102.71	121.099	109
Latitude	31.088	5.317	20.008	40.966	109
Ming Jinshi	75.761	83.965	1	533	109
Ming Academies	4.156	3.885	0	17	109
Local Charities in 1700	0.459	1.093	0	7	109
Buddhist Temples	9.477	7.544	0	60	109
Funding Agencies in 1700	0.275	1.193	0	11	109
Linguistic Fragmentation Index	0.104	0.177	0	0.699	108
Principal Component of Initial Social Capital	0.241	1.119	-0.919	4.639	109
Urbanization (1393)	8.549	7.475	0	59.1	75
On Grand Canal/Yangtze	0.862	0.346	0	1	109
Distance to a Courier Route	39.934	73.875	0	402.712	109
Conflicts 1644 to 1690	2.606	2.832	0	13	109
Ming Loyalists	1.193	3.105	0	24	109
Distance to Beijing	1017.389	555.199	0	2255.115	109
Examination Quota	131.24	53.682	44	250	104

▶ Return

MATCHING COVARIATES

Covariate	Literary Inquisition	Covariate	Literary Inquisition
Ming Jinshi	0.0663**	North China	0.0129
Agricultural Suitability	-0.0185	Northwest China	0.263
Log Population in 1600	0.0450	Upper Yangzi	0.207*
Courier Routes	0.0203	Middle Yangzi	0.256**
Ruggedness (2nd quartile)	0.116	Lower Yangzi	0.158
Ruggedness (3rd quartile)	0.0783	Southeast Coast	0.115
Ruggedness (4th quartile)	0.00522	Lingnan	0.0454

This table reports the variables used in our matching exercise. The omitted categories are the first quartile of ruggedness and Northeast China. There are 217 observations. The adjusted R^2 is 0.165. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table: Balance Table

(a) Before Matching					
Variables	N	Untreated	N	Treated	Difference in Means
Ming Jinshi	208	2.652	57	4.544	-1.892***
Agricultural Suitability	208	3.760	57	4.368	-0.609**
Log Population in 1600	208	12.462	57	13.273	-0.811***
Courier Routes	208	1.957	57	2.825	-0.868***
Ruggedness	208	5.915	57	4.176	1.739***
Northeast China	208	0.000	57	0.000	0.000
North China	208	0.125	57	0.140	-0.015
Northwest China	208	0.159	57	0.088	0.071
Upper Yangzi	208	0.096	57	0.018	0.079*
Middle Yangzi	208	0.130	57	0.211	-0.081
Lower Yangzi	208	0.101	57	0.246	-0.145***
Southeast Coast	208	0.058	57	0.140	-0.083**
Lingnan	208	0.115	57	0.158	-0.043
Other Regions	208	0.000	57	0.000	0.000

▶ Return

Table: Balance Table

(b) Before Matching, Excluding In-Migration

Variables	N	untreated	N	Treated	Difference in Means
Ming Jinshi	161	2.831	56	4.539	-1.707***
Agricultural Suitability	161	3.733	56	4.357	-0.624**
Log Population in 1600	161	12.444	56	13.281	-0.837***
Courier Routes	161	2.037	56	2.857	-0.820***
Ruggedness	161	5.492	56	4.159	1.333**
Northeast China	161	0.000	56	0.000	0.000
North China	161	0.161	56	0.143	0.019
Northwest China	161	0.205	56	0.089	0.116*
Upper Yangzi	161	0.037	56	0.018	0.019
Middle Yangzi	161	0.137	56	0.214	-0.078
Lower Yangzi	161	0.093	56	0.232	-0.139***
Southeast Coast	161	0.075	56	0.143	-0.068
Lingnan	161	0.149	56	0.161	-0.012
Other Regions	161	0.000	56	0.000	0.000

▶ Return

Table: Balance Table

(b) After Matching					
Variables	N	Untreated)	N	Treated	Difference in Means
Ming Jinshi	90	3.786	19	3.828	-0.042
Agricultural Suitability	90	-4.944	19	-5.211	0.266
Log Population in 1600	90	12.946	19	12.882	0.065
Courier Routes	90	2.400	19	2.263	0.137
Northeast China	90	0.000	19	0.000	0.000
North China	90	0.189	19	0.105	0.084
Northwest China	90	0.144	19	0.211	-0.066
Upper Yangzi	90	0.022	19	0.053	-0.030
Middle Yangzi	90	0.167	19	0.105	0.061
Lower Yangzi	90	0.133	19	0.105	0.028
Southeast Coast	90	0.122	19	0.158	-0.036
Lingnan	90	0.189	19	0.263	-0.074
Other Regions	90	0.000	19	0.000	0.000

[▶ Return](#)

Table: Other Pre-Inquisition Characteristics

Variables	Untreated	Mean	Treated	Mean	Mean Difference
Local Charities in 1700	90	0.456	19	0.474	-0.018
Reputable individuals in 1700	90	19.933	19	19.579	0.354
Population Density in 1580	64	0.072	13	0.066	0.005
Urban Population in 1393	62	50.576	13	63.338	-12.763
Buddhist Temples	90	9.778	19	8.053	1.725
Funding Agencies in 1700	90	0.222	19	0.526	-0.304
Conflicts 1644–1690	90	2.856	19	1.421	1.435**
Academies in 1700	90	5.944	19	5.316	0.629
Ming Loyalists	90	1.133	19	1.474	-0.34
Linguistic Fragmentation Index	89	0.104	19	0.104	0
Dist. to Beijing	90	1009.987	19	1052.451	-42.464
Log Dist. to Beijing	90	6.645	19	6.71	-0.065

[▶ Return](#)

THE IMPACT OF INQUISITIONS

FIXED EFFECTS VERSUS RANDOM EFFECTS

	Fixed Effects	Random Effects	Fixed Effects	Random Effects
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.750*	-0.740*	-1.024**	-1.004**
	(0.402)	(0.403)	(0.484)	(0.488)
Initial Pop. Density \times FE	Yes	Yes	Yes	Yes
Ming Jinshi \times FE	No	No	Yes	Yes
Latitude/Longitude \times FE	No	No	Yes	Yes
Socioeconomic Macroregion \times FE	No	No	Yes	Yes
Observations	1417	1417	1417	1417

Table: This table compares the estimates derived from using fixed effects versus random effects models. Robust standard errors are clustered at the prefecture level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

▶ Return

ROBUSTNESS TO DIFFERENT SAMPLES

Panel (a)	# Local Charities			
	1690-1830	1710-1830	1700-1820	1700-1840
	(1)	(2)	(3)	(4)
Literary Inquisition	-1.020*	-1.039**	-0.824*	-1.222**
	(0.526)	(0.483)	(0.449)	(0.567)
Baseline Controls \times FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Socioeconomic Macroregion \times FE	Yes	Yes	Yes	Yes
Observations	1526	1308	1308	1526
Adjusted R^2	0.805	0.856	0.823	0.829

All specifications include decade and prefecture fixed effects, and interact our baseline controls with decade fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

ROBUSTNESS TO DIFFERENT SAMPLES

Panel (b)	# Local Charities			
	At Least One Charity by 1750	At Least One Charity by 1830	Bottom 10% Ming Jinshi	Incoming Migration
	(5)	(6)	(7)	(8)
Literary Inquisition	-1.440*	-1.456**	-1.213*	-0.879*
	(0.784)	(0.704)	(0.624)	(0.526)
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	910	1040	1261	1365
Adjusted R^2	0.816	0.821	0.823	0.830

All specifications include decade and prefecture fixed effects, and interact our baseline controls with decade fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

▶ Return

IMPACT OF INQUISITIONS

PER CAPITA CHARITIES

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.00533 (0.00415)	-0.00663 (0.00449)	-0.00729** (0.00306)	-0.00729** (0.00295)
Initial pop. density \times FE	Yes	Yes	Yes	Yes
Ming Jinshi \times FE	No	Yes	Yes	Yes
Latitude/Longitude \times FE	No	No	Yes	Yes
Socioeconomic Macroregion \times FE	No	No	Yes	Yes
Clusters	Prefecture	Prefecture	Prefecture	Prefecture Decade
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1404	1404	1404	1404
Adjusted R^2	0.0882	0.133	0.829	0.829

All specifications include decade and prefecture fixed effects, and interact our baseline controls with decade fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

▶ Return

IMPACT OF INQUISITIONS

TIME VARYING CONTROLS

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.892* (0.475)	-1.065** (0.517)	-1.003** (0.498)	-0.932* (0.489)
Baseline Controls \times FE	Yes	Yes	Yes	Yes
Disaster Intensity	Yes	No	No	No
# Conflicts	No	Yes	No	No
# Jinshi	No	No	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1339	1308	1417	1236
Adjusted R^2	0.834	0.819	0.828	0.824

All specifications include decade and prefecture fixed effects, and interact our baseline controls with decade fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

▶ Return

THE IMPACT OF LITERARY INQUISITIONS ON LOCAL CHARITIES: JINSHI/SHENGYUAN QUOTA

	# Local Charities			
	(1)	Normalized (2)	(3)	Normalized (4)
Literary Inquisition	-1.151*	-0.00639*	-1.674**	-0.00946**
Literary Inquisition × Ming Jinshi (> Median)	0.246 (1.012)	-0.00165 (0.00600)		(0.00430)
Literary Inquisition × Shengyuan Quota (> Median)			0.596 (0.986)	0.000427 (0.00475)
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1417	1404	1352	1339
Adjusted R^2	0.827	0.828	0.834	0.828

ROBUSTNESS TO DROPPING SPECIFIC PREFECTURES

	Panel (a): Varying Time Periods			
	# Local Charities			
	1690-1830	1710-1830	1700-1820	1700-1840
	(1)	(2)	(3)	(4)
Literary Inquisition	-1.020*	-1.039**	-0.824*	-1.222**
	(0.526)	(0.483)	(0.449)	(0.567)
Baseline Controls \times FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1526	1308	1308	1526
Adjusted R^2	0.805	0.856	0.823	0.829

▶ Return

ROBUSTNESS TO DROPPING SPECIFIC PREFECTURES

Panel (b): Restricting the Sample

	# Local Charities			
	At least 1 Charity by 1750	At least 1 Charity by 1830	Bottom 10% Ming Jinshi	Incoming Migration
	(1)	(2)	(3)	(4)
Literary Inquisition	-1.440* (0.784)	-1.456** (0.704)	-1.213* (0.624)	-0.879* (0.526)
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	910	1040	1261	1365
Adjusted R^2	0.816	0.821	0.823	0.830

▶ Return

IMPACT OF INQUISITIONS

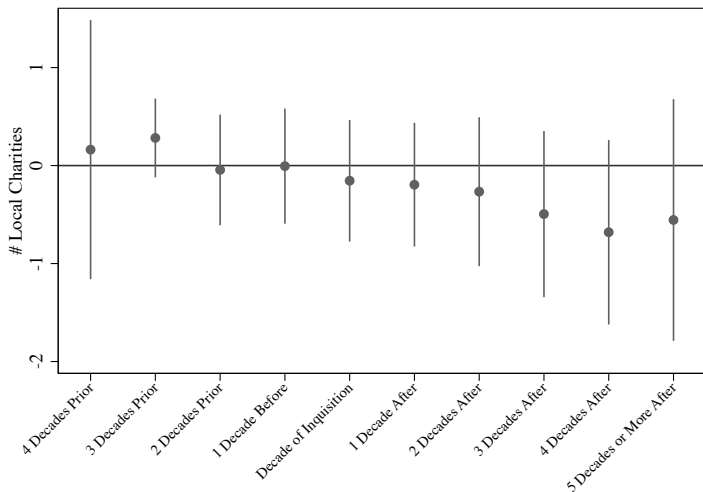
50 YEAR TIME PERIODS

	# Local Charities		New Local Charities	
	(1)	(2)	(3)	(4)
Literary Inquisition	-3.998** (1.753)	-4.029** (1.771)	-2.156* (1.152)	-2.134* (1.141)
Baseline Controls × Linear Trend	No	Yes	No	Yes
Baseline Controls × Decade FE	Yes	No	Yes	No
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	545	545	545	545
Adjusted R^2	0.639	0.632	0.459	0.433

This table reports the effect of a literary inquisition on the number of charitable organizations using 50-year time periods. Column 1 presents the baseline specification which includes our baseline controls interacted with decade fixed effects. Baseline controls include Ming jinishi, socioeconomic macro regions, latitude and longitude. Column 2 interacts our baseline controls with a linear time trend. Columns 3-4 focus on the formation of new charitable organizations. In all specifications, robust standard errors, clustered at the prefectural level, are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

[▶ Return](#)

PERSECUTIONS AND LOCAL CHARITIES



▶ Return

IMPACT OF INQUISITIONS

LOCAL CONDITIONS

	# Local Charities				
	Ag. Suitability (6)	Urbanization (7)	Yangtze/Grand Canal (8)	Coast (9)	Courier Routes (10)
Literary Inquisition	-0.999* (0.508)	-1.663** (0.637)	-0.993** (0.475)	-1.120** (0.519)	-1.022** (0.505)
Baseline Controls × FE	Yes	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes	Yes
Observations	1417	1417	1417	1417	1417
Adjusted R^2	0.831	0.823	0.830	0.828	0.827

[▶ Return](#)

IMPACT OF INQUISITIONS

SPATIAL LAGS

	# Local Charities (1)
Literary Inquisition	-0.925* (0.546)
Spatially Lagged Literary Inquisition	0.343 (0.248)
Baseline Controls \times FE	Yes
Decade FE	Yes
Prefecture FE	Yes
Socioeconomic Macroregion \times Decade FE	Yes
Observations	1417
Adjusted R^2	0.831

▶ Return

SPATIAL AUTOCORRELATION

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.979***	-0.979***	-0.979***	-0.979***
	(0.191)	(0.214)	(0.230)	(0.291)
Distance	50km	100km	200km	500km
# Lags	5	5	5	5
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1417	1417	1417	1417
Adjusted R^2	0.872	0.872	0.872	0.872
	# Local Charities			
	(5)	(6)	(7)	(8)
Literary Inquisition	-0.979***	-0.979***	-0.979***	-0.979***
	(0.214)	(0.214)	(0.214)	(0.214)
Distance	100km	100km	100km	100km
# Lags	1	2	3	4
Baseline Controls × FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1417	1417	1417	1417
Adjusted R^2	0.872	0.872	0.872	0.872

CEM MATCHING

	# Local Charities		
	(1)	(2)	(3)
Literary Inquisition	-1.047 ⁺ (0.625)	-1.015* (0.534)	-1.047 ⁺ (0.699)
Baseline Controls × FE	Yes	Yes	Yes
Bootstrapped SE	No	No	Yes
CEM Weights	No	Yes	No
Decade FE	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes
Observations	403	403	403
Adjusted R^2	0.778	0.381	0.272

▶ Return

DIFFERENT DEFINITION OF INQUISITION CASES

	# Local Charities			
	Prefectures with At Least 1 Charity & Ming Jinshi		At Least 1 Inquisition	
	(1)	(2)	(3)	(4)
Literary Inquisition	-1.017 (0.917)	-1.374 (0.943)	-1.724 (1.073)	-1.155 (1.031)
Initial Pop. Density \times FE	Yes	Yes	Yes	Yes
Ming Jinshi \times FE	No	Yes	No	Yes
Latitude/Longitude \times FE	No	Yes	No	Yes
Socioeconomic Macroregion \times FE	No	Yes	No	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1664	1664	448	448
Adjusted R^2	0.351	0.458	0.279	0.370

This table reports our results using a larger and less precise definition of inquisition cases. Columns 2-3 examine all prefectures which had a positive number of jinshi by 1600 and at least one charity by 1830. Columns 3-4 look within those prefectures with a least one persecution. In all specifications robust standard errors are clustered at the prefectural level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$,

*** $p < 0.01$.

[Return](#)

NO EFFECT OF CONFLICTS AND DISASTERS ON INQUISITIONS

	Decade of Inquisition			
	(1)	(2)	(3)	(4)
Total Conflicts	0.0106 (0.0140)	0.0227 (0.0355)		
Lag Conflicts		-0.00683 (0.00900)		
Diaster Intensity			0.00690 (0.0198)	0.00782 (0.0199)
Lag Diaster Intensity				-0.0319 (0.0199)
Baseline Controls \times FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1308	583	1339	1339
Adjusted R^2	0.0230	-0.0501	0.0204	0.0211

▶ Return

NO EFFECT OF INQUISITIONS ON CONFLICTS

	# Conflict			
	(1)	(2)	(3)	(4)
Literary Inquisition	0.0104 (0.0312)	0.00606 (0.0348)	0.00866 (0.0290)	0.00866 (0.0197)
Initial Pop. Density \times FE	Yes	Yes	Yes	Yes
Ming Jinshi \times FE	No	Yes	Yes	Yes
Latitude/Longitude \times FE	No	No	Yes	Yes
Socioeconomic Macroregion \times FE	No	No	Yes	Yes
Clusters	Prefecture	Prefecture	Prefecture	Prefecture Decade
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1308	1308	1308	1308
Adjusted R^2	0.0448	0.0415	0.0955	0.0955

▶ Return

NATURAL DISASTERS AND DISASTER RELIEF

	# Local Charities			
	(1)	(2)	(3)	(4)
Literary Inquisition	-0.886*	-1.038**	-0.913*	-1.071**
	(0.476)	(0.482)	(0.482)	(0.491)
Disaster Relief	0.00832	0.0112		
	(0.00853)	(0.00989)		
Literary Inquisition \times Disaster Relief		0.0487		
		(0.0310)		
Tax Relief			-0.00238	-0.00170
			(0.00354)	(0.00380)
Literary Inquisition \times Tax Cuts				0.0226
				(0.0269)
Disaster Intensity	Yes	Yes	Yes	Yes
Baseline Controls \times FE	Yes	Yes	Yes	Yes
Decade FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
Observations	1326	1326	1313	1313
Adjusted R^2	0.834	0.834	0.833	0.833

▶ Return

LITERACY DATA

- There is no systematic data for schooling in 19th or early 20th century China.
- After 1931 provision of education became centralized.
- We focus on individuals educated before 1931.
- Education was *decentralized*.
- Use the Integrated Public Use Microdata Series census (IPUMS) to obtain individual level literacy data for China in 1982.
- Match individual level observations from IPUMS data with prefecture-level data from the Historical China County Population Census (HCCPC) from 1982 and prefecture-level information from historical GIS data.
- Study literacy among individuals aged at least 70 in 1982 (i.e. those born before 1912) (sample = 72,658).

LITERACY DATA

Unbiased estimate of the effect of inquisitions on literacy in the late 19th and early 20th century if:

- 1 control for differences in survival rates between literate and illiterate individuals;
- 2 limited opportunities for individuals to become literate later in life.

To address (1) explicitly control for the age structure of the prefecture population.

For (2) individuals born in the late 19th and early 20th centuries were too old to be affected by the Communist era literacy campaigns.

▶ Return

CONTROLLING FOR SELECTIVE MIGRATION

- Estimate percentage of the population who migrated to Taiwan.
- Data from the Taiwan Family Genealogy Catalogue Database.
- Number of clans (proxied by number of family trees) by prefecture who migrated to Taiwan in the late 1940s.
- Normalize migration measure by the prefecture-level population in 1953 census.
- Distinguish between the records originally obtained from the GSU as these are more reliable from those records collected from other libraries that are also available in the Taiwan Family Genealogy Catalogue Database.
- Controlling for selective migration increases the size of the coefficient slightly.

LONG-RUN EFFECT ON ELITE EDUCATION

	Middle School		High School	
	(1)	(2)	(3)	(4)
Mean of Dep. Var.	0.0269	0.175	0.00255	0.0166
Literary Inquisition	-0.00178 (0.00577)	0.0284 (0.0196)	0.000294 (0.00144)	0.00210 (0.00569)
Log Jinshi Density	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes	Yes
Among Literates	No	Yes	No	Yes
Observations	72659	11137	72659	11137
Adjusted R^2	0.044	0.041	0.013	0.028

▶ Return

BASIC EDUCATION: URBAN AND RURAL SAMPLES

	Literate			
	Urban Sample		Rural Sample	
	(1)	(2)	(3)	(4)
Literary Inquisition	0.00429 (0.00947)	-0.000876 (0.00964)	-0.100*** (0.0357)	-0.0976*** (0.0344)
Log Jinishi Density	Yes	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Socioeconomic Macroregion FE	Yes	Yes	Yes	Yes
Observations	353426	393532	1111213	1071107
Adjusted R^2	0.0464	0.0455	0.207	0.208

BASIC EDUCATION: FROM DECENTRALIZATION TO CENTRALIZATION

	Literate		
	Baseline	Categorization 1	Categorization 2
	(1)	(2)	(3)
Literary Inquisition	-0.0585*	-0.0806**	-0.0823**
	(0.0340)	(0.0394)	(0.0334)
Age < 23 in 1982		0.573***	
		(0.0170)	
Age 23–56 in 1982		0.346***	
		(0.0102)	
Age >56 or < 23 in 1982			0.123***
			(0.0106)
Literary Inquisition × Age < 23 in 1982		-0.0102	
		(0.0330)	
Literary Inquisition × Age 23–56 in 1982		0.0464**	
		(0.0231)	
Literary Inquisition × Age >56 or < 23 in 1982			0.0436***
			(0.0132)
Log Jinshi Density	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Observations	1870154	1870144	1870144
Adjusted R ²	0.275	0.344	0.285

CONTROLLING FOR EXPOSURE TO THE TAIPING REBELLION

	Literate		
	(1)	(2)	(3)
Literary Inquisition	-0.0547** (0.0226)	-0.0523** (0.0219)	-0.0578** (0.0238)
Occupied by Taiping Troops	-0.0449 (0.0441)		
Months Occupied by Taiping Troops		0.000183 (0.000674)	
Log Months Occupied by Taiping Troops			-0.0470*** (0.0163)
Log Jinshi Density	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes
Observations	72659	72659	72659
Adjusted R^2	0.233	0.233	0.234

CONTROLLING FOR MIGRATION TO TAIWAN

	Literate					
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of Dep. Var.	0.153	0.153	0.153	0.153	0.153	0.153
Literary Inquisition	-0.0616*** (0.0222)	-0.0653*** (0.0227)	-0.0389* (0.0200)	-0.0709*** (0.0229)	-0.0669*** (0.0217)	-0.0424** (0.0167)
Log Jinshi Density	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Migration Records	Certain	Log Certain	Binary Certain	Possible Certain	Log Possible	Binary Possible
Observations	49414	49414	49414	49414	49414	49414
Adjusted R ²	0.212	0.212	0.213	0.212	0.212	0.213

▶ Return

CONTROLLING FOR THE CULTURAL REVOLUTION

	Literate					
	(1)	(2)	(3)	(4)	(5)	(6)
Literary Inquisition	-0.0485** (0.0214)	-0.0495** (0.0214)	-0.0641*** (0.0226)	-0.0456** (0.0208)	-0.0476** (0.0216)	-0.0524** (0.0223)
Cultural Revolution Deaths (v. 1) P.C	-0.0005*** (0.0002)	-0.0005** (0.0002)				
Cultural Revolution Deaths (v. 1) Abs. N.			-0.0093*** (0.0025)			
Cultural Revolution Deaths (v. 2) P.C				-0.0004** (0.0001)	-0.0005*** (0.0002)	
Cultural Revolution Deaths (v. 2) Abs. N						0.0001 (0.0051)
Crude Death Rates in Population		-0.0053 (0.0113)			-0.0249** (0.0096)	
Log Jinshi Density	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Contemporary Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical and Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	72658	72658	72658	72658	72658	72658
Adjusted R ²	0.234	0.234	0.234	0.233	0.233	0.233

▶ Return

INQUISITION CASES

清代文字獄檔目錄	
第一輯	
謝濟世著書案 乾隆六年九月初七年正月止	一
著孫嘉淦查明謝濟世註書具奏諭 實錄 聖訓法祖門卷三三	一
孫嘉淦奏違旨查取謝濟世所著書籍板片並銷燬摺 軍機處檔	一
王肇基獻詩案 乾隆十六年八月初本年九月止	五
阿思哈奏據稟王肇基獻詩緣由摺 續回硃批檔	五
王肇基是瘋人論 實錄	六
阿思哈奏訊得王肇基供情大略摺 續回硃批檔	七
王肇基立斃杖下母妻交地方官安插諭 實錄	九
阿思哈奏將王肇基杖斃摺 續回硃批檔	九
丁文彬逆詞案 乾隆十八年六月初本年九月止 本案餘三法司摺一件	一一
孔昭煥奏丁文彬冒稱親戚並搜獲所携書籍摺 軍機處檔	一一

目錄

清代文字獄檔

Figure: Literary inquisition cases as presented in Archives of Museum of Forbidden City (1934).

DATA ON LOCAL CHARITIES

苏	苏州	长洲	广仁堂	1737
川	重庆	江北厅	体仁堂	1741
滇	云南	富明	掩骼所	1743
苏	苏州	虎阜	积德堂	1743
甘	兰州	皋兰	掩骼社	1752
苏	太仓	宝山	罗店施棺局	1752
苏	苏州	虎阜	永仁堂	1752
川	重庆	巴县	敦义堂	1753
苏	苏州	崑山	崇善堂	1753
浙	杭州	海宁	同仁局	1757

Figure: An example of our charity data from Liang (2001).

IMPERIAL SUBJECTIVITY

- One individual was persecuted for writing: “Since the clear wind does not recognize words, Why does it flip through the pages of my book?”
- Chinese character for “Qing” has the connotation “clear”, this “poetic couplet was interpreted as criticism of the Qing rulers, who were implicitly depicted as illiterate barbarians masquerading as arbiters of literary tastes” (Gu 2013)

IMPERIAL SUBJECTIVITY

- One individual was persecuted for writing: “Since the clear wind does not recognize words, Why does it flip through the pages of my book?”
- Chinese character for “Qing” has the connotation “clear”, this “poetic couplet was interpreted as criticism of the Qing rulers, who were implicitly depicted as illiterate barbarians masquerading as arbiters of literary tastes” (Gu 2013)
- Censors reported an author for the following passage: “Facing the bright moon, one becomes a good friend./Inhaling the clear wind, one falls a drunken lord.” These words were suspect as “‘bright moon’ could be viewed a reference to the salutary moral power of the (previous) Ming dynasty”.
- However, this scholar were spared punishment when the emperor changed his mind at the last minute, writing: ‘Clear wind’ and ‘bright moon’ are commonly used words in poetry and essays. How can one avoid using them?’.

AN EXAMPLE LITERARY INQUISITION CASE

- 1 The case was first brought to the attention of the magistrate of Xinchang by Wang Longnan: Wang Longnan found a statement in the dictionary in which Wang Xihou seemed to cast doubt on the scholarly ability of the Kangxi Emperor.
- 2 Longnan had been banished from the province for ‘fomenting litigation’ in the past. When he returned he was arrested by Xihou. He preemptively accused Xihou of disloyalty.
- 3 The writings of Xihou reported to the magistrate. The magistrate in turn reported the case to the provincial governor of Jiangxi.
- 4 The Governor sent the dictionary to the consultants of his book bureau. They judged that Xihou’s writings did not constitute treason.

EXAMPLE LITERARY INQUISITION CASE

- 1 The Governor reported the case to the Qianlong Emperor.
- 2 Qianlong was extremely offended by Xihou's dictionary. He accused the governor of overlooking and missing other offensive passages.
- 3 Xihou was ordered to Beijing. His case was passed to the Board of Punishment. Wang Xihou was executed on 22 December 1777. Twenty-one members of his family were enslaved.

▶ Return

FORMING A CHARITY

“In the following year, 1591, thirty-one residents—virtually ‘all the rich and powerful of the city’ (Yang 1624, 1:9b)—so admired Yang’s benevolent society that they formed a second one, which successfully sponsored medical care for the poor. Having thus ‘rivalled the Society for Sharing Goodness in charitableness’ this society proudly assumed the name ‘Society for Spreading Humaneness’ (kuang-jen hui; Yang 1624, 1:9b–10a). In summarizing the accomplishments of the two societies that graced his ‘small town,’ Yang observed, ‘By treating one person with exceptional generosity, one can transform [the customs of] ten thousand people’ (Yang 1624, 1: 12a). The distribution of wealth even in very limited amounts had, according to Yang, the power to achieve the moral integration of his community” (Smith 1987, 312)

▶ Return

MODEL

- 1 There are two types of players: a ruler and a representative member of the population
- 2 The ruler is endowed with a strength θ_i , which can be strong (S) or weak (W) where $1 > S > W > 0$.
- 3 $\Delta > 0$ measures the perceived legitimacy of the regime.
- 4 When the ruler faces a rebellion by the citizen, he will survive with probability $S + \Delta$ if his strength is S and survive with probability $W + \Delta$ if his strength is W .
- 5 The ruler's strength is private information. Δ is common knowledge.
- 6 The citizen has a prior belief that the ruler's type, θ , is S with probability π and W with probability $1 - \pi$. If the ruler stays in power he obtains 1.

MODEL

- 1 The cost of persecuting for a type θ ruler is $c(p, \theta)$, where both the total and marginal cost of persecutions are increasing, and both total and marginal costs are lower for type S .
- 2 The individual citizen can choose action $a \in \{0, 1\}$, where $a = 0$ refers to not rebelling and $a = 1$ refers to rebellion.
- 3 If the rebellion is successful citizen obtains a benefit of b .
Normalize the utility of living under the current regime to 0.
- 4 Hence utility of the ruler is denoted by $U_R(\theta)$ while the utility of the citizen is denoted by $U_c(\theta)$ as follows:

$$U_R(\theta) = \begin{cases} 1 - c(p, \theta), & \text{if } a = 0; \\ \theta - c(p, \theta) & \text{if } a = 1. \end{cases} \quad (2)$$

$$U_c(\theta) = \begin{cases} 0, & \text{if } a = 0; \\ b(1 - \theta - \Delta) - r & \text{if } a = 1. \end{cases} \quad (3)$$

MODEL

- Case 1** Suppose Δ is greater than $1 - W - \frac{r}{b}$ (case 1). In this case, the regime is perceived as legitimate and both weak and stronger ruler are safe from rebellion. There is no incentive for either ruler type to engage in political persecutions. There is a trivial pooling equilibrium.
- Case 2** Consider the case where Δ is uniformly distributed on $[1 - S - \frac{r}{b}, 1 - W - \frac{r}{b}]$. This means that there will be a rebellion against a ruler who is known to be weak.
- Case 3** If Δ or r are such that $1 - S - \frac{r}{b}$, then both regime types face a rebellion and neither have an incentive to engage in political persecutions.

MODEL

- We focus on Case 2 as most relevant for Qing China.
- Spence Signaling model so can establish the following.

Proposition 1

For values of $\Delta \in [(1 - S - \frac{r}{b}), (1 - W - \frac{r}{b})]$, there is a unique separating PBE that satisfies the Intuitive Criterion, in which the strong ruler chooses a level of persecutions that solves $1 - c(p^, W) = W$ and the weak ruler chooses no persecutions ($p = 0$). The citizen will not rebel if the observed level of persecution is p^* or higher, and rebel otherwise.*

- No pooling equilibrium can satisfy minimal restrictions on out of equilibrium beliefs.

MODEL

Corollary 1

Persecutions are more likely when the legitimacy of the dynasty is questionable (Δ is low).

Persecutions are a way to signal the strength of the ruler. Consistent with the history of Qing dynasty which faced no significant external threats or major rebellions for much of the eighteenth century.

Corollary 2

In the absence of open opposition, political persecutions are necessarily indiscriminate.

In our model there is only a single actor so it follows by definition that persecutions are indiscriminate. The important observation is that in equilibrium there is no open opposition. Hence the emperor is not able to selectively target enemies for persecution and instead relied on inquisitions to signal his ability to seek out and crush any potential opposition.