

Replicating *Web of Power* (Bai et al., 2022)

Replicator: Ian Ho

June 18, 2023

Table I Summary Statistics

Sample	Hunan counties 1850-1864			All counties, 1820-1910		
	Obs.	Mean	Std. dev.	Obs.	Mean	Std. dev.
Number of soldier deaths by year	1,125	26.21	145.75			
Number of soldier deaths during 1854-64 (1K)	1,125	0.37	1.20	149,786	0.02	0.27
Elite connections, baseline networks (weighted)	1,125	1.23	2.53	149,786	0.68	2.02
Elite connections per capita, baseline networks (weighted)	1,125	4.46	7.53	149,786	2.92	9.28
Number of national-level offices				149,786	0.09	0.54
ln area	1,125	7.84	0.48	149,786	7.40	0.89
ln population	1,125	12.14	0.62	149,786	12.08	1.02
ln rice suitability	1,125	1.63	0.10	149,786	1.34	0.32
ln wheat suitability	1,125	1.61	0.06	149,786	1.56	0.30
Main river dummy	1,125	0.40	0.49	149,786	0.42	0.49
Distance to the Grand Cannal	1,125	8.74	1.22	149,786	7.06	5.56
ln urban population	1,125	8.53	1.48	149,786	7.70	2.76
Prefecture capital	1,125	0.28	0.51	149,786	0.14	0.35
ln number of Jinshi	1,125	1.11	1.07	149,786	1.46	1.23
ln quotas for the entry-level exam	1,125	2.63	0.36	149,786	2.50	0.84
Distance to Nanjing	1,125	8.64	1.26	149,786	9.12	4.74
Along the route of Taipings during 1950-53	1,125	0.12	0.33	149,786	0.04	0.19

Table II The Effect of Elite Connections on Soldier Deaths: DD Estimates

Dependent variable	ln(Soldier deaths + 1)									
Connection measured by	$\sum_{n=1}^{N_c} \frac{1}{d_{c,n}}$						N_c			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Baseline Connections	0.214*** (0.058)	0.201*** (0.060)	0.212*** (0.058)	0.213*** (0.059)			0.146*** (0.042)	0.147*** (0.042)		
Baseline Connections per capita					0.061*** (0.022)	0.056** (0.023)			0.047*** (0.017)	0.044** (0.017)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
County FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Geographic-Economic Controls		Y	Y	Y		Y		Y		Y
Political Controls			Y	Y		Y		Y		Y
War Controls				Y		Y		Y		Y
Observations	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125
R-Squared	0.452	0.467	0.477	0.478	0.447	0.475	0.452	0.477	0.449	0.476

Table III The Effect of Elite Connections on Soldier Deaths: Type of Links

Effects of Expanded Networks & Specific Types of Links				
	(1)	(2)	(3)	(4)
Expanded network \times post	0.183*** (0.038)			
Blood, marriage, and friends \times post		0.178*** (0.043)		
Provincial-level exam connections \times post			0.200** (0.095)	
National-level exam connections \times post				0.680** (0.282)
County FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Controls \times post	Y	Y	Y	Y
Pref \times year FE	Y	Y	Y	Y
Observations	1,110	1,110	1,110	1,110
R-Squared	0.671	0.667	0.664	0.665

Effects of Clan Relations

	(5)	(6)	(7)
Same-surname baseline connections \times post	0.223*** (0.067)	0.249*** (0.073)	0.214*** (0.061)
Diff-surname baseline connections \times post		0.056*** (0.017)	
County FE	Y	Y	Y
Year FE	Y	Y	Y
Controls \times post	Y	Y	
Pref \times year FE	Y	Y	
Year \times surname FE	Y	Y	Y
County \times surname FE	Y	Y	Y
Year \times county FE			Y
Observations	48,495	48,495	48,480
R-Squared	0.473	0.478	0.616

Table IV The Effect of Elite Connections on Soldier Deaths: Placebo Networks

Sample	Hunan					
	OLS estimates			IV estimates		
	(1)	(2)	(3)	(4)	(5)	(6)
Baseline connections \times Post				0.329** (0.137)	0.323** (0.140)	0.330** (0.143)
National-level exam connections \times Post	0.725** (0.316)	0.756** (0.335)	0.727** (0.316)			
Placebo connections I \times Post	-0.028 (0.254)		0.146 (0.537)	-0.303 (0.329)		-0.079 (0.535)
Placebo connections II \times Post		-0.085 (0.192)	-0.179 (0.422)		-0.278 (0.253)	-0.231 (0.408)
Year FE	Y	Y	Y	Y	Y	Y
County FE	Y	Y	Y	Y	Y	Y
Controls \times Post	Y	Y	Y	Y	Y	Y
Pref \times year FE	Y	Y	Y	Y	Y	Y
Observations	1,095	1,095	1,095	1,095	1,095	1,095
R-Squared	0.638	0.638	0.638	0.102	0.102	0.102

Sample	Huai region				
	(7)	(8)	(9)	(10)	(11)
Baseline connections \times Post	0.029 (0.036)				
National-level exam connections \times Post		0.047 (0.052)	0.030 (0.056)	0.048 (0.053)	0.028 (0.054)
Placebo connections I \times Post			0.021 (0.047)		0.106 (0.097)
Placebo connections II \times Post				-0.001 (0.050)	-0.115 (0.106)
Year FE	Y	Y	Y	Y	Y
County FE	Y	Y	Y	Y	Y
Controls \times Post	Y	Y	Y	Y	Y
Pref \times year FE	Y	Y	Y	Y	Y
Observations	1,995	1,995	1,995	1,995	1,995
R-Squared	0.561	0.561	0.561	0.561	0.561

Table V The Effect of Elite Connections on Elite Power: DD and DDD Estimates

Specification	DID				DDD	
Sample	Hunan		Non-Hunan		All	
	(1)	(2)	(3)	(4)	(5)	(6)
Baseline connections \times 1854-1910	0.053*** (0.005)	0.054*** (0.005)	0.009 (0.012)	0.011 (0.011)	0.009 (0.012)	0.011 (0.011)
Baseline Connections \times Hunan \times 1854-1910					0.044*** (0.012)	0.049*** (0.013)
Hunan \times 1854-1910					0.094 (0.058)	0.082 (0.063)
County FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Controls \times 1854-1910		Y		Y		Y
Observations	6,825	6,825	142,961	142,961	149,786	149,786
R-Squared	0.338	0.357	0.388	0.388	0.383	0.384

Table VI The Power Effect: The Role of Soldier Deaths

Dependent variable Methods	National-level offices (mean: 0.093)					
	OLS			IV		
	(1)	(2)	(3)	(4)	(5)	(6)
Baseline connections \times Hunan \times 1854-1910	0.049*** (0.013)		-0.011 (0.015)			
Soldier Deaths ₁₈₅₄₋₆₄ \times 1854-1910		0.421*** (0.091)	0.427*** (0.097)	0.383*** (0.077)	0.387*** (0.093)	0.368*** (0.044)
Natl-level exam connections \times Hunan \times 1854-1910					0.018 (0.076)	
Other connections \times Hunan \times 1854-1910						0.008 (0.035)
Baseline connections \times 1854-1910	0.011 (0.011)	0.010 (0.011)	0.011 (0.011)			
Natl-level exam connections \times 1854-1910				0.006 (0.020)	0.007 (0.022)	0.007 (0.022)
Other connections \times 1854-1910				0.022 (0.030)	0.019 (0.040)	0.019 (0.040)
Hunan \times 1854-1910	0.082 (0.063)	-0.018 (0.029)	-0.008 (0.032)	-0.020 (0.040)	-0.024 (0.038)	-0.022 (0.037)
County FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Controls \times 1854-1910	Y	Y		Y	Y	Y
Observations	149,786	149,786	149,786	149,786	149,786	149,786
R-Squared	0.384	0.392	0.392	0.019	0.019	0.019
First-stage F-test				55750.5	104969.5	63510.2
Overidentification test p-value				0.81		