Appendix:

Additional Data Source Information and Robustness Checks

1. Data Sources on Indicators of Social Scientization

Table A1

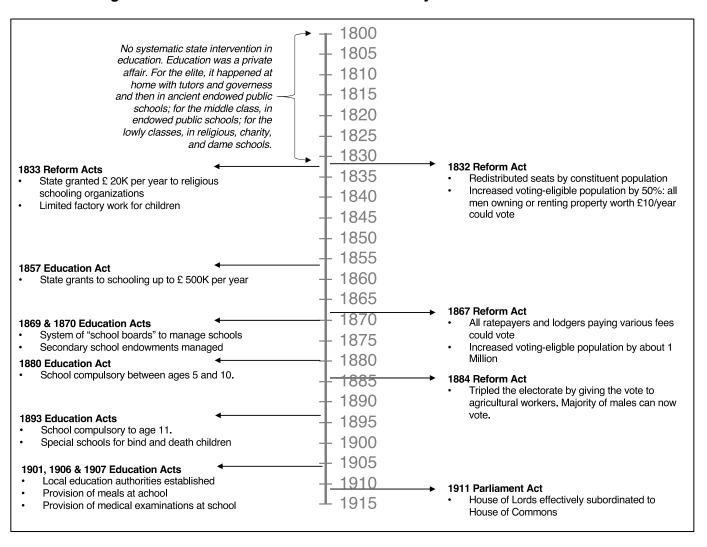
Correlation Matrix of Variables

Variable (unit)	1.	2.	3.	4.	5.	6.	7.	8.
Degree Centrality for Schooling (SD)	1							
2. Scientization (SD)	0.9441	1						
3. UK with dom. conflict (Binary)	-0.1555	-0.1295	1					
4. UK in int'l. conflict (Binary)	0.0261	0.0477	-0.0821	1				
5. States in int'l. conflict (%)	-0.2761	-0.266	-0.0471	0.1831	1			
6. Agricultural to industrial output (%)	0.6941	0.7431	-0.1679	0.0327	-0.3712	1		
7. UK life expectancy (Years)	0.7848	0.8288	-0.0956	-0.0572	-0.1648	0.3823	1	
8. UK particularistic v. public goods index (SD)	0.6168	0.6038	-0.0861	-0.0022	0.0228	0.1198	0.6721	1

2. Historical Context

Figure A1

Timeline Giving Selected Historical Context of Parliamentary Reform



3. Accompanying Context for Figure 7

Figure A2

Most Indicative Words of Topics Depicted in Figure 7

diminish actual small larger proport smaller nearli return decreas enorm statist figur caus statist figur esult greater comparamount past excess show head calcul follow extent upward total aggreg period avail thirti fourth ad reduc haddit

averag half popul an includ comparisonapproxim

B Crown

pelong advis dispos throne georg maintainmake late save submit queen arrang civil_list princ _{held} address callhousehold publicking preced natural period royal_high advic digniti reign privat royal royalti sovereign continu circumst occas princ_walegrant

Industrial Development



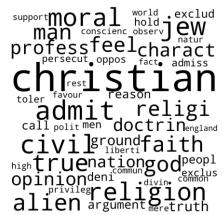
English Nationalism

```
long his tor ilove spirit men head sentiment men polit save manengland highappeal to hear to honour turn moral human life enemi god live littltruth destroi dare english work and memori race countrymen
```

Public Health



Christian Faith & Character



4. Robustness Checks of Inferential Modeling Reported in Table 3

My inclusion of the lagged outcome and lagged independent variables in the models reported in **Table 3** enables me to relate variation in *any change* of the political centrality of schooling in the political discourse from one year to the next due to historical processes in the previous year. In this empirical setup, I excluded an indicator of time to emphasize the substantive historical processes of political and cultural change. As a check of robustness, I refitted a taxonomy of models with both prime minister and decade fixed effects (**Table A2**). The results are virtually identical.

Table A2
GLS Results with Decade Fixed Effects

	(1)	(2)	(3)	(4)	(5)
Social Scientization	0.534***	1.356***	1.208*	1.432***	1.380***
	(0.118)	(0.473)	(0.600)	(0.496)	(0.483)
Decade Fixed Effects					
1800s (reference)		_	_	_	_
1810s		0.026***	0.066	-0.067	0.026***
		(0.002)	(0.042)	(0.106)	(0.002)
1820s		0.035	-0.003	-0.093	0.028
		(0.060)	(0.079)	(0.166)	(0.055)
1830s		1.382	1.134	1.182	0.811
		(0.972)	(1.197)	(1.285)	(1.130)
1840s		0.923	0.623	0.715	0.248
		(0.776)	(1.023)	(1.072)	(0.894)
1850s		0.849	0.537	0.721	0.171
		(0.735)	(0.983)	(0.973)	(0.860)
1860s		0.806	0.485	0.658	0.117
		(0.578)	(0.821)	(0.805)	(0.708)
1870s		1.182**	0.931	1.021	0.980*
		(0.509)	(0.695)	(0.748)	(0.546)
1880s		0.332	0.217	0.271	0.229
		(0.292)	(0.382)	(0.390)	(0.324)
1890s		0.339***	0.253	0.266	0.227
		(0.102)	(0.166)	(0.185)	(0.162)

1900s		0.007	-0.016	-0.041	-0.109
		(0.055)	(0.077)	(0.114)	(0.121)
Conflict					
UK with dom. conflict		-0.100	-0.065	-0.097	-0.049
		(0.080)	(0.105)	(0.076)	(0.119)
UK in int'l. conflict		-0.000	-0.000	-0.000	-0.000
		(0.001)	(0.001)	(0.001)	(0.001)
% states in int'l. conflict		-0.009***	-0.008***	-0.008**	-0.008**
		(0.003)	(0.003)	(0.003)	(0.003)
Development					
UK Industrialization			0.003		
			(0.003)		
% change UK industrial.			0.005		
			(0.005)		
UK life expectancy				-0.046	
				(0.060)	
% change UK life exp.				0.005	
				(0.011)	
UK pub. goods index					-0.264**
					(0.104)
% change pub. goods					0.002
					(0.002)
PM Fixed Effects	Yes	Yes	Yes	Yes	Yes
N Semantic Networks	106	106	106	106	106

Notes. Prime Minister (PM) adjusted robust standard errors are in parentheses. Variable definitions can be found in the Research Design section.

^{***} p<0.01, ** p<0.05, * p<0.1

Relatedly, my empirical focus has been on the gestalt of the political discourse as a whole — the ways that MPs in the aggregate associated and interrelated various political topics in their debates about governance and lawmaking. A reasonable critique is that the models in **Table 3** and **Table A2** do not account for endogenous changes in the culture of the UK parliament itself, particularly with respect to changing norms and conventions shaping how legislators debate policy. As a robustness check, I included indicators of the three periods of distinctive parliamentary debate to capture this kind of internal change (**Table A3**). These were inductively discovered and defined as distinctive using hierarchical clustering analysis on the yearly correlation matrix of topic thetas (years with more similar loadings — common discursive concerns — were periodized. The results reported in **Table 3** are robust.

Table A3

GLS Results with Parliamentary Period Fixed Effects

	(1)	(2)	(3)	(4)	(5)
Social Scientization	0.534***	0.530*	0.548**	0.765***	0.580*
	(0.118)	(0.287)	(0.200)	(0.172)	(0.313)
Period Fixed Effects					
1800s (reference)		_	_	_	_
1810s		0.039	-0.035	0.121	0.017
		(0.051)	(0.063)	(0.073)	(0.050)
1820s		0.300	0.207	0.365**	0.287
		(0.218)	(0.152)	(0.156)	(0.208)
Conflict					
UK with dom. conflict		-0.235***	-0.230***	-0.262***	-0.237***

		(0.052)	(0.074)	(0.077)	(0.050)
UK in int'l. conflict		-0.001	-0.001	-0.001*	-0.001
		(0.001)	(0.001)	(0.001)	(0.001)
% states in int'l. conflict		-0.006**	-0.005*	-0.006*	-0.005
		(0.003)	(0.003)	(0.003)	(0.003)
Development					
UK Industrialization			0.003		
			(0.002)		
% change UK industrial.			0.004		
			(0.004)		
UK life expectancy				-0.074	
				(0.052)	
% change UK life exp.				0.010	
				(0.012)	
UK pub. goods index					-0.055
					(0.073)
% change pub. goods					-0.001
					(0.003)
PM Fixed Effects	Yes	Yes	Yes	Yes	Yes
N Semantic Networks	106	106	106	106	106

Notes: Prime Minister (PM) adjusted robust standard errors are in parentheses. Parliamentary periods are inductively discovered using hierarchical clustering on the yearly correlation matrix of topic loadings. Variable definitions can be found in the Research Design section.