

Evaluating the Effectiveness of Campaign Speeches: Evidence from the First National Speaking Tour

Online Appendix

Johannes C. Buggle*

Stephanos Vlachos[†]

A Additional tables

Table A.1: Cross-sectional falsification

<i>Dep. Variable</i>	(1)	(2)	(3)	(4)	(5)
	Democratic vote (%) in				
	1884	1888	1892	1896	1900
Speech (binary)	0.271 (0.326)	-0.254 (0.324)	-0.123 (0.312)	1.230*** (0.312)	-0.338 (0.320)
Lag Democratic vote (%)	0.834*** (0.021)	0.877*** (0.021)	0.875*** (0.018)	0.817*** (0.027)	0.896*** (0.026)
Lag Populist vote (%)				0.815*** (0.040)	
Demographic controls	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes
Economic controls	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
Mean dep. variable	46.96	46.62	51.83	48.07	44.79
Mean exp. variable	0.30	0.30	0.28	0.26	0.26
Observations	1,168	1,167	1,280	1,392	1,375
Clusters	218	218	218	220	220
Adjusted R^2	0.88	0.90	0.85	0.82	0.87

Notes: OLS regressions. The unit of observation is a county. Demographic controls: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%). Geographic controls: Railroad density (km per sq. km), Distance to state capital (log), Distance to state largest city (log), Latitude, Longitude. Economic controls: Farmers (%), Manufacture workers (%). All regression include State fixed-effects. Standard errors clustered at the Congressional district level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

*University of Lausanne. e-mail: johannes.buggle@unil.ch.

[†]University of Vienna. e-mail: stephanos.vlachos@univie.ac.at.

Table A.2: Difference-in-differences estimation

<i>Dep. Variable</i> <i>Democratic vote (%)</i>	(1) Speech (binary)	(2) Speeches/ 10k pop	(3) Speeches/ 10k pop	(4) Distance (log km)
Speech variable \times 1884	0.197 (0.447)	0.924 (0.574)	-0.156 (1.091)	-0.114 (0.178)
Speech variable \times 1888	0.038 (0.340)	0.319 (0.478)	-0.032 (0.836)	-0.121 (0.139)
Speech variable \times 1892 (omitted)	0	0	0	0
Speech variable \times 1896	1.173*** (0.336)	1.062** (0.453)	2.427*** (0.543)	-0.345*** (0.128)
Speech variable \times 1900	0.713* (0.387)	0.775** (0.358)	1.079* (0.611)	-0.390*** (0.144)
Speech var squared \times 1884			0.830 (0.603)	
Speech var squared \times 1888			0.335 (0.474)	
Speech var squared \times 1892 (omitted)			0	
Speech var squared \times 1896			-0.612*** (0.137)	
Speech var squared \times 1900			-0.140 (0.160)	
Demographic controls	Yes	Yes	Yes	Yes
Year \times State FE	Yes	Yes	Yes	Yes
Year \times Farmers (%)	Yes	Yes	Yes	Yes
Year \times Workers (%)	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes
Mean dep. Variable	47.66	47.66	47.66	47.91
Observations	6,668	6,668	6,668	5,930
Clusters	1,392	1,392	1,392	1,240
Adjusted R^2	0.89	0.89	0.89	0.89

Notes: OLS regressions. The unit of observation is a county \times election. Time-varying controls: Year \times Farmers (%), Year \times Manufacture workers (%). Demographic controls: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%). Other controls: Railroad access (binary), Railroad density (km per sq. km). All regression include Year \times State fixed-effects and county fixed-effects. Standard errors clustered at the county level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

Table A.3: Sensitivity analysis

<i>Dep. Variable</i>	(1)	(2)	(3)	(4)
<i>Democratic vote (%) in 1896</i>	Speech (binary)	Speeches/ 10k pop	Speeches/ 10k pop	Distance (log km)
Panel A. Neighbor-pair estimation				
Speech variable	0.891*** (0.254)	1.151*** (0.376)	1.755*** (0.487)	-0.269** (0.107)
Speech variable squared			-0.286 (0.195)	
Democratic vote (%) in 1892	0.632*** (0.040)	0.635*** (0.040)	0.636*** (0.040)	0.632*** (0.045)
Populist vote (%) in 1892	0.609*** (0.060)	0.610*** (0.058)	0.610*** (0.058)	0.606*** (0.066)
Neighbor-pair FE	Yes	Yes	Yes	Yes
Full set of controls	Yes	Yes	Yes	Yes
Mean dep. variable	48.00	48.00	48.00	48.10
Observations	2,283	2,283	2,283	2,088
Clusters	1,224	1,224	1,224	1,213
Adjusted R^2	0.83	0.83	0.83	0.82
Panel B. Within district estimation				
Speech variable	0.830** (0.335)	0.987*** (0.293)	1.723** (0.665)	-0.264* (0.150)
Speech variable squared			-0.305 (0.185)	
Democratic vote (%) in 1892	0.811*** (0.029)	0.812*** (0.029)	0.812*** (0.029)	0.805*** (0.030)
Populist vote (%) in 1892	0.776*** (0.046)	0.773*** (0.046)	0.774*** (0.045)	0.777*** (0.047)
Congressional district FE	Yes	Yes	Yes	Yes
Full set of controls	Yes	Yes	Yes	Yes
Mean dep. variable	48.07	48.07	48.07	48.41
Observations	1,392	1,392	1,392	1,240
Clusters	220	220	220	217
Adjusted R^2	0.85	0.85	0.85	0.85

Notes: OLS regressions. The unit of observation is a county. Controls included: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%), Railroad density (km per sq. km), Distance to state capital (log), Distance to state largest city (log), Latitude, Longitude, Farmers (%), Manufacture workers (%). Panel A regressions include Neighbor-pair fixed-effects; Panel B regressions include Congressional district fixed-effects. Panel A: standard errors clustered at the neighbor-pair level in parentheses; Panel B: standard errors clustered at the Congressional district level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

Table A.4: House election evidence

<i>Dep. Variable</i>	(1)	(2)	(3)	(4)
<i>Democratic vote (%) in 1896 (House)</i>	Speech (binary)	Speeches/ 10k pop	Speeches/ 10k pop	Distance (log km)
Speech variable	1.031* (0.570)	0.901** (0.428)	1.501* (0.849)	-0.569** (0.244)
Speech variable squared			-0.259 (0.215)	
Democratic vote (%) in 1894 (House)	0.179** (0.071)	0.178** (0.071)	0.178** (0.071)	0.189** (0.074)
Populist vote (%) in 1894 (House)	0.107 (0.077)	0.095 (0.079)	0.095 (0.079)	0.156** (0.073)
Democratic vote (%) in 1892 (House)	0.505*** (0.090)	0.506*** (0.090)	0.506*** (0.090)	0.488*** (0.090)
Populist vote (%) in 1892 (House)	0.298*** (0.100)	0.297*** (0.100)	0.298*** (0.100)	0.305*** (0.103)
Demographic controls	Yes	Yes	Yes	Yes
Geography controls	Yes	Yes	Yes	Yes
Economic controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Mean dep. variable	45.46	45.46	45.46	45.80
Observations	1,247	1,247	1,247	1,101
Clusters	207	207	207	204
Adjusted R^2	0.67	0.67	0.67	0.67

Notes: OLS regressions. The unit of observation is a county. Demographic controls: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%). Geographic controls: Railroad density (km per sq. km), Distance to state capital (log), Distance to state largest city (log), Latitude, Longitude. Economic controls: Farmers (%), Manufacture workers (%). All regression include State fixed-effects. Standard errors clustered at the Congressional district level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

Table A.5: Heterogeneous effects

<i>Dep. Variable</i>	(1)	(2)	(3)	(4)	(5)
	Democratic vote (%) in 1896				
Speech (binary)	-1.610 (1.560)	-1.789 (2.033)	1.438*** (0.366)		0.367 (0.683)
Speech × Workers (%)	0.189** (0.083)	0.189** (0.083)			
Speech × Farmers (%)	0.043 (0.027)	0.045 (0.031)			
Speech × Urban county		0.136 (0.757)			
Speech × Newspapers (#)			-0.172 (0.132)		
Newspapers (#)			0.136 (0.162)		
Speech × 1st trip				0.096 (0.783)	
Speech × 2nd trip				0.853* (0.482)	
Speech × 3rd trip				1.109*** (0.344)	
Speech × 4th trip				2.447* (1.248)	
Speech × Days since campaign start					0.011 (0.008)
Democratic vote (%) in 1892	0.817*** (0.027)	0.817*** (0.027)	0.818*** (0.026)	0.817*** (0.027)	0.816*** (0.027)
Populist vote (%) in 1892	0.816*** (0.040)	0.816*** (0.040)	0.814*** (0.040)	0.816*** (0.041)	0.814*** (0.040)
Demographic controls	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes
Economic controls	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
Mean dep. variable	48.07	48.07	48.09	48.07	48.07
Observations	1,392	1,392	1,390	1,392	1,392
Clusters	220	220	220	220	220
Adjusted R ²	0.82	0.82	0.82	0.82	0.82

Notes: OLS regressions. The unit of observation is a county. Demographic controls: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%). Geographic controls: Railroad density (km per sq. km), Distance to state capital (log), Distance to state largest city (log), Latitude, Longitude. Economic controls: Farmers (%), Manufacture workers (%). All regression include State fixed-effects. Standard errors clustered at the Congressional district level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

Table A.6: Effects on turnout and Republican vote

	(1) Speech (binary)	(2) Speeches/ 10k pop	(3) Speeches/ 10k pop	(4) Distance (log km)
Panel A. Dep. Variable: Democratic vote (% of legally eligible electorate) in 1896				
Speech variable	1.197*** (0.354)	1.243*** (0.345)	2.162*** (0.611)	-0.472*** (0.123)
Speech variable squared			-0.406* (0.223)	
Democratic vote (% eligible) in 1892	0.694*** (0.020)	0.695*** (0.020)	0.695*** (0.020)	0.696*** (0.021)
Populist vote (% eligible) in 1892	0.596*** (0.033)	0.593*** (0.033)	0.594*** (0.033)	0.586*** (0.035)
Republican vote (% eligible) in 1892	-0.271*** (0.021)	-0.271*** (0.021)	-0.270*** (0.021)	-0.273*** (0.022)
Panel B. Dep. Variable: Republican vote (% of legally eligible electorate) in 1896				
Speech variable	-0.719** (0.335)	-0.788** (0.327)	-1.288** (0.579)	0.156 (0.118)
Speech variable squared			0.221 (0.211)	
Democratic vote (% eligible) in 1892	-0.175*** (0.019)	-0.176*** (0.019)	-0.176*** (0.019)	-0.186*** (0.020)
Populist vote (% eligible) in 1892	-0.166*** (0.031)	-0.165*** (0.031)	-0.165*** (0.031)	-0.181*** (0.034)
Republican vote (% eligible) in 1892	0.842*** (0.020)	0.841*** (0.020)	0.841*** (0.020)	0.831*** (0.021)
Panel C. Dep. Variable: Turnout (% of legally eligible electorate) in 1896				
Speech variable	0.478 (0.437)	0.455 (0.426)	0.873 (0.755)	-0.316** (0.152)
Speech variable squared			-0.185 (0.276)	
Democratic vote (% eligible) in 1892	0.518*** (0.024)	0.519*** (0.024)	0.519*** (0.024)	0.510*** (0.026)
Populist vote (% eligible) in 1892	0.430*** (0.041)	0.429*** (0.041)	0.429*** (0.041)	0.405*** (0.043)
Republican vote (% eligible) in 1892	0.570*** (0.026)	0.571*** (0.026)	0.571*** (0.026)	0.558*** (0.027)
Demographic controls	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes
Economic controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Mean Democratic vote	40.32	40.32	40.32	40.65
Mean Republican vote	42.98	42.98	42.98	42.88
Mean turnout	83.30	83.30	83.30	83.53
Observations	1,392	1,392	1,392	1,240

Notes: Seemingly unrelated regressions (SUR). The unit of observation is a county. Demographic controls: Urban (binary), District population (%), Log population, White (%), Male above 21 (%), Native (%). Geographic controls: Railroad density (km per sq. km), Distance to state capital (log), Distance to state largest city (log), Latitude, Longitude. Economic controls: Farmers (%), Manufacture workers (%). All regression include State fixed-effects. Standard errors clustered at the Congressional district level in parentheses. * significant at 10%; ** at 5%; *** at 1%.

Table A.7: Counterfactual vote

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Actual outcomes				Counterfactual vote if no campaign		
	Speeches	Electoral votes	Democratic vote	Democratic margin	Speech (binary)	Speeches/10k pop	Speeches & speeches sq.
Connecticut	10	6	32.5	-30.7	-1.0	-0.1	-0.3
Delaware	5	3	43.1	-10.1	-0.9	-0.3	-0.7
Illinois	135	24	42.7	-13.0	-0.9	-0.4	-0.7
Indiana	68	15	48.0	-2.9	-0.8	-0.3	-0.6
Iowa	55	13	42.9	-12.6	-0.4	-0.3	-0.6
Kentucky	17	13	48.9	-0.1	-0.3	-0.1	-0.2
Maine	3	6	29.2	-38.7	-0.3	-0.1	-0.1
Maryland	4	8	41.6	-13.1	-0.2	-0.0	-0.1
Massachusetts	10	15	26.3	-43.1	-0.9	-0.0	-0.1
Michigan	78	14	43.5	-10.3	-0.9	-0.4	-0.8
Minnesota	31	9	40.9	-15.7	-0.5	-0.2	-0.5
Missouri	29	17	54.0	8.7	-0.3	-0.1	-0.2
Nebraska	43	8	51.5	5.3	-0.5	-0.5	-0.9
New Hampshire	3	4	25.9	-42.8	-0.4	-0.1	-0.2
New Jersey	12	10	36.0	-23.7	-0.7	-0.1	-0.2
New York	49	36	38.7	-18.9	-0.8	-0.1	-0.2
North Carolina	14	11	52.6	5.8	-0.3	-0.1	-0.2
North Dakota	2	3	43.6	-11.9	-0.2	-0.1	-0.2
Ohio	85	23	47.1	-4.8	-0.8	-0.3	-0.5
Pennsylvania	16	32	36.3	-24.7	-0.4	-0.0	-0.1
Rhode Island	1	4	26.4	-41.9	-0.9	-0.0	-0.1
South Dakota	14	4	49.7	0.2	-0.3	-0.5	-0.9
Tennessee	16	12	52.1	5.8	-0.2	-0.1	-0.2
Virginia	6	12	52.5	6.6	-0.0	-0.0	-0.1
West Virginia	15	6	46.8	-5.4	-0.4	-0.2	-0.4
Wisconsin	23	12	37.0	-22.9	-0.5	-0.1	-0.3
Popular vote (1,000)	744	447	7112.1	-601.3	-65.0	-19.6	-39.3
Popular vote (%)	744	447	46.7	-4.3	-0.6	-0.2	-0.4
Electoral college	744	447	176	-95	-4	-4	-4
House representatives	744	357	146	-60	-5	-3	-3

Notes: Counterfactual vote in the absence of campaign speeches, based on the results of Table 2 and Table A.4. Columns (1) to (4): actual outcomes; Columns (5) to (7): outcomes in the absence of the campaign. We do not calculate a counterfactual for the distance measure of speeches as it is impossible to calculate counterfactual distance.