

# Replication Package for: ‘Populist Persuasion in Electoral Campaigns: Evidence from Bryan’s Unique Whistle-Stop Tour’

Date: August 1, 2022

## Overview

This replication package accompanies the paper Buggle, J.C, and Vlachos, S. (forthcoming). ‘Populist Persuasion in Electoral Campaigns: Evidence from Bryan’s Unique Whistle-Stop Tour’. *The Economic Journal*.

The files from this folder allow replicating all tables and figures using Stata and ArcMap. The Stata code runs for about 5 minutes.

The master do file ‘MasterDoFile.do’ runs all the Stata code necessary to produce all tables and figures in the paper (except maps). The folders ‘do\_files’ and ‘data’ contain do-files and data files that are called from the ‘MasterDoFile.do’. Please set your directory in line 24 of the ‘MasterDoFile.do’. Figures are exported as .pdf-files to the folders ‘figures’ and tables are exported as .tex-files to the folder ‘tables’. Log files are exported to the folder ‘log\_files’.

Some figures are produced in ArcMap. The material necessary to produce these figures is contained in the folder ‘maps’.

## Data Availability and Provenance Statements

### Statement about Rights

☒ I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

### Summary of Availability

☒ All data are publicly available.

### Details on each Data Source

The replication package contains the following data sets in Stata format (.dta) and as text (.csv) in the folder ‘data’. Note that all variables in the main datasets have self-explanatory labels: Hence, for a data dictionary, type ‘describe’ in Stata after opening the dataset. In the following, we explain the content and sources for the variables contained in each dataset. For additional details on the data and sources, refer to Online Appendix A.

#### 1. Data\_County.dta

This dataset contains most of the county-level variables of interest and is used in all Tables and Figures (except for Table C.2 and Figures 1, A1, A2, A3, A4, A5, B4, B5,

C.4). All data is harmonized to our time invariant counties (see Online Appendix A1 for more details). More precisely, this dataset contains the following data:

- i. **Speech data:** County level information on Bryan's railroad trips and the number of speeches per county. The data comes from the University of Nebraska 'Railroads and the Making of Modern America - A Digital History Project' (Thomas III et al., 2017). The data is freely available and open-source and can be accessed via <http://railroads.unl.edu/topics/bryan.php> (last accessed on Jan 19, 2022). The data also contains information on the speech during which Bryan visited the county, and - for a limited number of observations - the average attendance at Bryan's speeches. It also contains information on whether the speech was planned or spontaneous (at a train depot). All speech variables are time invariant and refer to whether Bryan gave a speech in the county in 1896.
- ii. **Electoral outcomes:** County-level information on Presidential election outcomes for the 1880, 1884, 1888, 1892, 1896, and 1900 elections. The data comes from the United States Historical Election Returns, 1824-1968 (ICPSR Study no.1). Turnout data comes from Clubb et al. (2006). Missing data (VA in 1892 and some minor parties in previous elections) are complemented from the Wikipedia page of the respective election. Congressional districts come from ICPSR Study no.1. Because of our county harmonization, some counties are associated with more than one district; when this is the case, we attribute the district number of the county with the largest area. All election variables are time varying.
- iii. **County characteristics:** We calculate demographic characteristics of counties based on the decennial censuses available from the NHGIS (Manson et al., 2021) and the Integrated Public Use Microdata Series (IPUMS) full count data (Ruggles et al., 2021). These censuses are available for 1880, 1890, and 1900; following Gentzkow (2006) we linearly interpolate the data for inter-census years.

Geographic covariates are calculated using the NHGIS shapefiles and GIS software. The railroad network shapefiles come from Attack (2013).

The economic variables come from several sources. Information on the share of farmer households and manufacturing workers comes from NHGIS. Newspaper circulation comes from Gentzkow et al. (2011) and the location of mines from Couttenier et al. (2017). To construct the county specific value of crop baskets we use information about the crop production by county in 1890 from the US Agricultural Census (Haines et al., 2018). We apply to this basket yearly crop prices measured at the national level, taken from the Historical Statistics of the United States Millennial Edition Online (Tables Da667 to Da773).

- iv. **Newspaper data:** To study the coverage of the 1896 campaigns in the media, we have collected data on newspaper coverage from *Chronicling America*, a collection of digitized newspapers provided by The Library of Congress (2007).

## **2. Data\_District.dta**

The dataset contains speech variables, electoral outcomes, and county characteristics described under point 1. aggregated to the congressional district. When possible, the raw data is used for the aggregation. This is the case will all variables except geographical variables. Geographical variables are aggregated to districts by calculating the weighted average of distance where populations are used as weights. Once all variables are aggregated at the district level, the same code as counties is used to construct share etc. The data is used in Table B.1.

## **3. Data\_State.dta**

The dataset contains speech variables, electoral outcomes, and county characteristics described under point 1. aggregated to the state level. When possible, the raw data is used for the aggregation. This is the case will all variables except geographical variables. Geographical variables are aggregated to states by calculating the weighted average of distance where populations are used as weights. Once all variables are aggregated at the state level, the same code as counties is used to construct share etc. The data is used in Tables B.1 and D.5.

## **4. Data\_Neighbor\_Pairs.dta**

The dataset contains all data described under point 1. for pairs of neighboring counties, as well as a pair identifier. The data is used in Figures 2 and B.3 and Tables B.3, B.4, and C.4.

## **5. Data\_Congress.dta**

The dataset contains all data described under point 1. for Congress elections over the 1890-1896 period. The data is used in Tables B.6, C.2, and D.5 and Figure C.4.

## **6. Data\_Chronicling.dta**

The dataset contains the number of newspaper mentions of Bryan and McKinley by county and month for the year 1896. The data is obtained from *Chronicling America*, a collection of digitized newspapers provided by The Library of Congress (2007). We searched the database for mentions of "William J. Bryan", as well as "William McKinley". The data is used in Figure A.4.

## **7. Data\_Chronicling\_Panel.dta**

The dataset contains the number of newspaper mentions of Bryan and McKinley by county and week. The period covered is from the start of the campaign in July 1896 to the week of the election in November 1896. The data also includes an indicator for the week when a speech by Bryan took place in a given county. If multiple speeches occurred in a county, only the first speech is retained. The data is used in Figure A.5.

## Computational requirements

- Operating System: Windows 7 or later

## Software Requirements

- ArcMap 10.8
- Stata/SE (code was last run with version 16.1). Packages:
  - estout
  - erepost
  - scheme-burd
  - reghdfe
  - ppmlhdfc
  - acrieg
  - psmatch2
  - ebalance
  - predcalc
  - suregr
  - coefplot
  - nnmatch
  - psacalc
  - grc1leg
  - center
  - the program 'MasterDoFile.do' will install all packages locally, and should be run once.

## Memory and Runtime Requirements

### Summary

- Approximate time needed to reproduce the analyses on a standard (2022) desktop machine: <10 minutes

### Details

- The code was last run on a 'Intel(R) Core(TM) i7-10610U CPU @ 1.80GHz -2.30 GHz Windows PC' with 32GB RAM. OS: Windows 10 Pro.
- Computation took 5 minutes.

## Description of programs/code

- The Stata do-files in the folder 'do\_files' generate all tables and most figures in the main text and the Online Appendix. The file 'MasterDoFile.do' will run them all. Each do-file called from 'MasterDoFile.do' identifies the table or figure it creates (e.g., Table1.do; FigureB1.do). All output files are given the name of the do-file the file was created from (Table1.tex, FigureB1.pdf) so that the source do-file and the output file can be easily linked.

- Please set your directory in line 24 of the 'MasterDoFile.do'. The directory refers to the location on your computer to which you have extracted the '3\_Replication\_package' folder.

## Instructions to Replicators

1. Download and unzip the replication files.
2. Open 'MasterDoFile.do'. Please set your directory in line 24 of the 'MasterDoFile.do'. The directory refers to the location on your computer to which you have extracted the '3\_Replication\_package' folder.
3. Run 'MasterDoFile.do' to set the working directories, install all third-party packages and produce figures and tables.

## Details

- Contents of the 'MasterDoFile.do':
  - Lines 26 to 32 set the working directories for the do-files, data, log files, tables, and figures, as well as the date.
  - Lines 38 to 51 install all relevant third-party programs.
  - Lines 61 to 133 call all the do-files that generate tables and figures.
  - These programs were last run in June 2022.
  - Expected computation time is less than 5 minutes.
- Each do-file in the folder 'do\_files' can also be run individually after the working directories have been defined and after the relevant third-party packages have been installed in the 'MasterDoFile.do'.
- Figures 1, A1, A2, and B5 are created using ArcGIS. The figures can be reproduced using i) the ArcGIS map packages (.mpx) provided in the folder 'maps' and ii) ArcMap Desktop (Version 10.8). Please follow these instructions:
  - For each of the Figures 1, A1, A2, and B5, open the relevant map package.
  - Activate all layers by ticking the boxes, as shown in the following example:



- The layers are in the correct order - to replicate the figures do not order them differently.
- Before exporting the map, select “Layout view” by clicking on *View -> Layout view*.
- Export the map as .pdf by clicking on *File -> Export Map....* Select .pdf as type.

### List of tables and programs

Figure/Table #	Program	Output file	Note
Table 1	Table1.do	Table1.tex	
Table 2	Table2.do	Table2.tex	
Table 3	Table3.do	Table3.tex	
Table B1	TableB1.do	TableB1.tex	
Table B2	TableB2.do	TableB2.tex	
Table B3	TableB3.do	TableB3.tex	
Table B4	TableB4.do	TableB4.tex	
Table B5	TableB5.do	TableB5.tex	
Table B6	TableB6.do	TableB6.tex	
Table B7	TableB7.do	TableB7.tex	
Table C1	TableC1.do	TableC1.tex	
Table C2	TableC2.do	TableC2.tex	
Table C3	TableC3.do	TableC3.tex	
Table C4	TableC4.do	TableC4.tex	
Table D1	TableD1.do	TableD1.tex	
Table D2	TableD2.do	TableD2.tex	
Table D3	TableD3.do	TableD3.tex	
Table D4	TableD4.do	TableD4.tex	
Table D5	TableD5.do	TableD5.tex	
Figure 1	n.a.		<i>Created in ArcMap</i>
Figure 2	Figure2.do	Figure2.pdf	
Figure 3	Figure3.do	Figure3.pdf	
Figure 4	Figure4.do	Figure4.pdf	
Figure 5	Figure5.do	Figure5.pdf	
Figure A1	n.a.		<i>Created in ArcMap</i> <i>Created in ArcMap</i>
Figure A2	n.a.		
Figure A3	FigureA3.do	FigureA3.pdf	
Figure A4	FigureA4.do	FigureA4.pdf	

Figure A5	FigureA5.do	FigureA5.pdf	<i>External Source: The Library of Congress (2007) Created in ArcMap</i>
Figure B1	FigureB1.do	FigureB1.pdf	
Figure B2	FigureB2.do	FigureB2.pdf	
Figure B3	FigureB3.do	FigureB3.pdf	
Figure B4	n.a.		
Figure B5	n.a.		
Figure C1	FigureC1.do	FigureC1.pdf	
Figure C2	FigureC2.do	FigureC2.pdf	
Figure C3	FigureC3.do	FigureC3.pdf	
Figure C4	FigureC4.do	FigureC4.pdf	
Figure C5	FigureC5.do	FigureC5.pdf	

## References

- Atack, J. (2013). 'On the use of geographic information systems in economic history: the American transportation revolution revisited', *The Journal of Economic History*, vol. 73(02), pp. 313–338.
- Clubb, J.M., Flanigan, W.H. and Zingale, N.H. (2006). 'Electoral data for counties in the United States: presidential and congressional races, 1840-1972', Inter-university Consortium for Political and Social Research [distributor], <https://doi.org/10.3886/ICPSR08611.v1>.
- Couttenier, M., Grosjean, P. and Sangnier, M. (2017). 'The wild west is wild: the homicide resource curse', *Journal of the European Economic Association*, vol. 15(3), pp. 558–585.
- Gentzkow, M. (2006). 'Television and voter turnout', *The Quarterly Journal of Economics*, vol. 121(3), pp. 931–972.
- Gentzkow, M., Shapiro, J.M. and Sinkinson, M. (2011). 'The effect of newspaper entry and exit on electoral politics', *The American Economic Review*, vol. 101(7), pp. 2980–3018.
- Haines, M., Fishback, P. and Rhode, P. (2018). 'United States agriculture data, 1840 -2012', Inter-university Consortium for Political and Social Research [distributor], <https://doi.org/10.3886/ICPSR35206.v4>.
- ICPSR (1999). 'United states historical election returns, 1824-1968', Inter-university Consortium for Political and Social Research [distributor], 1999-04-26. <https://doi.org/10.3886/ICPSR00001.v3>.

- Manson, S., Schroeder, J., Van Riper, D., Kugler, T. and Ruggles, S. (2021). 'Ipums national historical Geographic Information System: Version 16.0 [dataset]', Minneapolis, MN: IPUMS. <http://doi.org/10.18128/D050.V16.0>.
- Ruggles, S., Fitch, C.A., Goeken, R., Hacker, J.D., Nelson, M.A., Roberts, E., Schouweiler, M. and Sobek, M. (2021). 'IPUMS Ancestry Full Count Data: Version 3.0 [dataset]', Minneapolis, MN: IPUMS, 2021.
- Ruggles, S., Flood, S., Goeken, R., Schouweiler, M. and Sobek, M. (2022). 'IPUMS USA:Version 12.0 [dataset]', Minneapolis, MN: IPUMS, 2022. <https://doi.org/10.18128/D010.V12.0>.
- The Library of Congress (2007). 'Chronicling America: historic American newspapers', [Washington, D.C.: Library of Congress]. <https://chroniclingamerica.loc.gov/>.
- Thomas III, W.G., Healey, R. and Cottingham, I. (2017). 'Railroads and the Making of Modern America,' Center for Digital Research in the Humanities, University of Nebraska–Lincoln, [distributor], <https://railroads.unl.edu>.