# READ ME FILE to replicate the results contained in "Understanding Cultural Persistence and Change" by Paola Giuliano and Nathan Nunn.

Sept 12, 2020

#### **Data Availability and Provenance Statements**

Below we list the original raw data used in each Stata data file that is provided in the replication folder. Details on each variable are provided in the paper's Appendix.

- The raw data files used for Table1, Table2\_A, Table2\_B, Table2\_C and Figure 5 are:
  - The World Value Survey can be downloaded from: http://www.worldvaluessurvey.org/wvs.jsp. We use version: "WVS Longitudinal 1981-2014 stata v 2014 11 25"
  - o The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," Science 326. 1256–1260. DOI: 10.1126/science.1177303. The data downloaded can be from: https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D
  - o Per-capita GDP is taken from the World Bank's *World Development Indicators*, which is available from: <a href="https://databank.worldbank.org/home.aspx">https://databank.worldbank.org/home.aspx</a>
  - A cleaned version of the original *Ethnographic Atlas* database (and extensions mentioned in the paper) can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
  - O The country level *Ethnographic Atlas* data are from Giuliano and Nunn (2018) "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1), 1–17 and can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
- The raw data for Table 3 are from the following sources:
  - The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," Science 326. 1256–1260. DOI: 10.1126/science.1177303. The data can be downloaded from: https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D **C**1
  - Female labor force participation data are from the *World Development Indicator*, and can be downloaded from: <a href="https://databank.worldbank.org/home.aspx">https://databank.worldbank.org/home.aspx</a>
  - Data on polygamy are from the OECD Gender, Institutions and Development
     Database and can be downloaded from:
     https://stats.oecd.org/Index.aspx?DataSetCode=GIDDB2019

- Data on cousin marriage are from Schulz, Jonathan, "The Churches' Bans on Consanguineous Marriages, Kin Networks and Democracy," 2017. Mimeo, Yale University
- Per-capita GDP is taken from the World Bank's World Development Indicators and it can be obtained from: <a href="https://databank.worldbank.org/home.aspx">https://databank.worldbank.org/home.aspx</a>
- O The country level *Ethnographic Atlas* data are from Giuliano and Nunn (2018) "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1), 1–17 and can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
- The raw data for Table 4 and Figure 6 are from the following sources:
  - The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Climate Anomaly," Science Medieval 326. 1256–1260. DOI: 10.1126/science.1177303. The data be downloaded from: https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D
  - March Supplement of the Current Population Survey from 1994–2014 can be downloaded from: <a href="https://cps.ipums.org/cps/">https://cps.ipums.org/cps/</a>
  - o Per-capita GDP is taken from the World Bank's *World Development Indicators* and it can be obtained from: https://databank.worldbank.org/home.aspx
  - Data on genetic distance are from Spolaore, E. and R. Wacziarg, 2009, "The Diffusion of Development," *Quarterly Journal of Economics*, 124 (2), 469–529 and can be downloaded from: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/TNC U8K
  - O The country level *Ethnographic Atlas* data are from Giuliano and Nunn (2018) "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1), 1–17 and can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
- The raw data for Table 5 and Figure 7 are from the following sources:
  - o The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," Science 326, 1256–1260. DOI: 10.1126/science.1177303. The data can be downloaded from: https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D **C**1
  - o 2000 Census data can be downloaded from:
  - o Per-capita GDP is taken from the World Bank's *World Development Indicators* and it can be obtained from: <a href="https://databank.worldbank.org/home.aspx">https://databank.worldbank.org/home.aspx</a>
  - o Linguistic distance is taken from Spolaore, E. and R. Wacziarg, 2009, "The Diffusion of Development," *Quarterly Journal of Economics*, 124 (2), 469–529 and

- can be downloaded from: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/TNC U8K
- o The country level *Ethnographic Atlas* data are from Giuliano and Nunn (2018) "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1), 1−17 and can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
- The raw data for Table 6 are from the following sources:
  - The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," Science 326, 1256–1260. DOI: 10.1126/science.1177303. The data can be downloaded from: https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D
  - o March Supplement of the Current Population Survey from 1994–2014 can be downloaded from: https://cps.ipums.org/cps/
  - O The country level *Ethnographic Atlas* data are from Giuliano and Nunn (2018) "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1), 1–17 and can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0
- The raw data for Tables 7–10 are from the following sources:
  - o The global gridded data on temperature anomalies are from: Mann et al (2009) "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," Science 326, 1256–1260. DOI: downloaded 10.1126/science.1177303. The data be can https://science.sciencemag.org/content/suppl/2009/11/25/326.5957.1256.D **C**1
  - The data for the Palmer Drought Severity Index (PDSI) for North America are from: Cook, Edward & National Center for Atmospheric Research Staff (Eds). "The Climate Data Guide: Drought atlases from tree rings." The data are available from <a href="https://climatedataguide.ucar.edu/climate-data/drought-atlases-tree-rings">https://climatedataguide.ucar.edu/climate-data/drought-atlases-tree-rings</a>.
  - o US Census data for 1930, 1990 and 2000 can be downloaded from: https://usa.ipums.org/usa/
  - O Canadian census data for 2001, 2006 and 2011 and can be obtained from the Indigenous and Northern Affairs, Canada: https://www.aadnc-aandc.gc.ca/eng/1100100010002/1100100010021
  - A cleaned version of the original *Ethnographic Atlas* database (and extensions mentioned in the paper) can be downloaded from: https://scholar.harvard.edu/nunn/pages/data-0

### **Dataset list**

Data file	Source	Notes	Provided
Table1.dta	All listed	Combines multiple data sources, serves as input for Table 1, Figures 5	Yes
Table2_A.dta	All listed	Combines multiple data sources, serves as input for Table 2	Yes
Table2_B.dta	All listed	Combines multiple data sources, serves as input for Table 2	Yes
Table2_C.dta	All listed	Combines multiple data sources, serves as input for Table 2	Yes
Table3.dta	All listed	Combines multiple data sources, serves as input for Table 3	Yes
Table4_A.dta	All listed	Combines multiple data sources, serves as input for Table 4	Yes
Table4_B.dta	All listed	Combines multiple data sources, serves as input for Table 4	Yes
Table5.dta	All listed	Combines multiple data sources, serves as input for Table 5	Yes
Table6A.dta	All listed	Combines multiple data sources, serves as input for Table 6	Yes
Table6B.dta	All listed	Combines multiple data sources, serves as input for Table 6	Yes
Table7_9.dta	All listed	Combines multiple data sources, serves as input for Tables 7 and 9	Yes
Table8.dta	All listed	Combines multiple data sources, serves as input for Table 8	Yes
Table10.dta	All listed	Combines multiple data sources, serves as input for Table 10	Yes
Figure6.dta	All listed	Combines multiple data sources, serves as input for Figure 6	Yes
Figure7.dta	All listed	Combines multiple data sources, serves as input for Figure 7	Yes

## Description of programs and instructions to replicators

This folder contains all the files needed to replicate the results reported in the paper. It contains STATA dta files, STATA do files, outputted results for Tables 1–10, graphs for Figures 5–7, and a log file. A single do file contains the code for all regressions of the paper.

## List of tables and programs

The do file "Giuliano\_Nunn\_replication.do" replicates all the Tables and Figures in the paper using the datasets listed above. To run the file, the user will need to change the path name listed in the cd command at the top of the do file. Since all other paths are relative, this is the only change that needs to be made for the user to run the file.

#### References

- Giuliano, Paola and Nathan Nunn, 2018, "Ancestral Characteristics of Modern Populations," *Economic History of Developing Regions*, 33 (1): 1–17.
- Mann, Michael E., Zhihua Zhang, Scott Rutherford, Raymond S. Bradley, Malcolm K. Hughes, Drew Shindell, Caspar Ammann, Greg Faluvegi, and Fenbiao Ni, 2009, "Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly," *Science*, 326: 1256–1260.
- Schulz, Jonathan, "The Churches' Bans on Consanguineous Marriages, Kin Networks and Democracy," 2017. Mimeo, Yale University.
- Spolaore, E. and R. Wacziarg, 2009, "The Diffusion of Development," *Quarterly Journal of Economics*, 124 (2): 469–529.