README (Dec 2022)

This replication package comprises two sets of code and one data set for generating the main results of the manuscript *The Fractured Land Hypothesis*. The two sets of code are to be run using R and Stata, respectively.

The data sources are described in the manuscript's Online Appendix A.

Software Requirements

- Stata (code was last run with version 17)
- R 4.0.4 (code was last run with R Studio 2022.07.1 Buid 554)

R Code

The first set of code comprises the following files:

Table 1: R Code Files.

	Filename	Remarks
1.	Start.R	-
2.	Main.R	-
3.	SeaDistance.R	-
4.	Plotcode.R	-
5.	Map	Folder containing dataset (see Table 2)
6.	Output	Folder

Table 2: Data Set in the Map Folder.

	Filename	Format
1.	China	.cpg, .dbf, .prj, .shp, .shp.xml, .shx
2.	DistMatrix_World	.csv
3.	Euroasia_Dis	.cpg, .dbf, .prj, .sbn, .sbx, .shp, .shp.xml, .shx
4.	Europe	.cpg, .dbf, .prj, .shp, .shp.xml, .shx
5.	World5_Nodta	.cpg, .dbf, .prj, .sbn, .sbx, .shp, .shp.xml, .shx
6.	World5	.cpg, .dbf, .prj, .sbn, .sbx, .shp, .shp.xml, .shx, .xml

To run the R code,

1. Open the file `Start.R` and change the"mainfolder" on line 3 to the pathname of the folder that contains the files listed in Table 1.
2. Run the code in `Start.R` and install the required dependencies.

Note:

- To simulate the specification in Figure VIII of the manuscript, replace "Specification" in line 27 of `Start.R` with "Baseline";
- To simulate Figure IXA, replace with "No Climatic Obstacles";
- To simulate Figure IXB, replace with "No Obstacles";
- To simulate Figure IXC, replace with "Uniform Resource";
- To simulate Figure IXD, replace with "No Obstacles+Uniform Resource";
- To simulate Figure XA, replace with "Alt. Y CSI";
- To simulate Figure XB, replace with "Alt. r:KK10";
- To simulate Figure XIA, replace with "Alt. Conflict Mech: Expected Gain";
- To simulate Figure XIB, replace with "Alt. Conflict Mech: Random";
- To simulate Figure XIIA, replace with "Rivers";
- To simulate Figure XIIB, replace with "Loess";
- To simulate Figure XIIC, replace with "Silk Road+Steppe Expansionism";
- To simulate Figure XIID, replace with "Nomadic Pastoralism";
- To simulate Figure XIIE, replace with "Adj. for hot and cold climate";
- To simulate Figure XIIF, replace with "Preferred".

Stata Code

The second set of code comprises the following files:

Table 3: Stata Code Files.

	Filename	Remarks
1.	BootStrap_CN Baseline.do	-
2.	BootStrap_EU Baseline.do	-
3.	GraphforCI_Baseline.do	-

This set of code executes the bootstrap exercise described in Section V of the manuscript. Run this only after running the R code.

1. Transfer `herfCN.csv` and `herfEU.csv` from the `Output` folder in Table 1 to the folder that contains the files in Table 3.
2. Open `BootStrap_CN.do`, then search and replace "mainfolder2" with the pathname of the folder that contains the files listed in Table 3.
3. Repeat the previous step for `BootStrap_EU.do` and `GraphforCI_Baseline.do`.
4. Run `BootStrap_CN.do` and `BootStrap_EU.do` before running `GraphforCI_Baseline.do`.