TRACKING SOCIAL VALUE TRENDS ACROSS TIME AND SPACE

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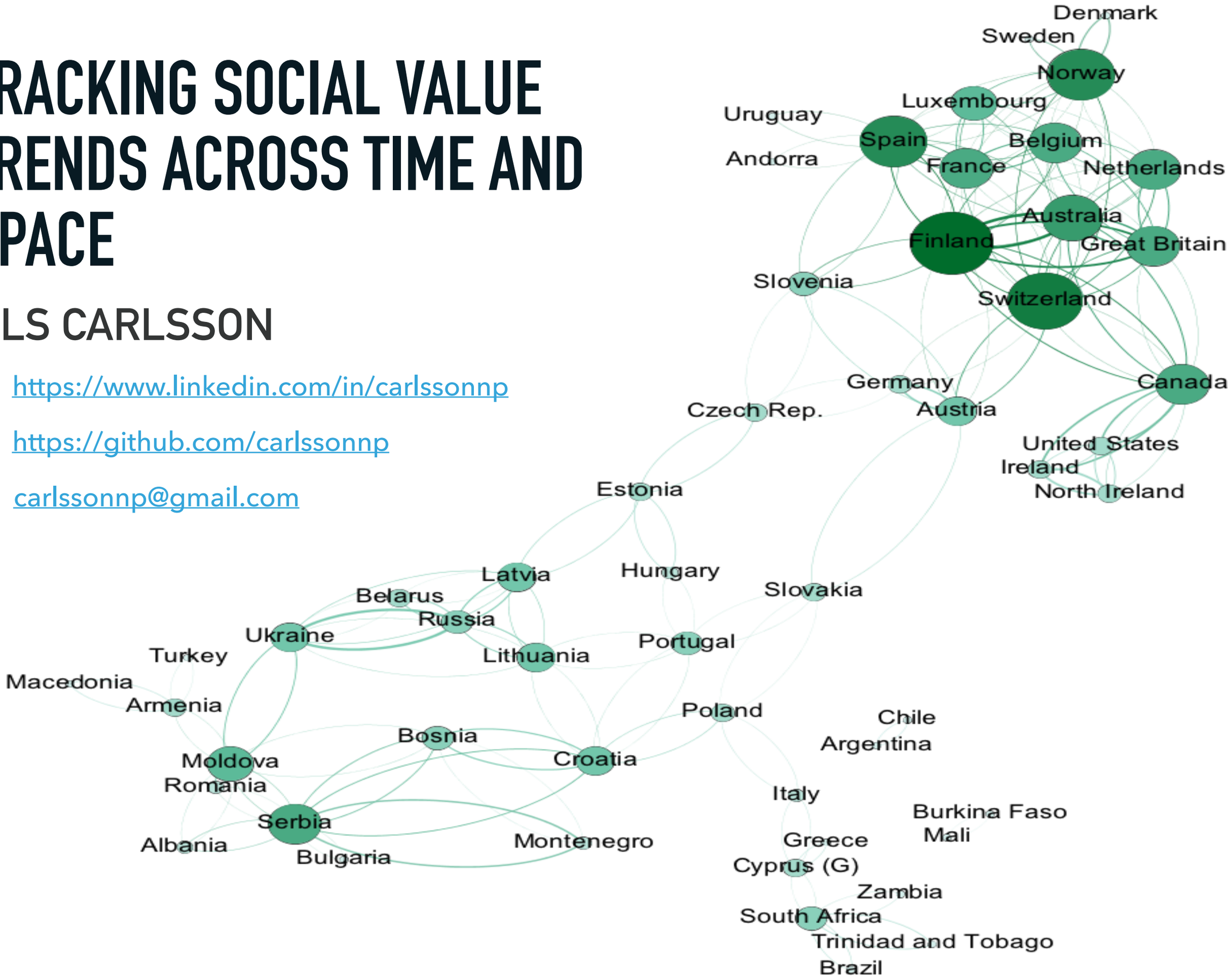


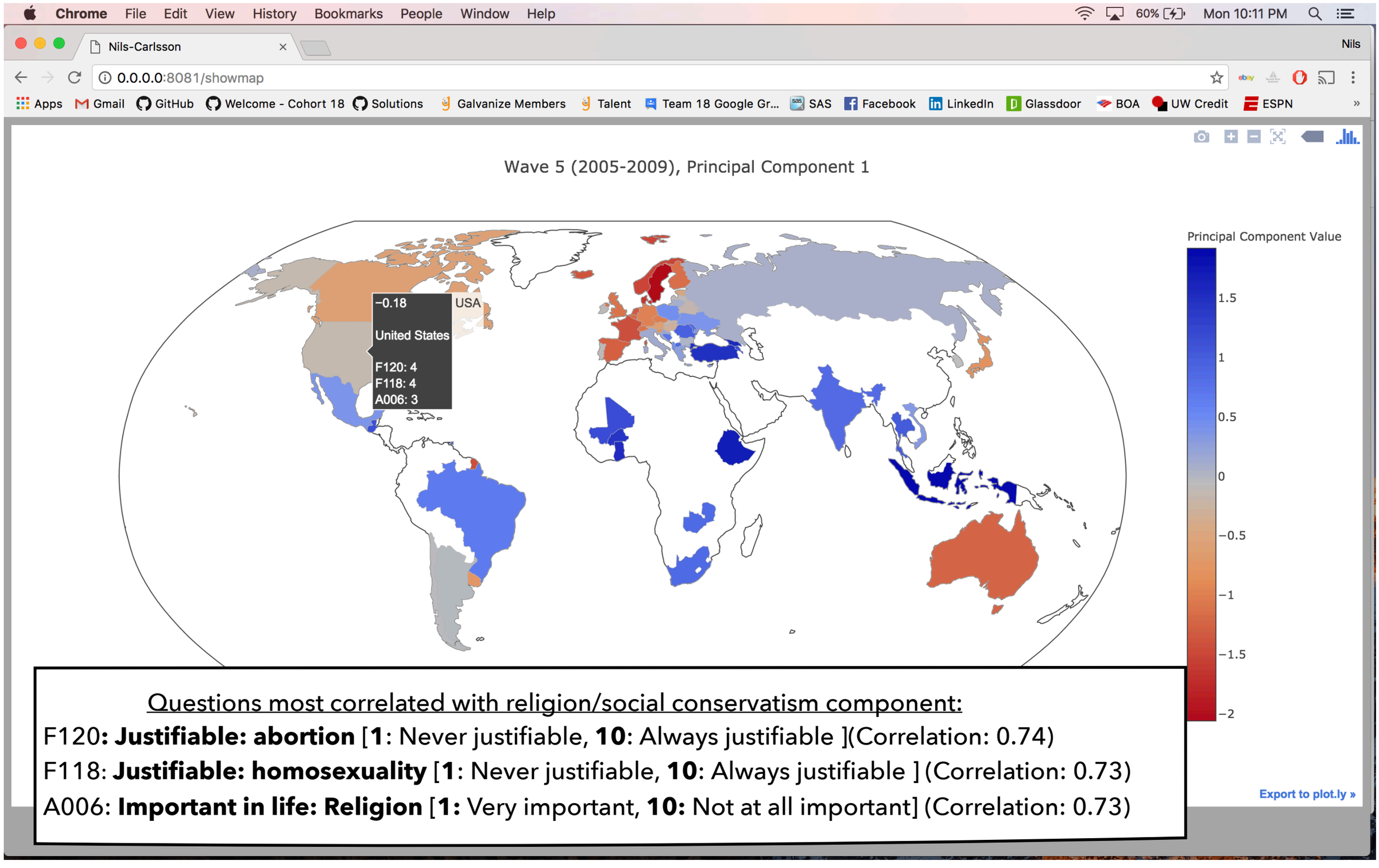
THE WORLD AND EUROPEAN VALUES SURVEYS: BRIEF OVERVIEW

- The World and European Values surveys: projects that examine values and beliefs on a global scale, beginning in 1981
- Participants asked questions that quantify religious, political, social attitudes
- Over 100 countries, 200 questions, and 500,00 individuals: a wealth of data!

RELIGION/SOCIAL CONSERVATISM AS MAIN DRIVERS OF VARIANCE

- Reduce dimensionality of dataset using Principal Component Analysis; separate by time period
- In every time period, first PC composed of: i. **religion** and ii. **social conservatism** (abortion, homosexuality, divorce)
- Sign of component is such that HIGHER values mean more religious/more conservative stance on social issues

APP SCREENSHOT – RELIGION/SOCIAL CONSERVATISM COMPONENT



Questions most correlated with religion/social conservatism component:

F120**: Justifiable: abortion** [**1**: Never justifiable, **10**: Always justifiable](Correlation: 0.74)

F118: **Justifiable: homosexuality** [**1**: Never justifiable, **10**: Always justifiable] (Correlation: 0.73)

A006: **Important in life: Religion** [**1:** Very important, **10:** Not at all important] (Correlation: 0.73)

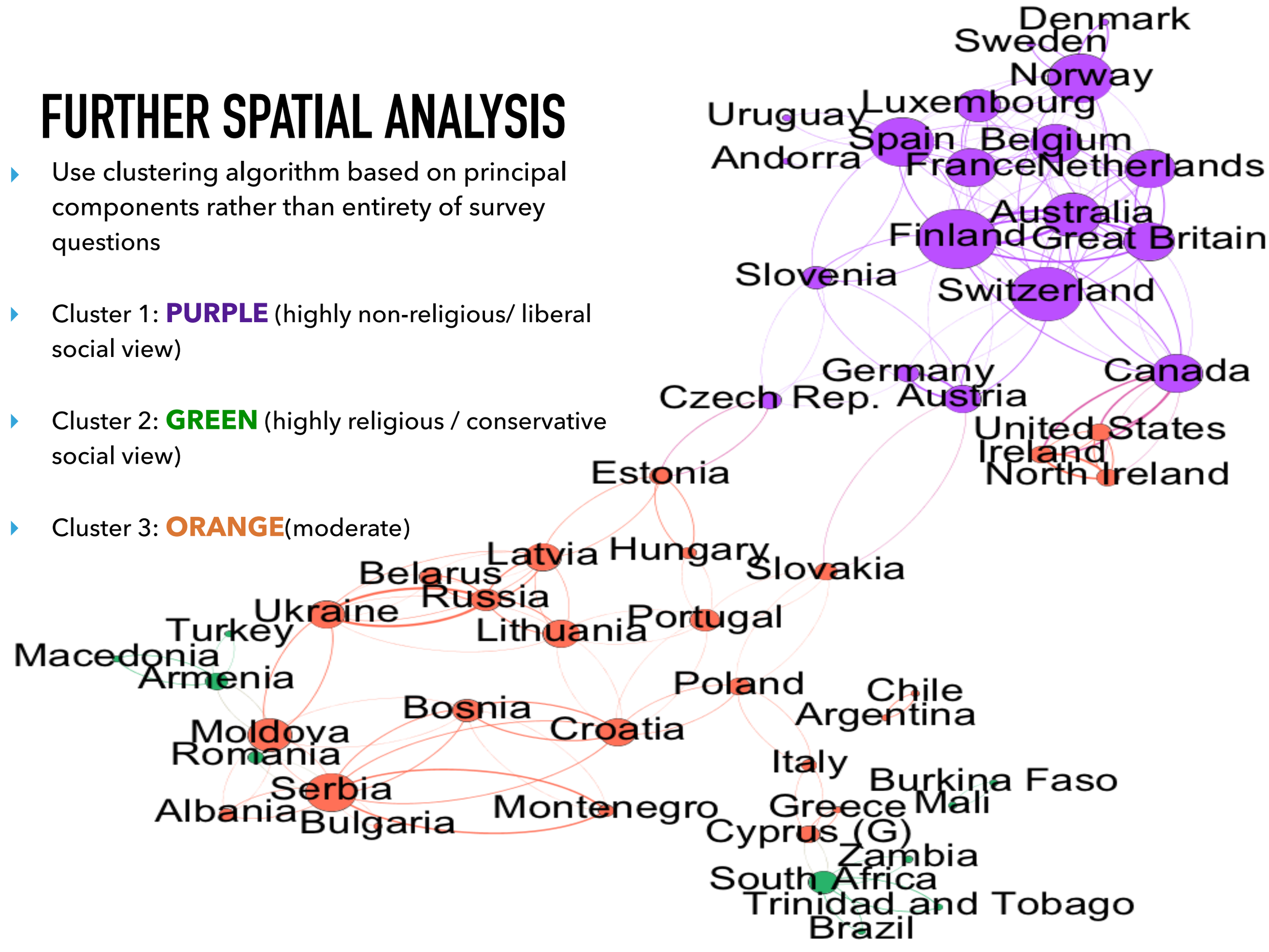
FURTHER SPATIAL ANALYSIS

- Use clustering algorithm based on principal components rather than entirety of survey questions

- Cluster 1: **PURPLE** (highly non-religious/ liberal social view)

- Cluster 2: **GREEN** (highly religious / conservative social view)

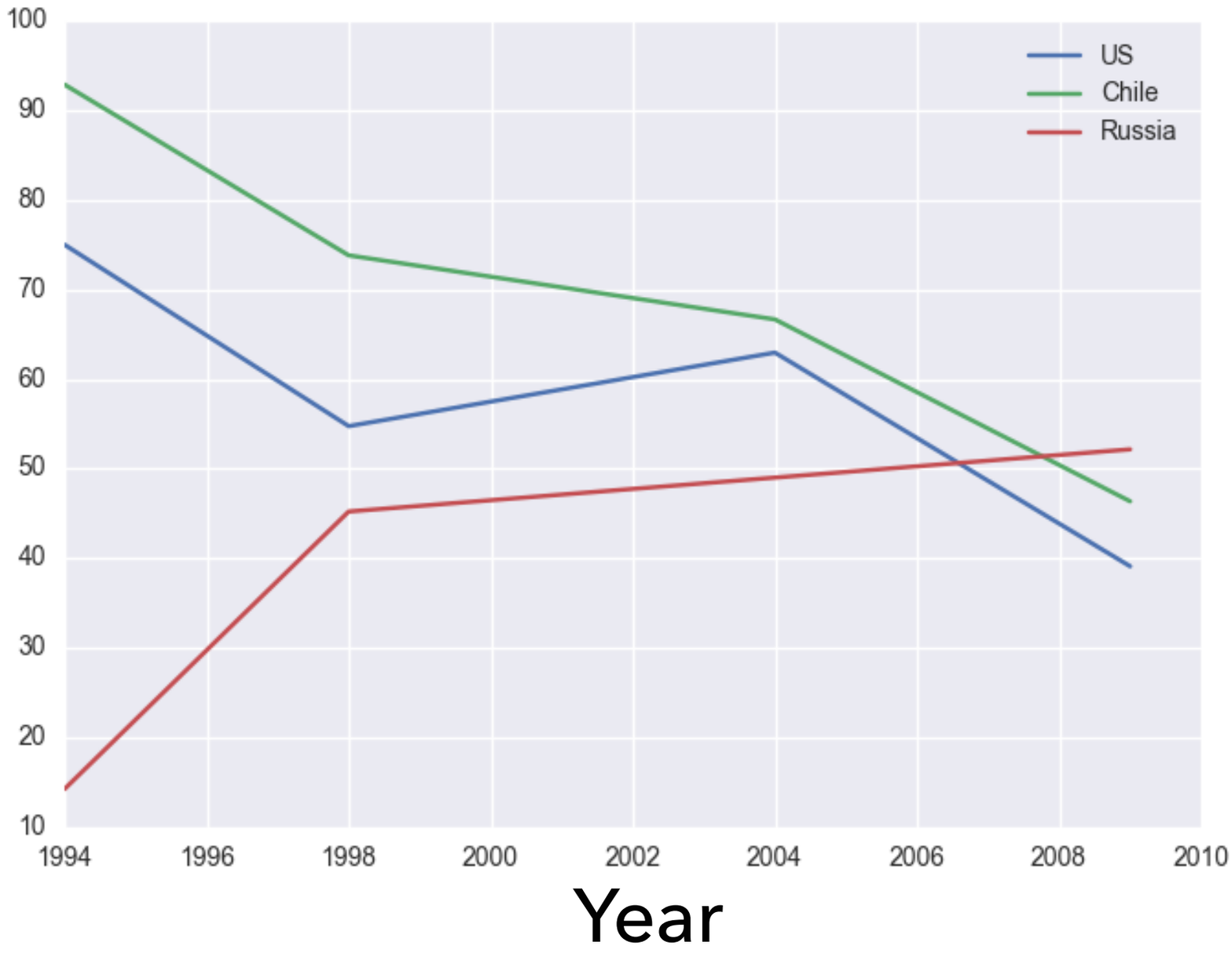
- Cluster 3: **ORANGE**(moderate)



TEMPORAL TRENDS

- U.S., Russia, and Chile experience notable change

Percentile relative to other countries of religious/social conservatism component



FUTURE DIRECTIONS/TECHNOLOGY USED

- Include country meta-data (GDP, political landscape, historical events), tie to survey data
- Missing data input via matrix factorization
- New wave coming up! Will include as it becomes available
- Technologies used: Gephi, Plotly, Flask, R

Thanks!

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