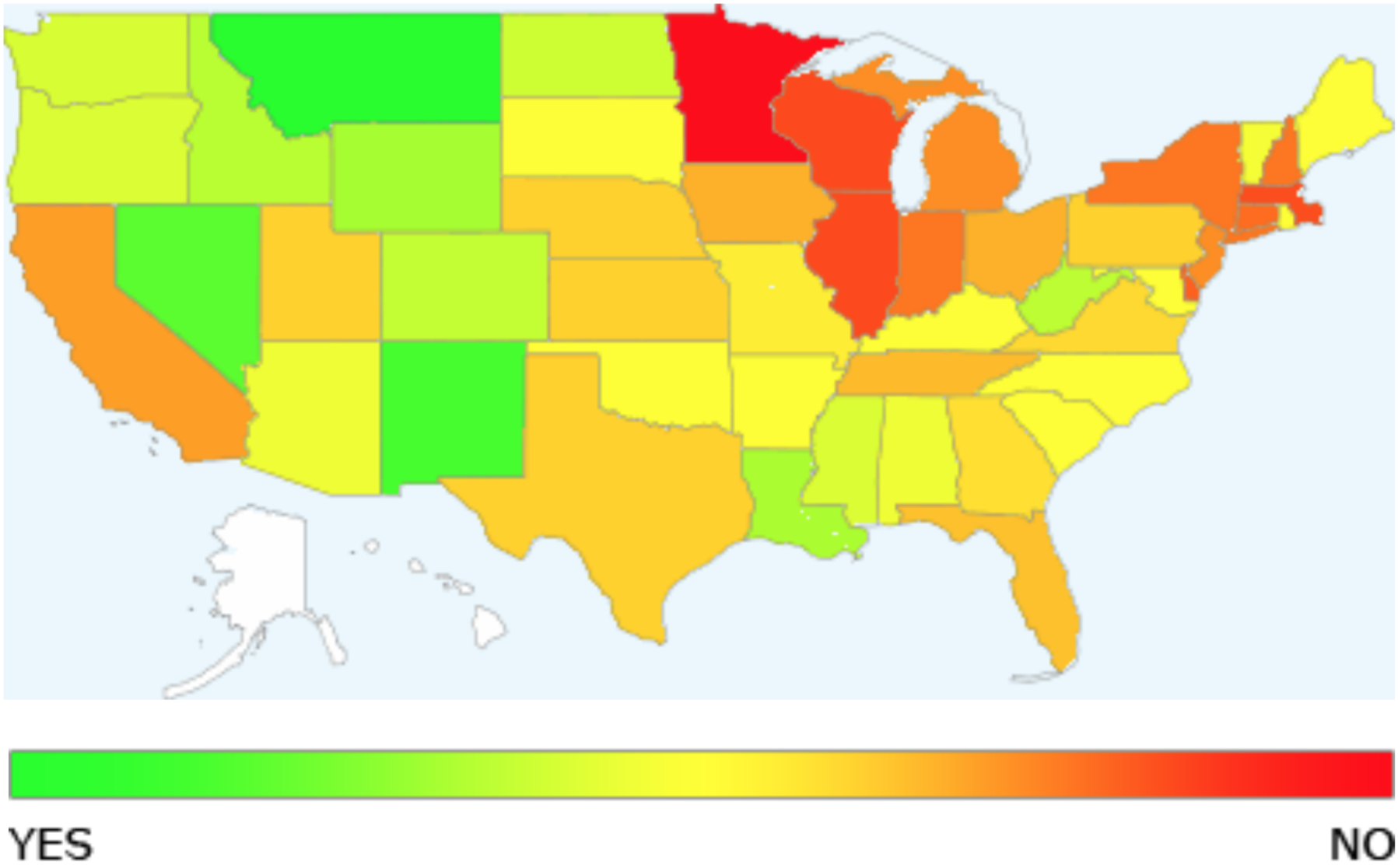
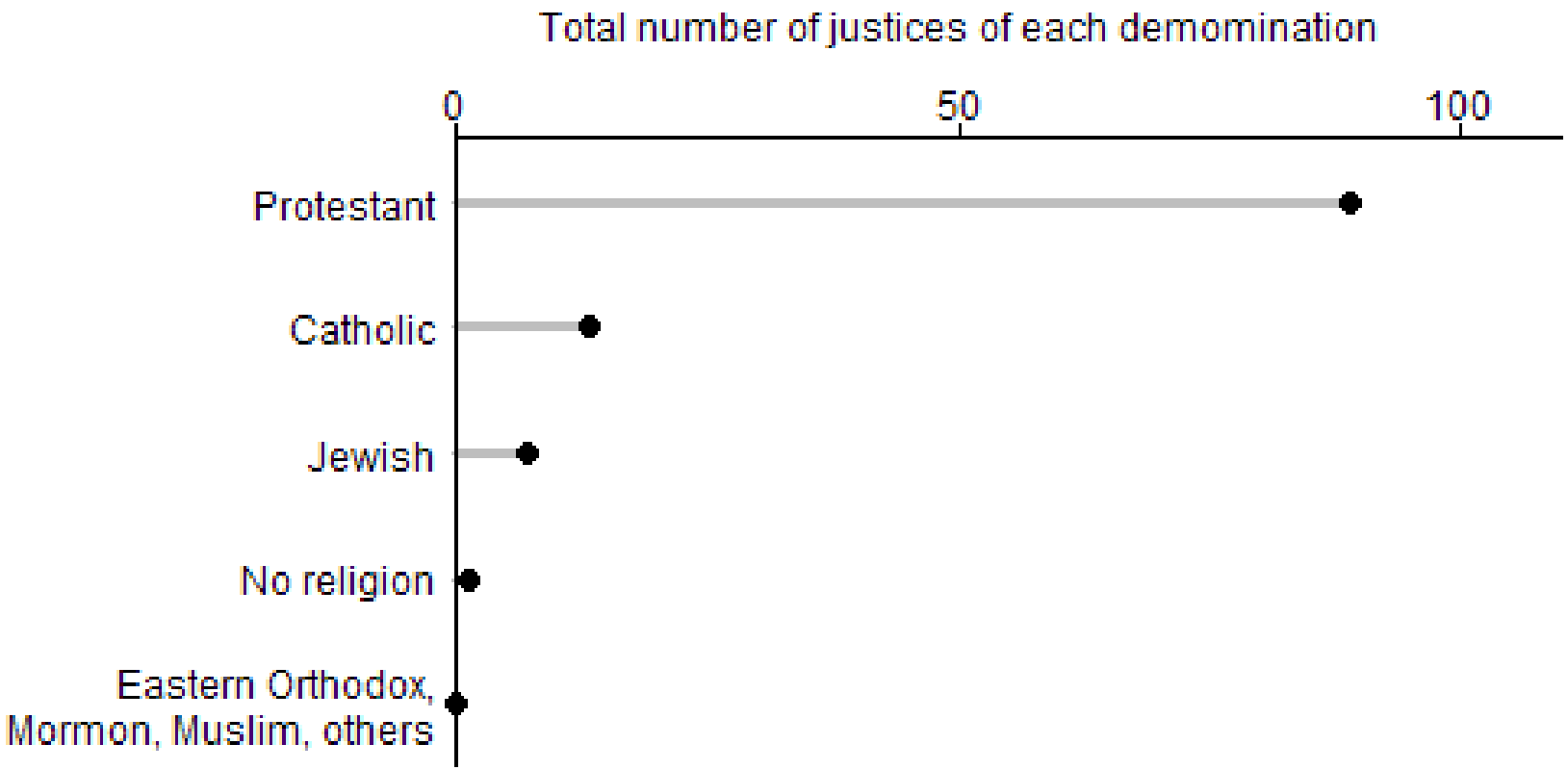
Percentage in each state answering Yes to, "If you knew for sure you would not get caught, would you commit murder for any reason?



Religious affiliation of U.S. Supreme Court justices, 1789-2010



1880 1884 1888 1960 1968 2000

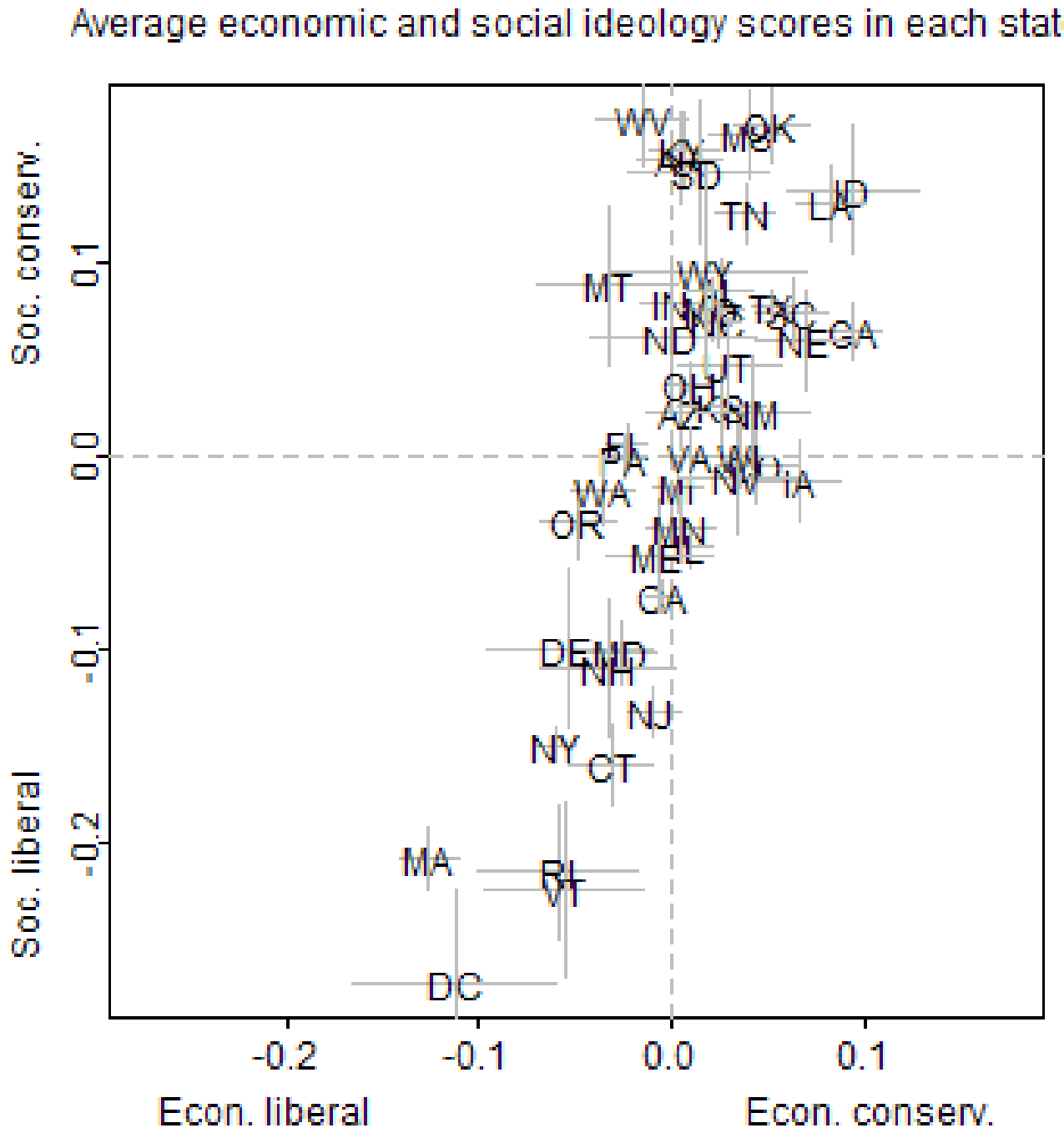
1880 1884 1888 1960 1968 2000

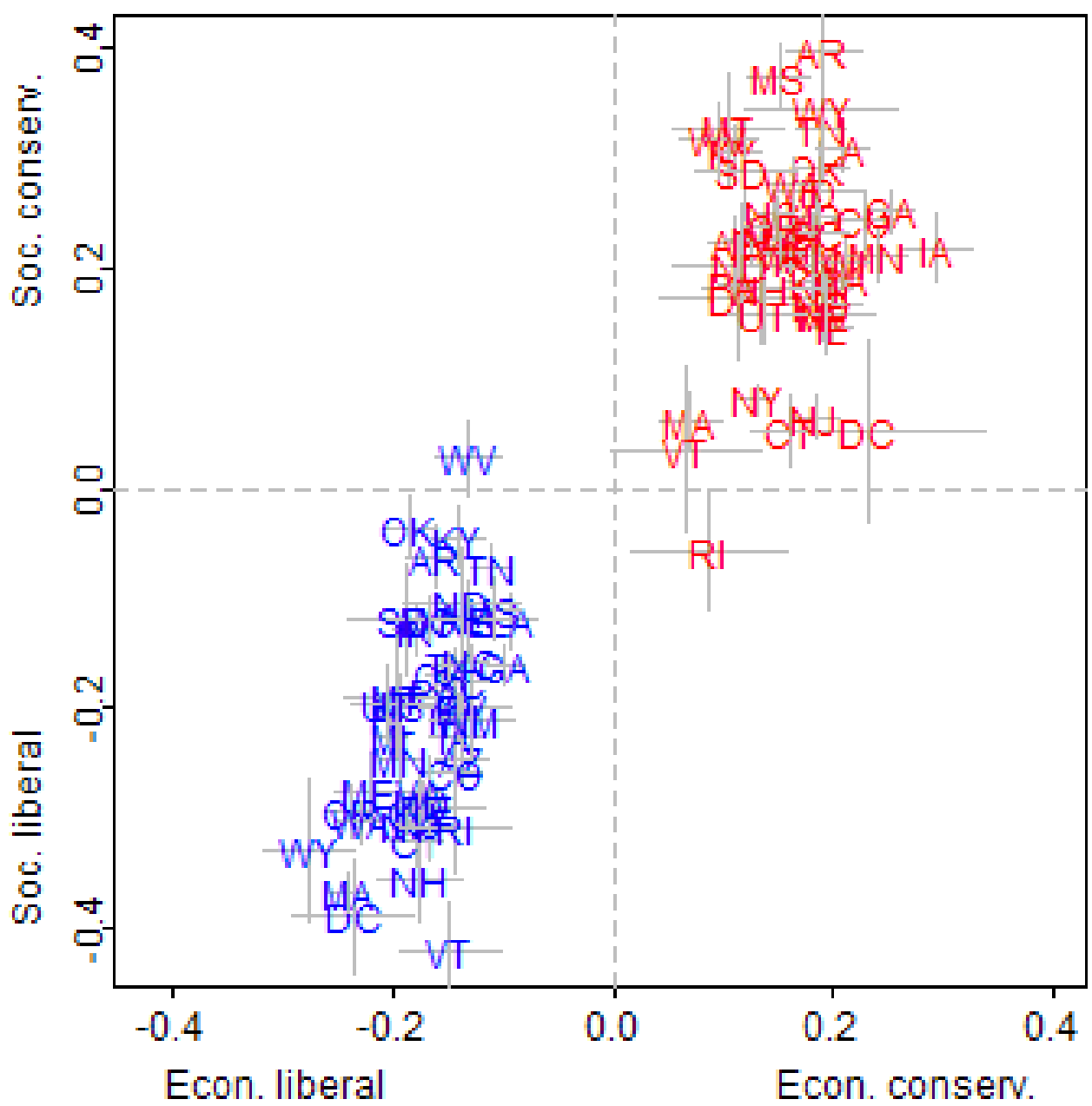
1876 1916 1976 2004

Preferences in Political Mapping (Measuring, Modeling, and Visualization)

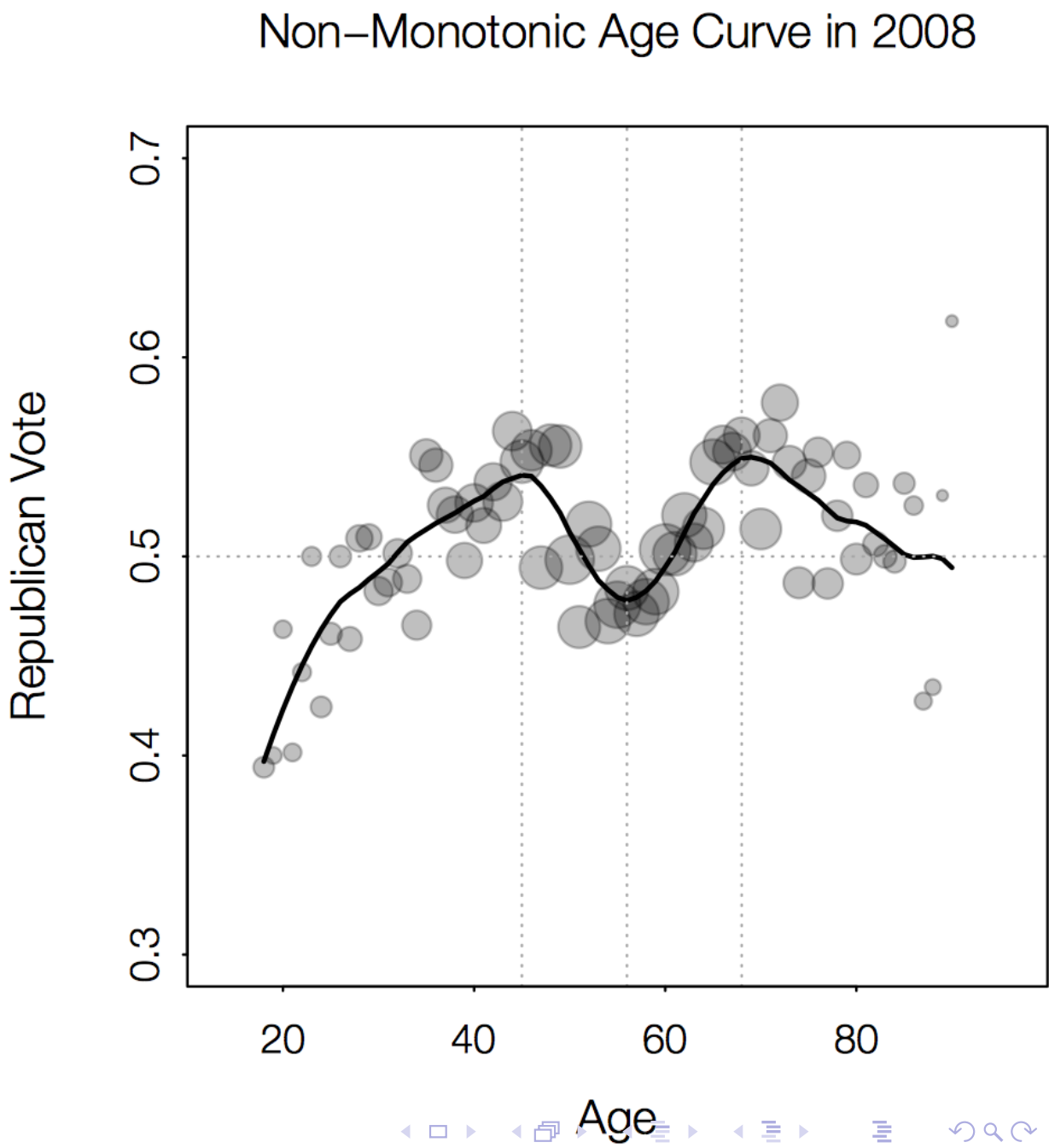
Andrew Gelman
Department of Statistics and Department of Political Science
Columbia University

17 Mar 2016

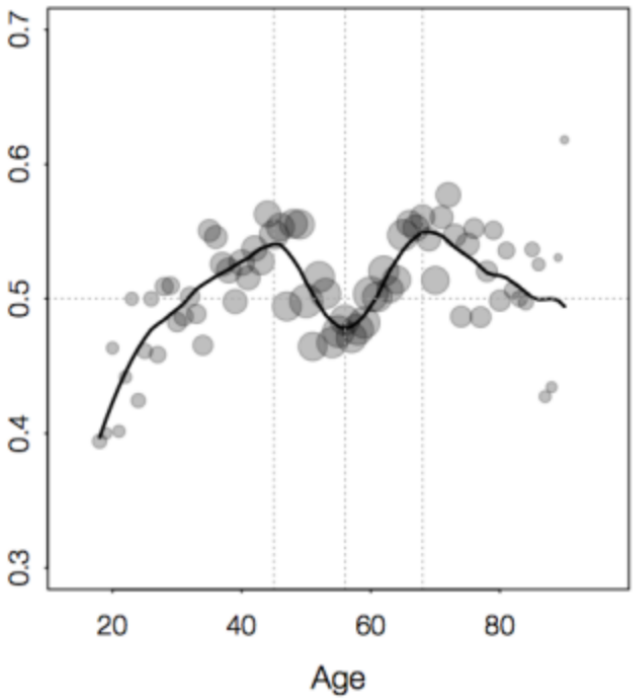

Average economic and social ideology scores in each state
Soc. conserv.
Soc. liberal
Econ. liberal
Econ. conserv.
0.1
0.0
-0.1
-0.2
-0.2
-0.1
0.0
0.1
WV
OK
MS
SD
ID
LA
TN
MT
WY
TX
NE
GA
ND
UT
OH
AZ
SC
IN
FL
VA
NV
IA
WA
MI
OR
MN
ME
CA
DE
MD
NH
NJ
NY
CT
MA
RI
VT
DC


Average economic and social ideology scores
among Bush voters (red) and Gore voters (blue) in each state
Soc. conserv.
Soc. liberal
Econ. liberal
Econ. conserv.
0.4
0.2
0.0
-0.2
-0.4
-0.4
-0.2
0.0
0.2
0.4
AR
MS
WY
TN
KS
GA
IA
NY
NJ
MA
CT
DC
VT
RI
WV
OK
KY
AR
TN
GA
MN
RI
WY
NH
MA
DC
VT

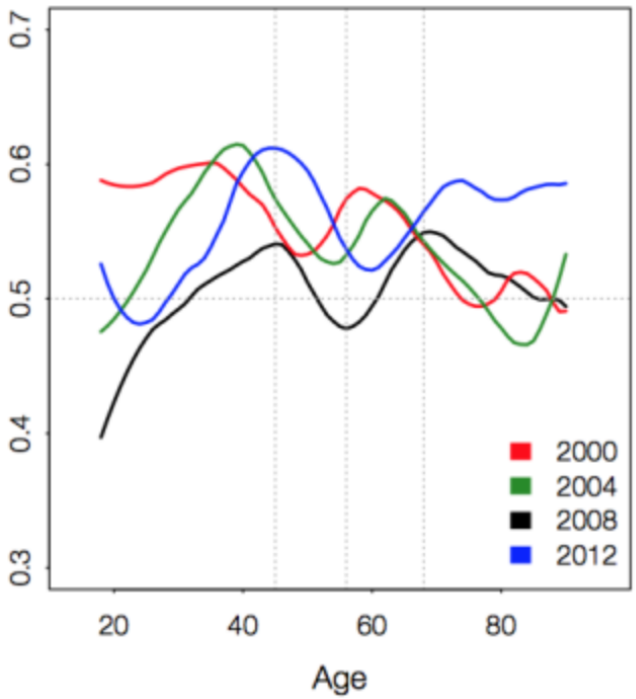
Jimmy Carter Republicans and George W. Bush Democrats



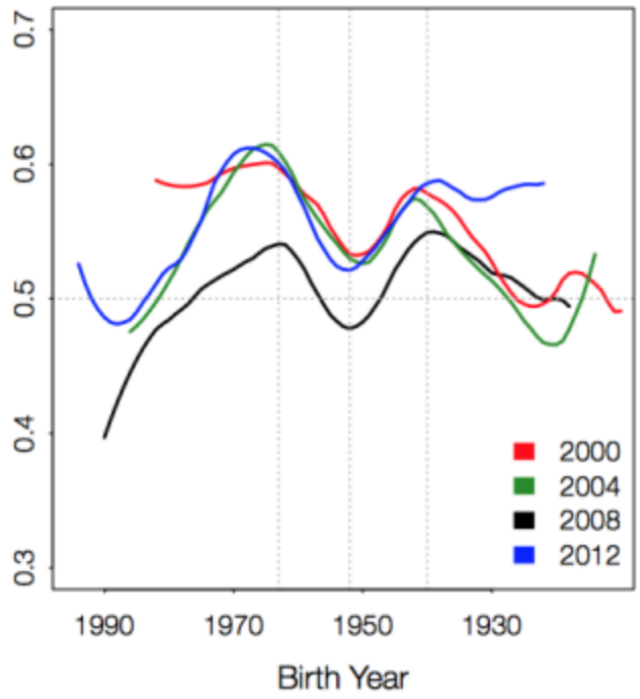
Non−Monotonic Age Curve in 2008



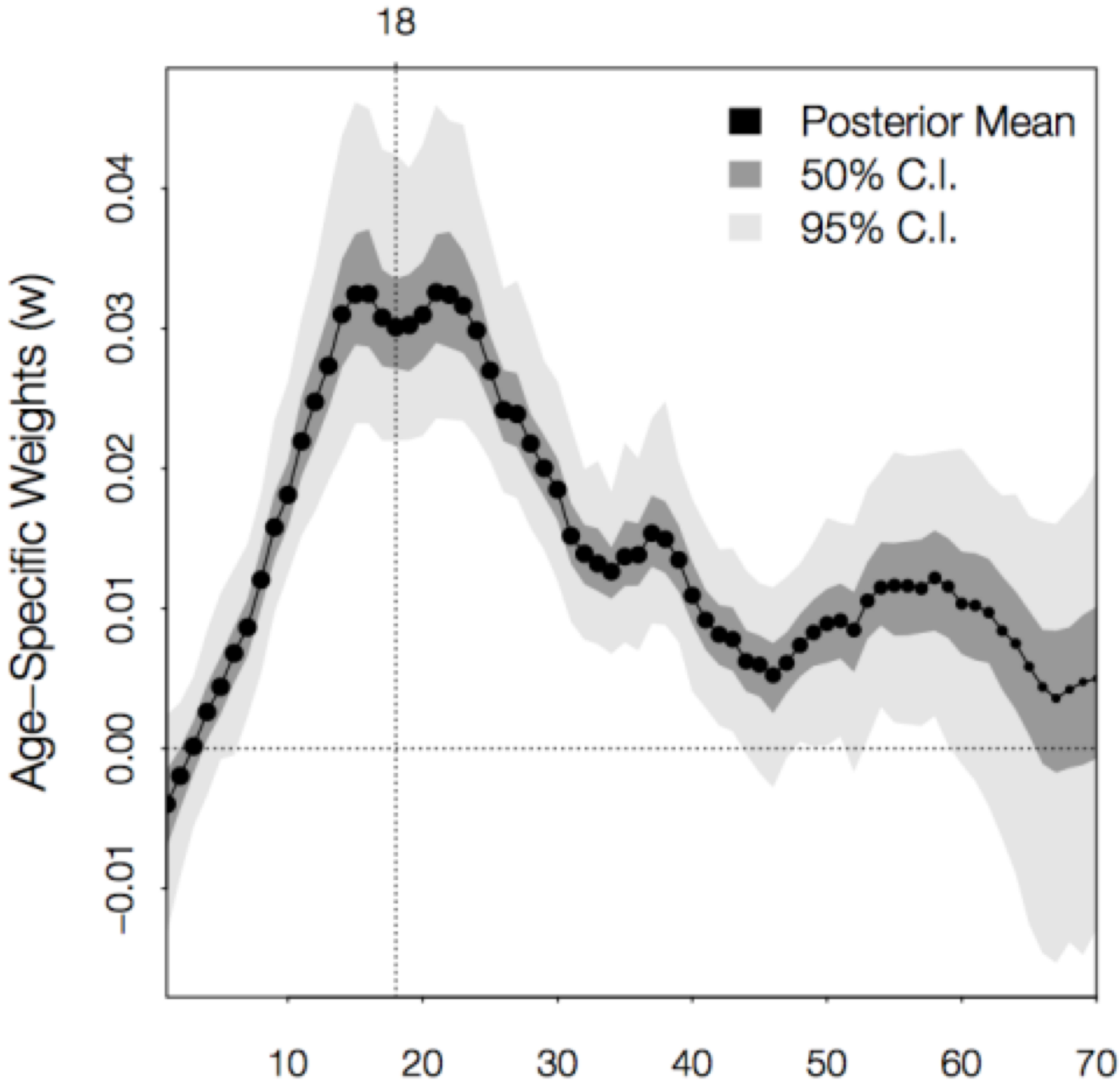
Non−Monotonicity in Other Elections



Lining up by Birth Year



The Formative Years



Red state, blue state, rich state, poor state

- Richer *voters* favor the Republicans, *but*
- Richer *states* favor the Democrats
- Hierarchical logistic regression: predict your vote given your income and your state ("varying-intercept model")

Red state, blue state, rich state, poor state

- Richer *voters* favor the Republicans, *but*
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- Hierarchical logistic regression: predict your vote given your income and your state ("varying-intercept model")

Red state, blue state, rich state, poor state

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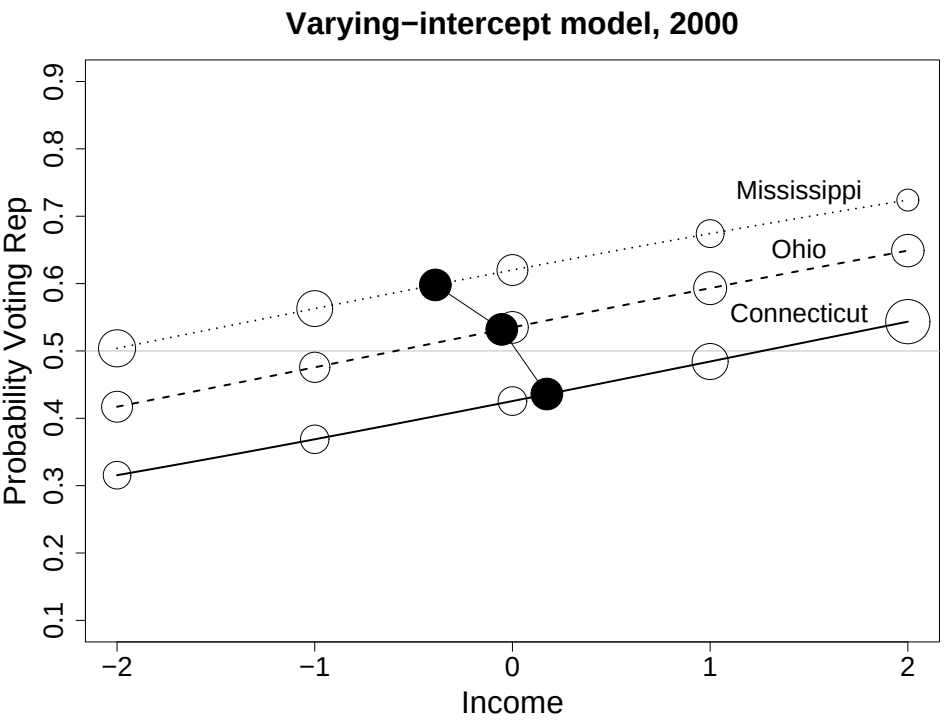
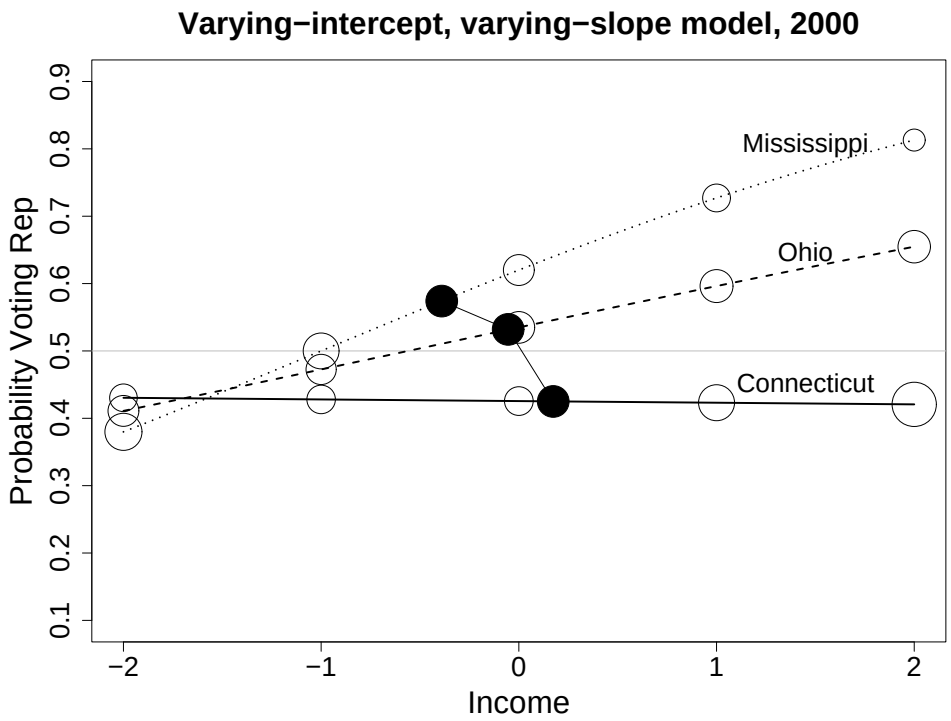
Red state, blue state, rich state, poor state

- Richer *voters* favor the Republicans, *but*
- Richer *states* favor the Democrats
- Hierarchical logistic regression: predict your vote given your income and your state ("varying-intercept model")

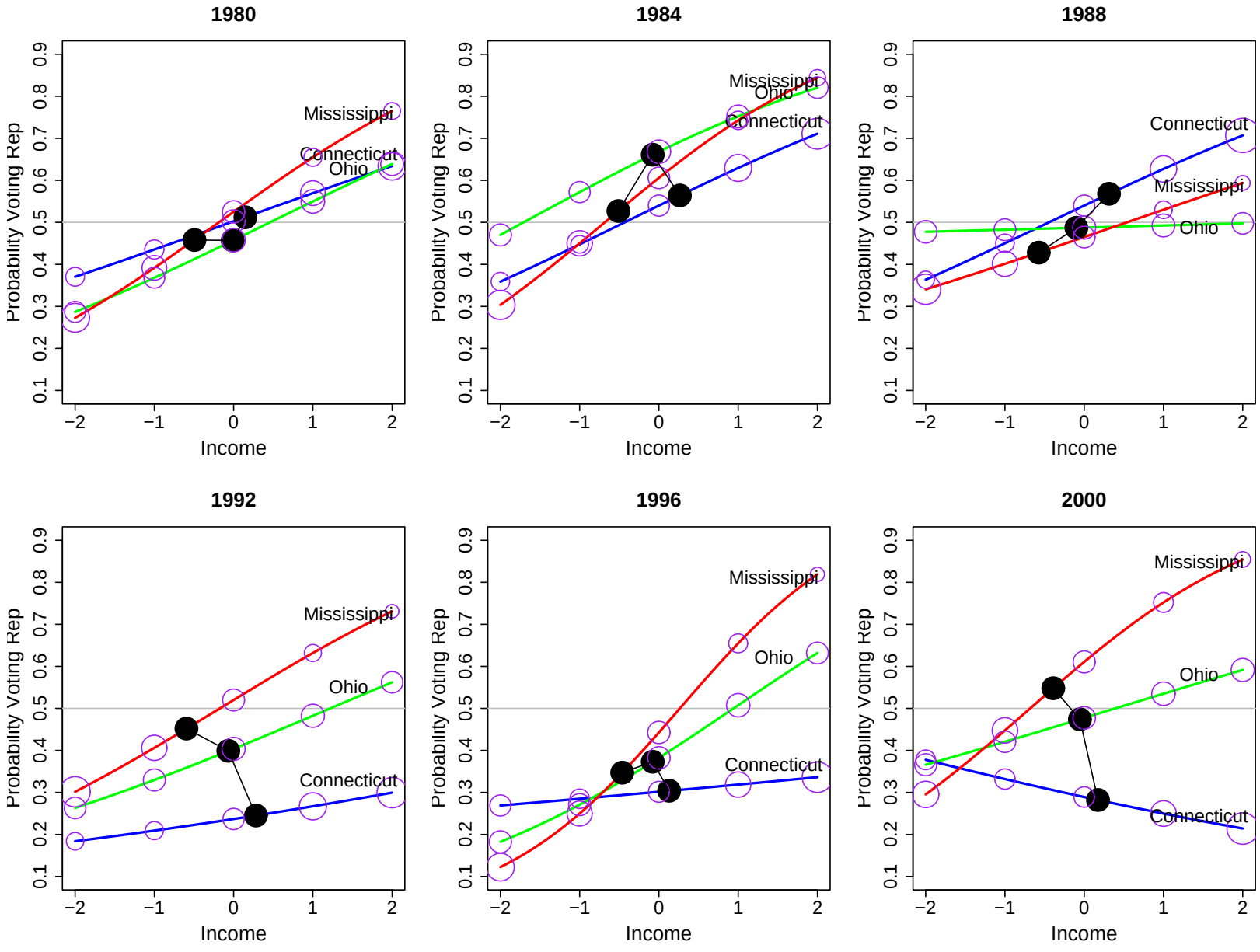
Varying-intercept model, then model criticism, then varying-slope model



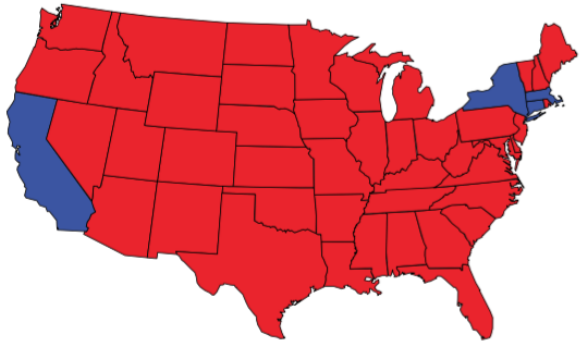


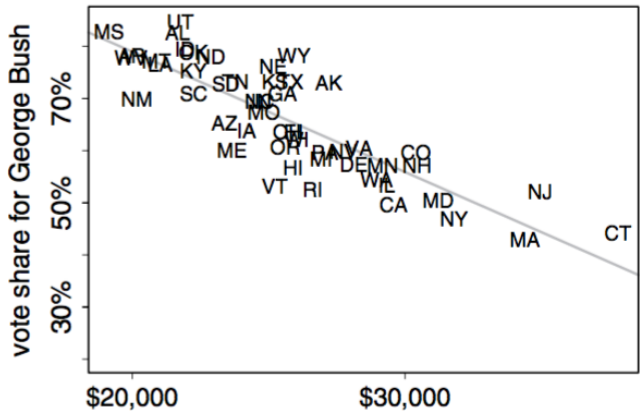
In any given state, the estimates would not be statistically significant!

3-way interactions!

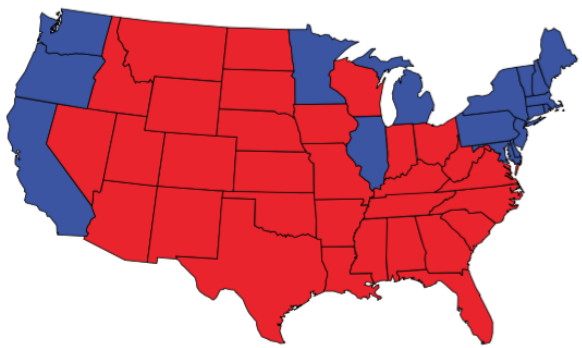


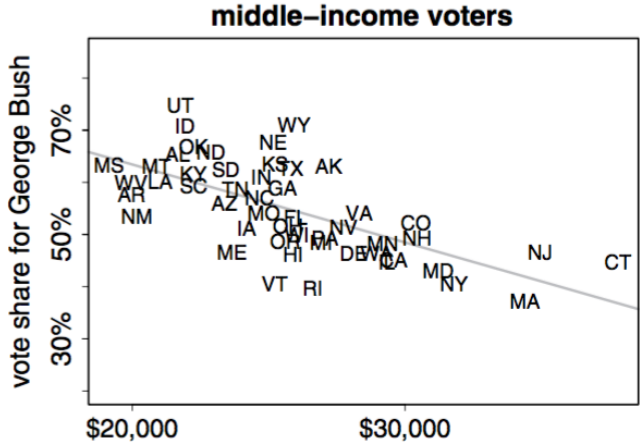
State winners (rich voters only)



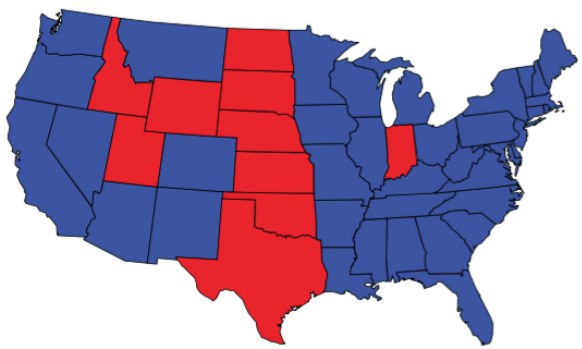


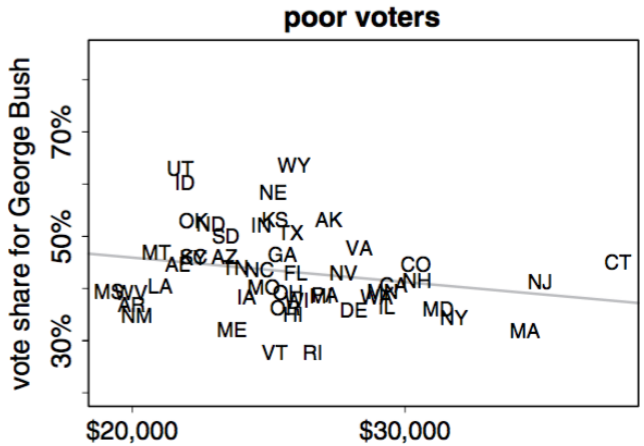
State winners (middle−income voters)





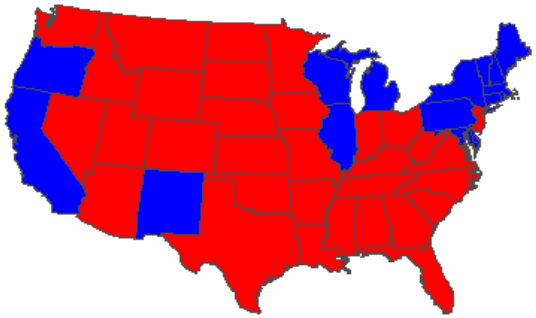
State winners (poor voters only)



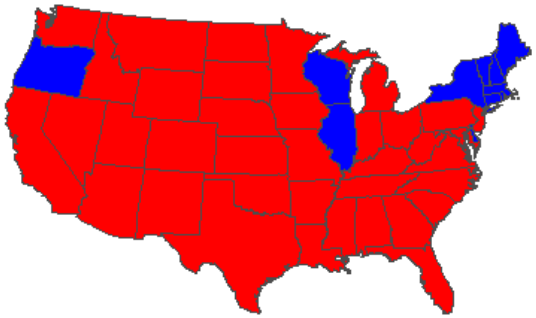


Adding another factor: The inference . . .

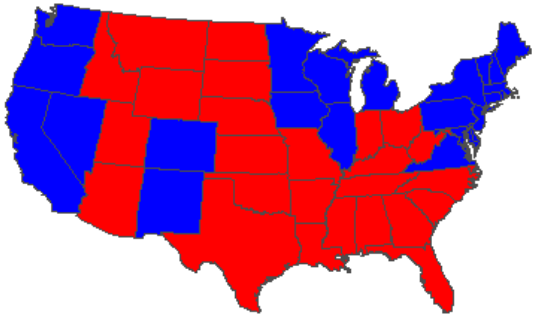
State winners in 2008 (rich voters only)



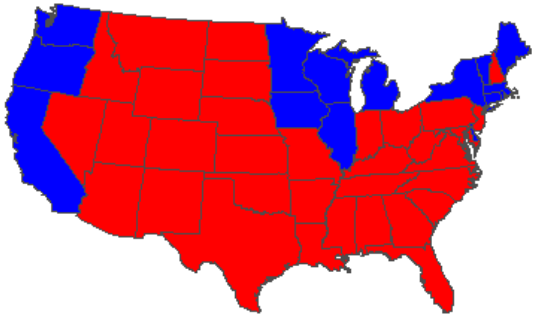
State winners in 2008 (rich Whites only)



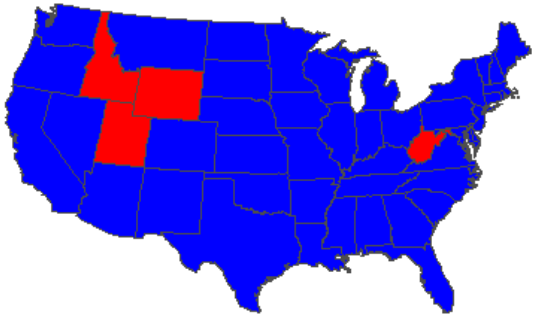
State winners in 2008 (middle-income voters)



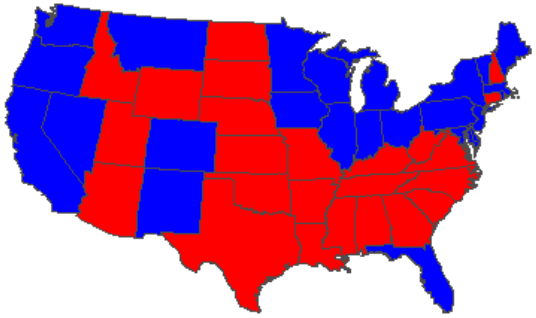
State winners in 2008 (middle-income Whites)



State winners in 2008 (poor voters only)



State winners in 2008 (poor Whites only)



. . . and the refutation!

- Criticisms from the blogger "Daily Kos":
  - Criticisms of the inferences:

    "While Gelman claims only the under-$20K white demo went for Obama, the results were far different. Per the exit poll — real voters — Obama won all whites: 54–45 percent for those making under $50K, and 51–47% for those making over $50K. . . . New Hampshire is solidly Blue unlike Gelman's maps, 58–40 — one of the most obvious misses in Gelman's analysis. . . ."
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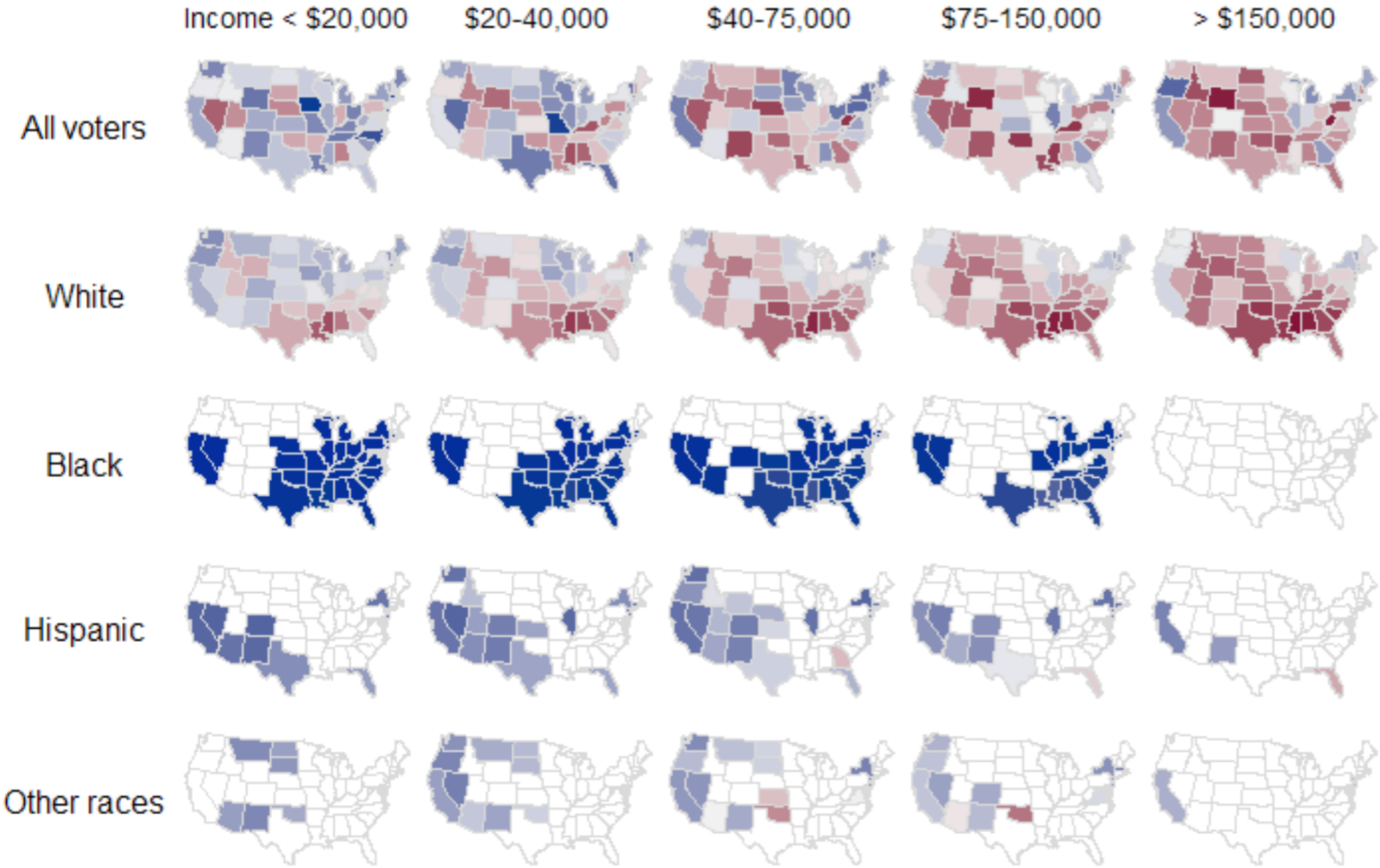
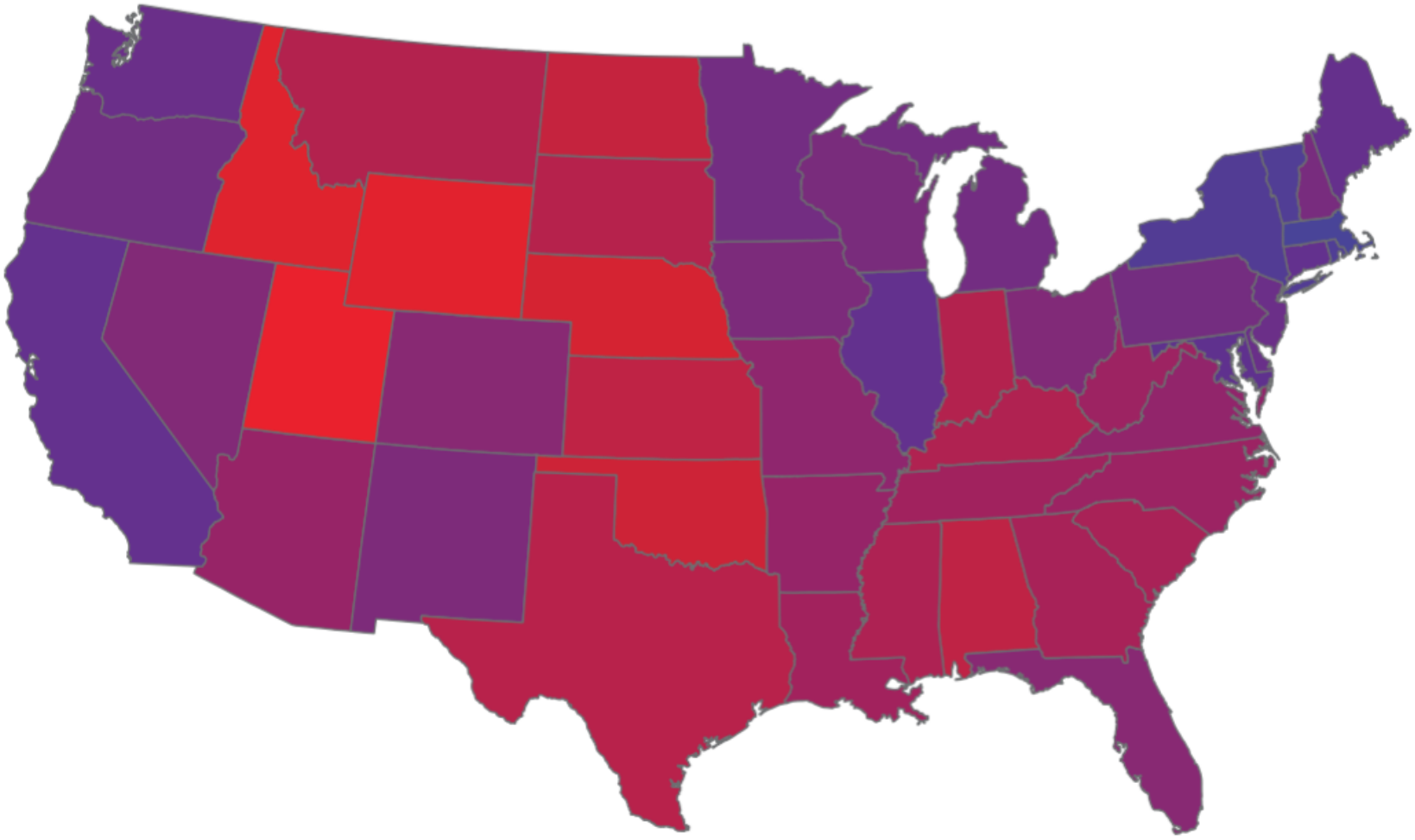
Did you vote for McCain in 2008?



I don't like these colors



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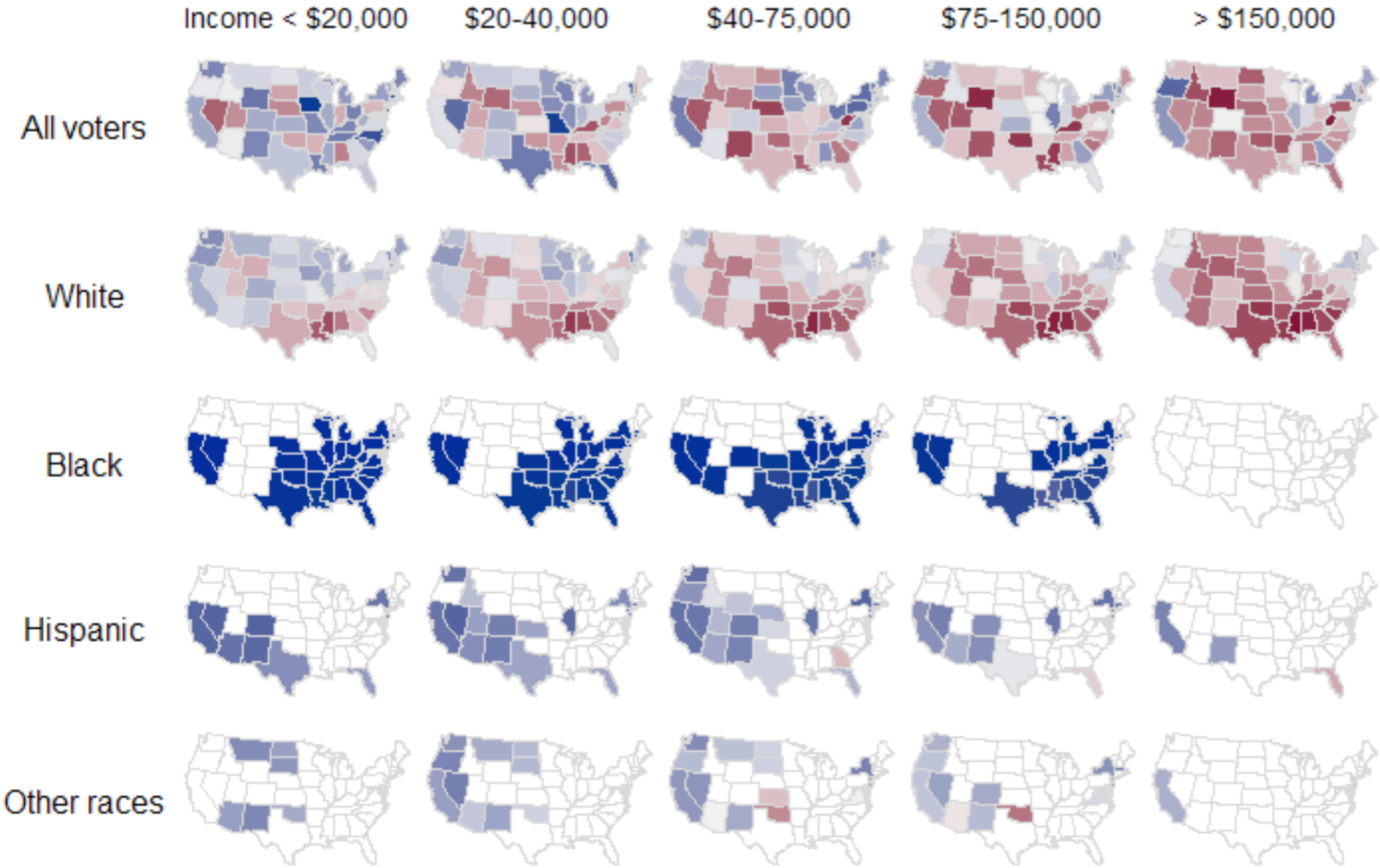
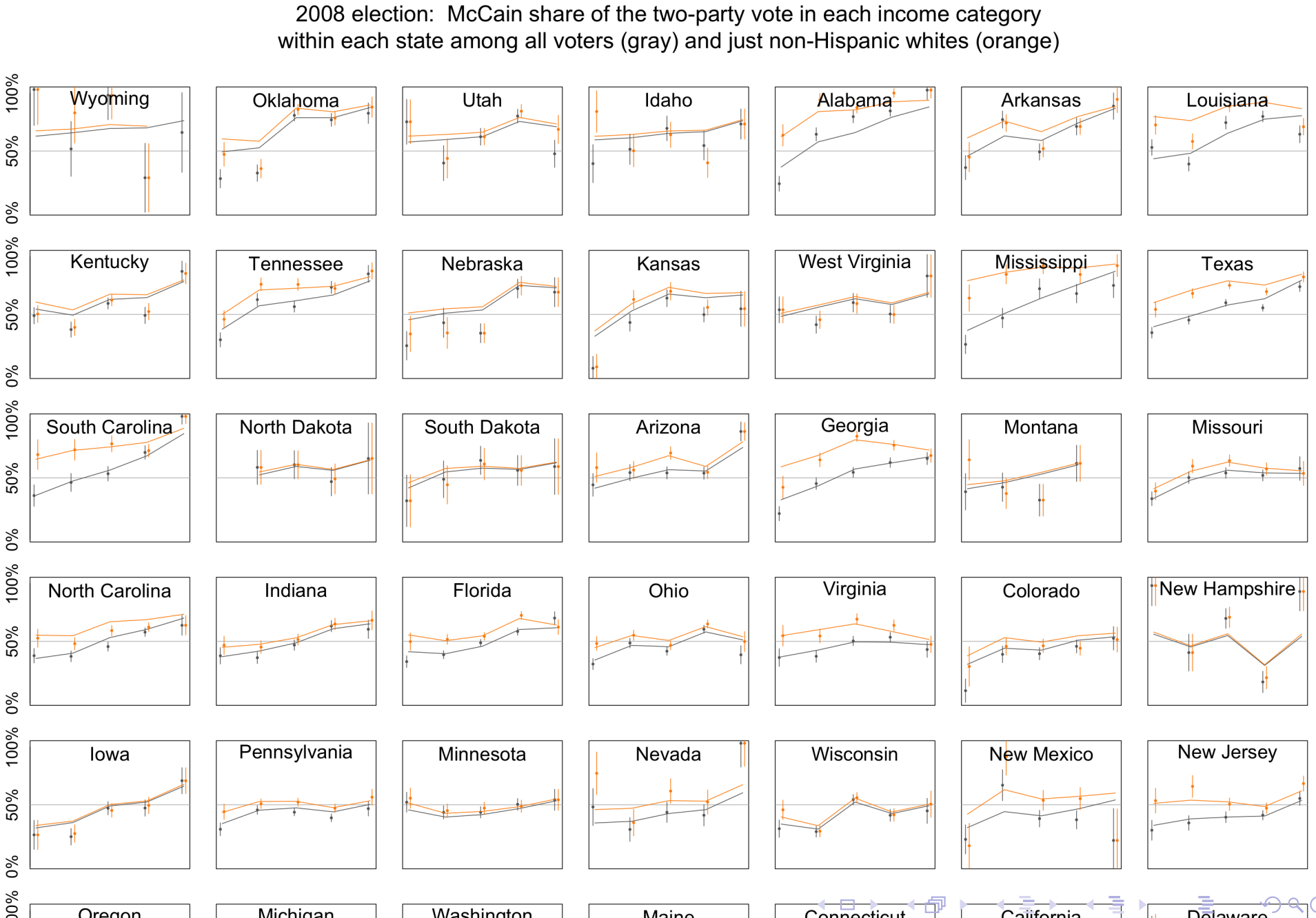
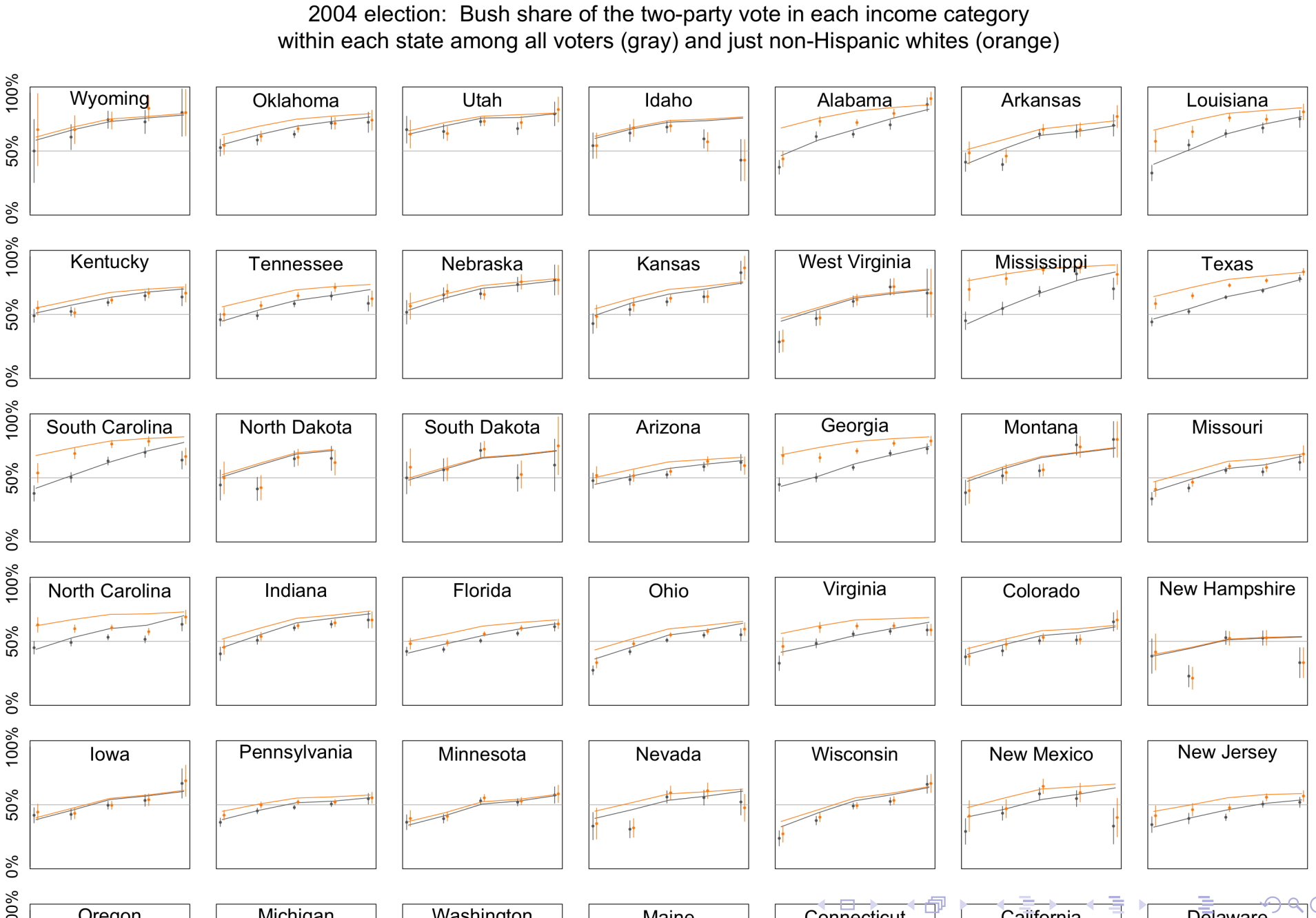


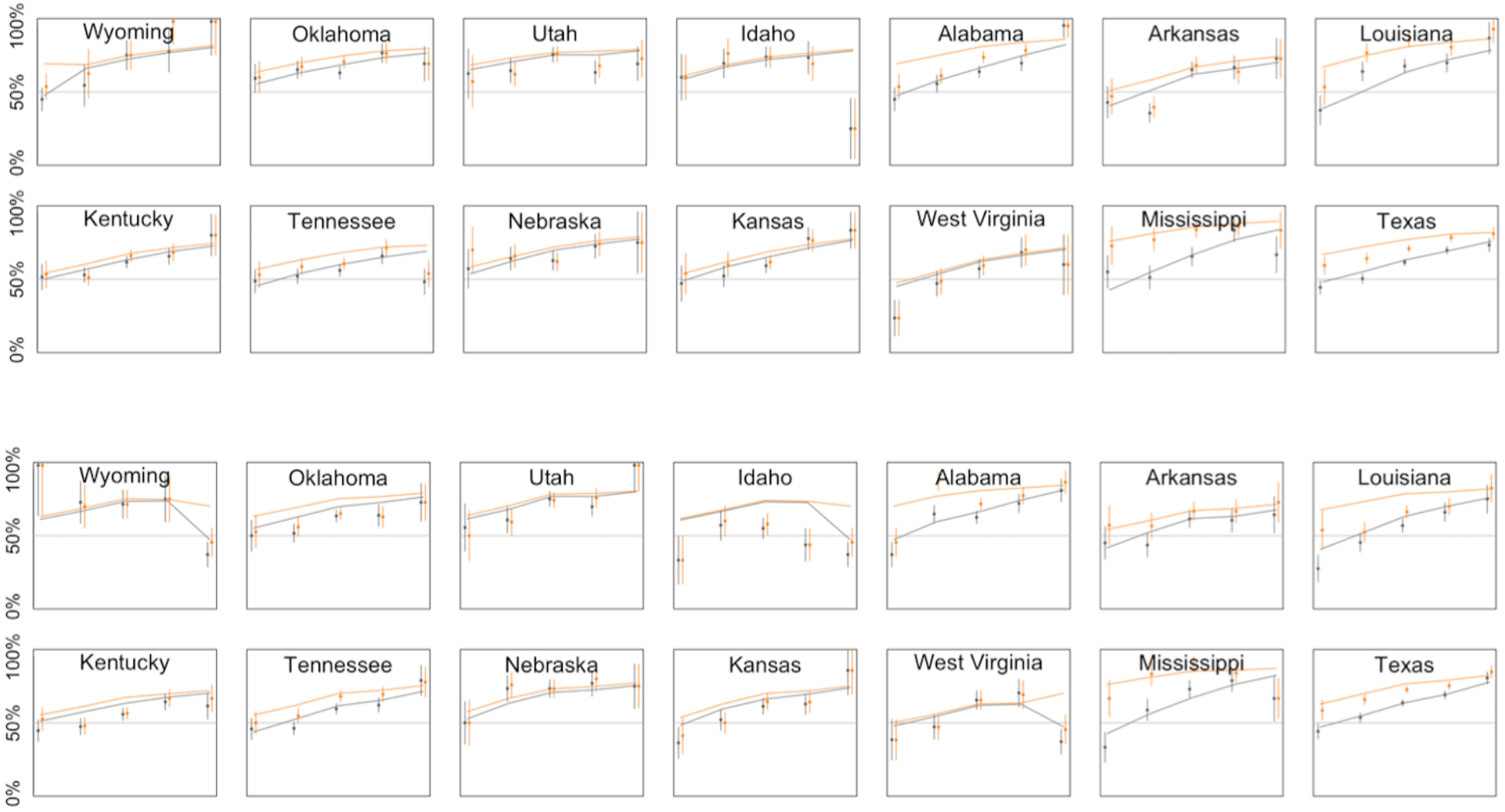
A graph we made to study and criticize our inferences

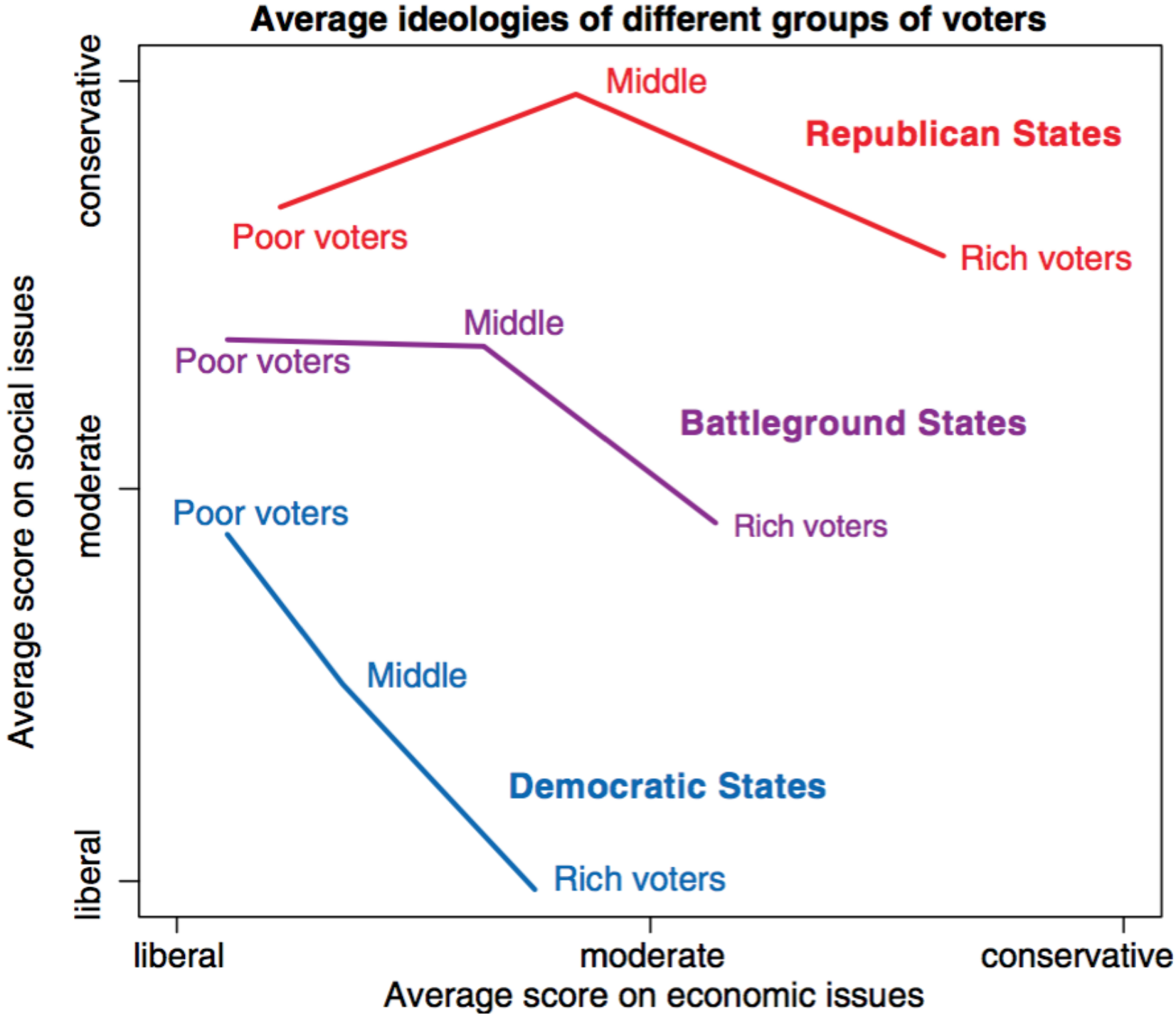


Replication using data from 2004

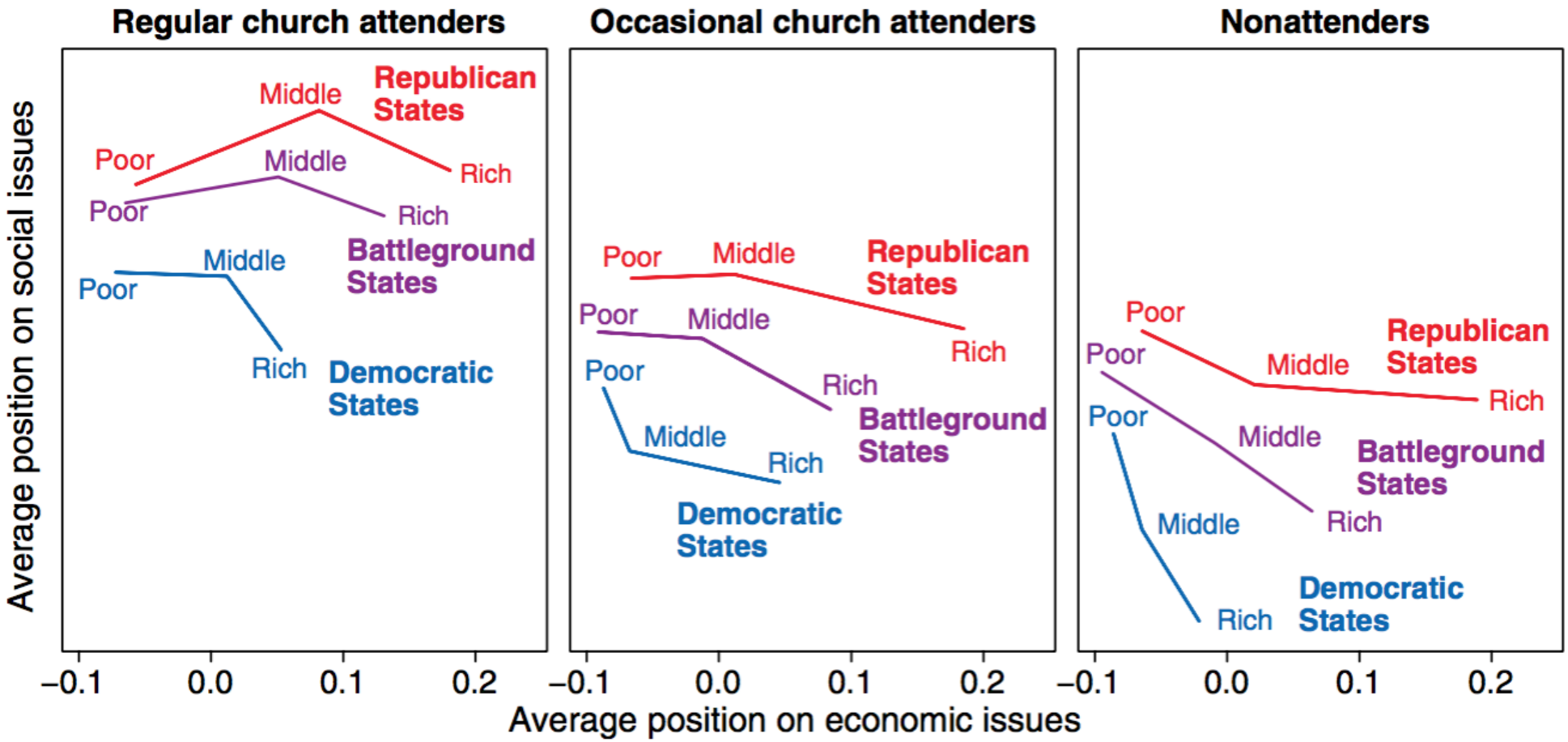


Splitting the 2004 data into 2 parts

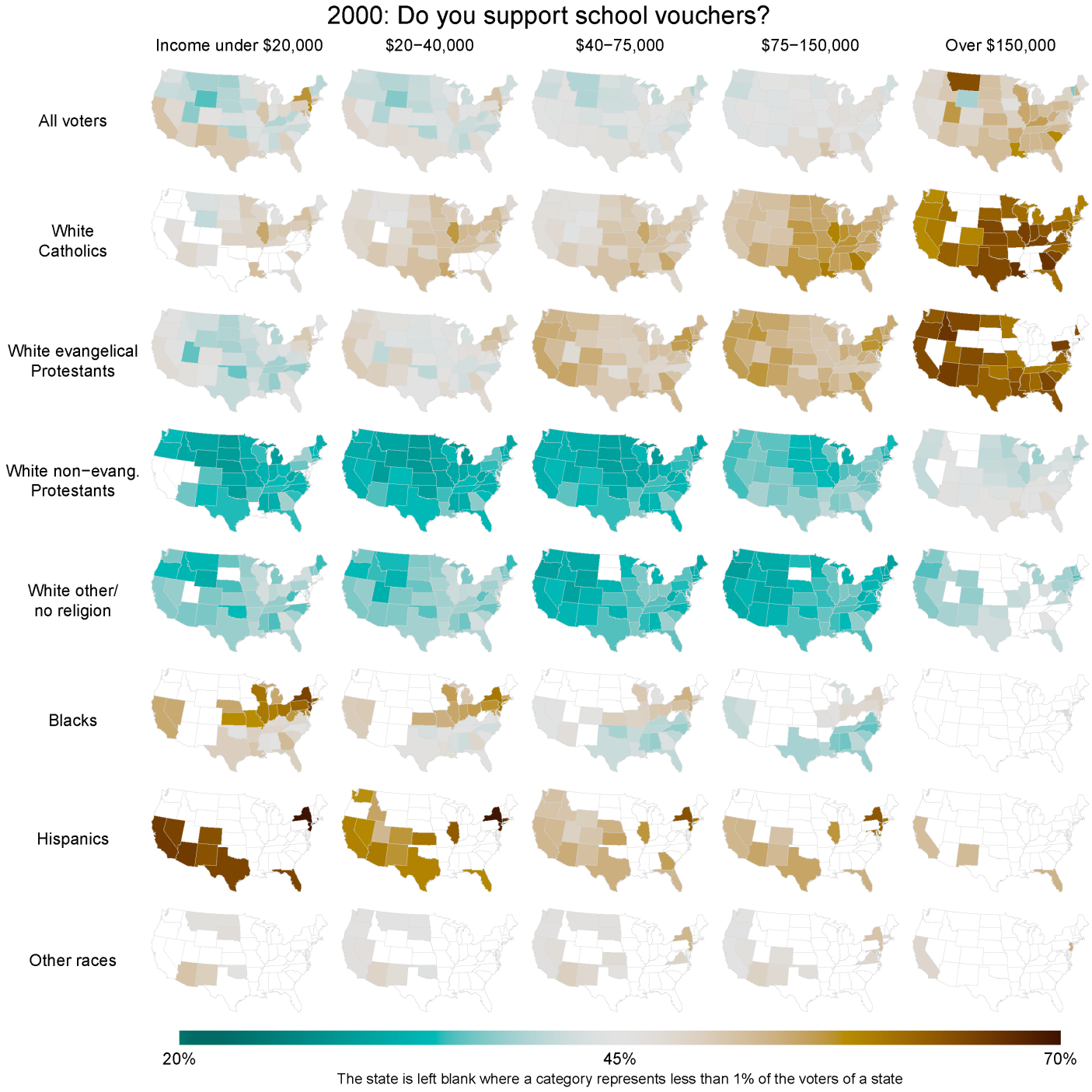



Average ideologies of different groups of voters
conservative
moderate
liberal
Average score on social issues
Middle
Republican States
Poor voters
Rich voters
Middle
Poor voters
Battleground States
Poor voters
Rich voters
Middle
Democratic States
Rich voters
liberal
moderate
conservative
Average score on economic issues

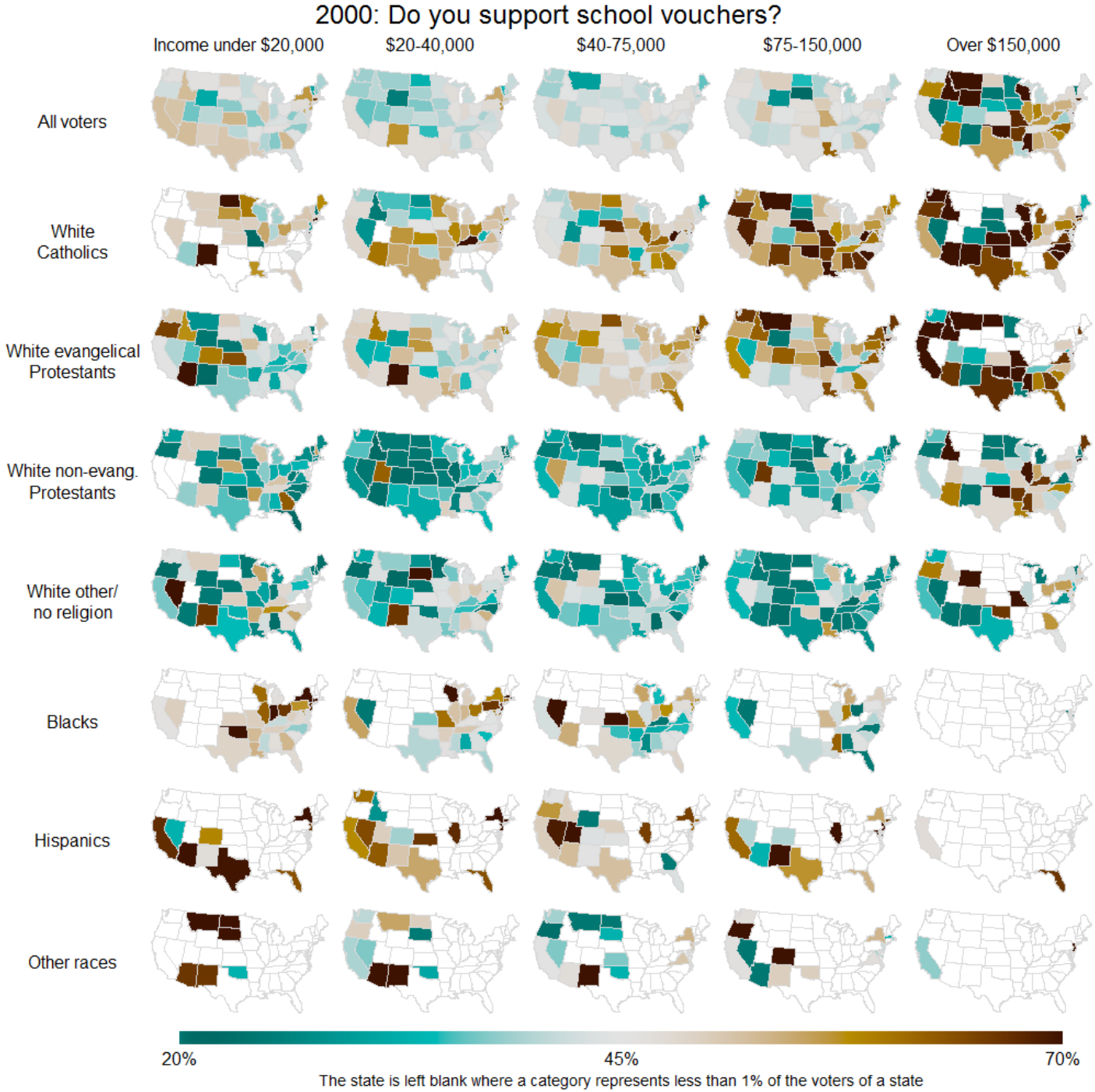
Find the standard errors



Ethnicity/religion, income, and school vouchers:



The raw data:


2000: Do you support school vouchers?
Income under $20,000
$20-40,000
$40-75,000
$75-150,000
Over $150,000
All voters
White Catholics
White evangelical Protestants
White non-evang. Protestants
White other/ no religion
Blacks
Hispanics
Other races
20%
45%
70%
The state is left blank where a category represents less than 1% of the voters of a state