The Rise of Partisanship in the US

A Network Science Approach

SLT 13B | Bengielyn Danao, Kyle Ong

The New York Times

Trump Acquitted of Two Impeachment Charges in Near Party-Line Vote

As Republicans rallied behind President Trump, Senator Mitt Romney of Utah, the party's 2012 presidential nominee, joined Democrats in voting to convict, the only senator to cross party lines.

https://www.nytimes.com/2020/02/05/us/politics/trump-acquitted-impeachment.html

Donald Trump's congress is very partisan.

Analyze the voting behavior of *Republican* & *Democratic* parties over time (1947 – 2019)

The Data

Rollcall vote data from voteview.com beta

UCLA | DEPARTMENT OF Political Science
SOCIAL SCIENCES DIVISION

 Congressional rollcalls

 Individual votes (Yes / No)
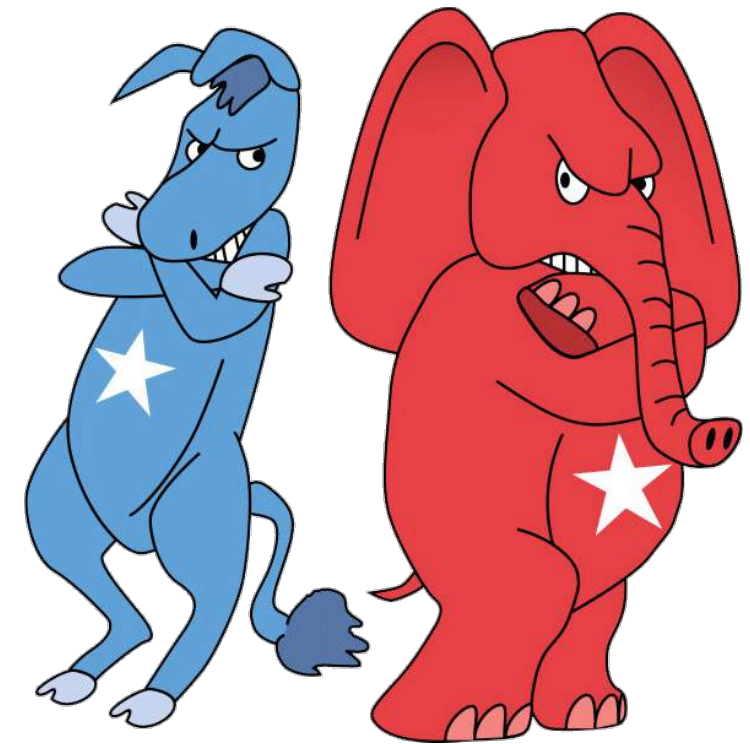
 Members & parties

Senate   House

80th to 115th
Congress

Network Structure

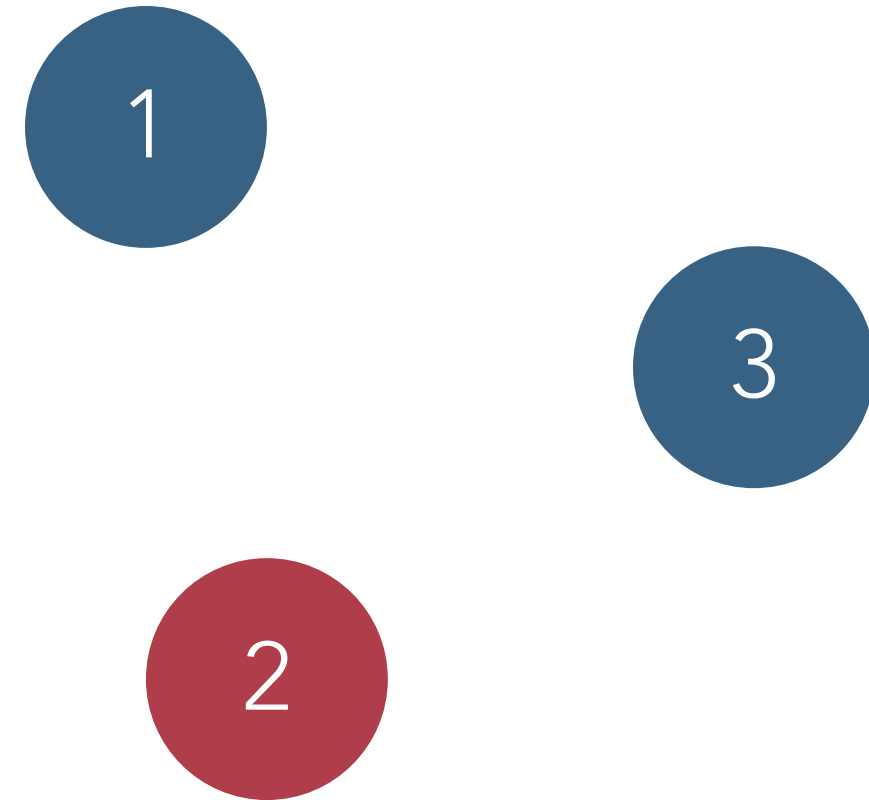Observe the polarity / degree of conformity between parties.

↑ individuals of the same party vote identically

↓ individuals of different parties vote identically
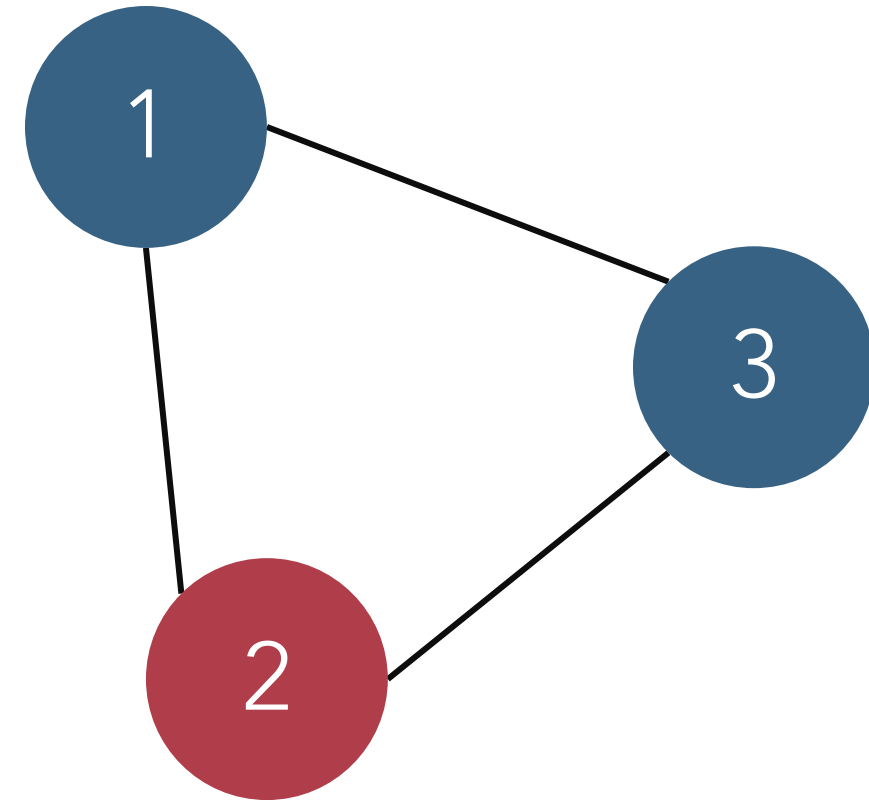
Network Structure

Nodes: Members of the senate or house of representatives

Network Structure

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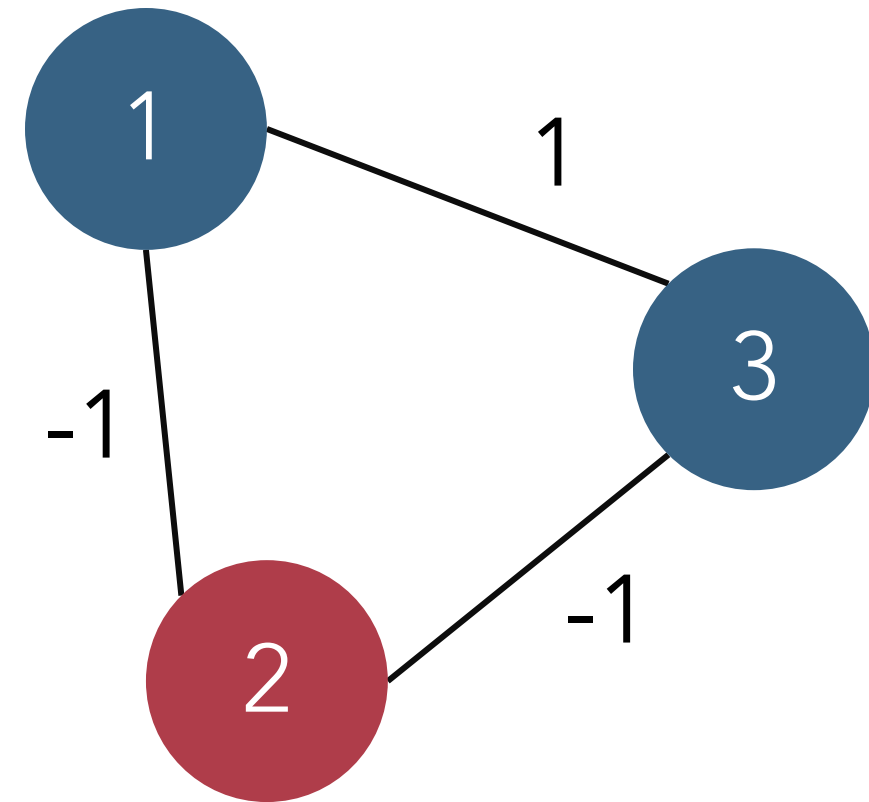**Edges**: Similarity of voting patterns between two members of congress

Network Structure

Nodes: Members of the senate or house of representatives

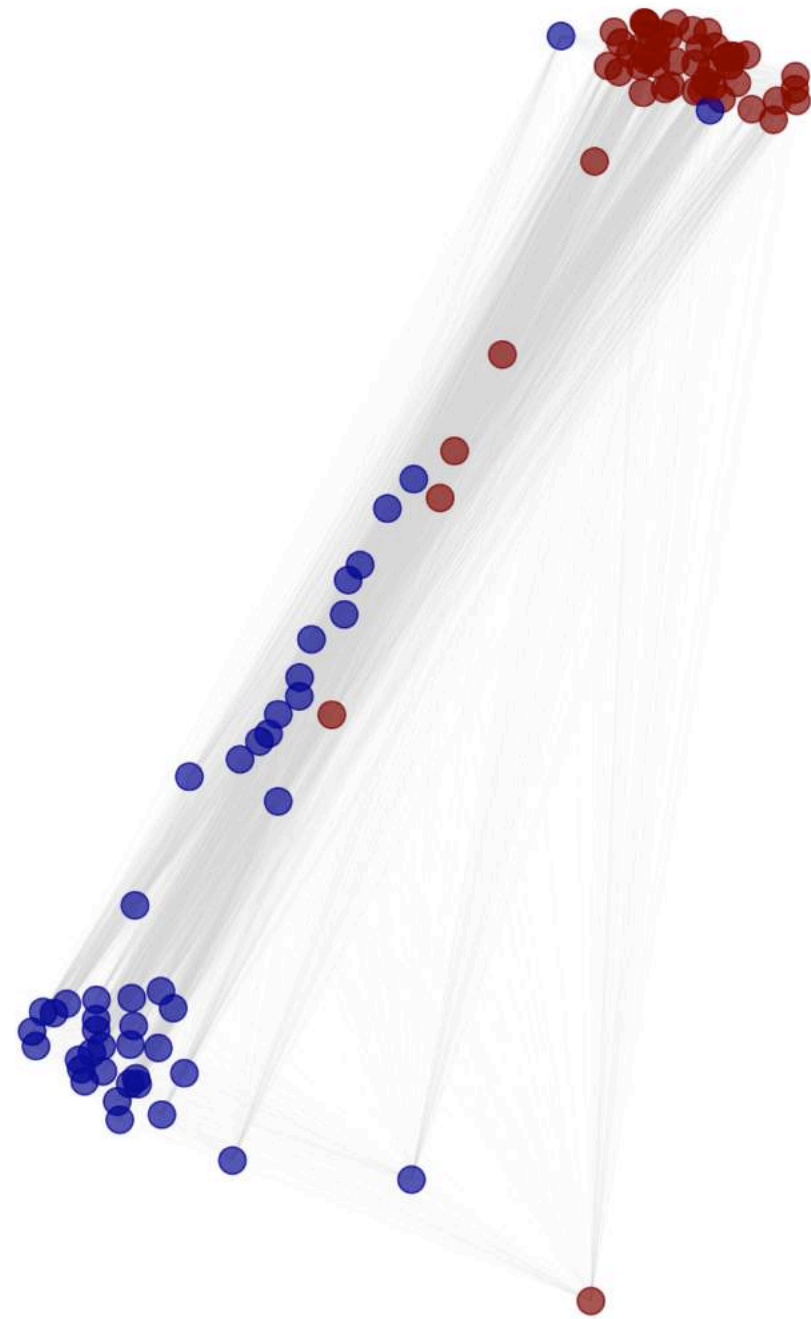**Edges**: Connection between all pairs of members (fully-connected)

Weight: Cosine similarity of voting patterns between two members of the congress

Network
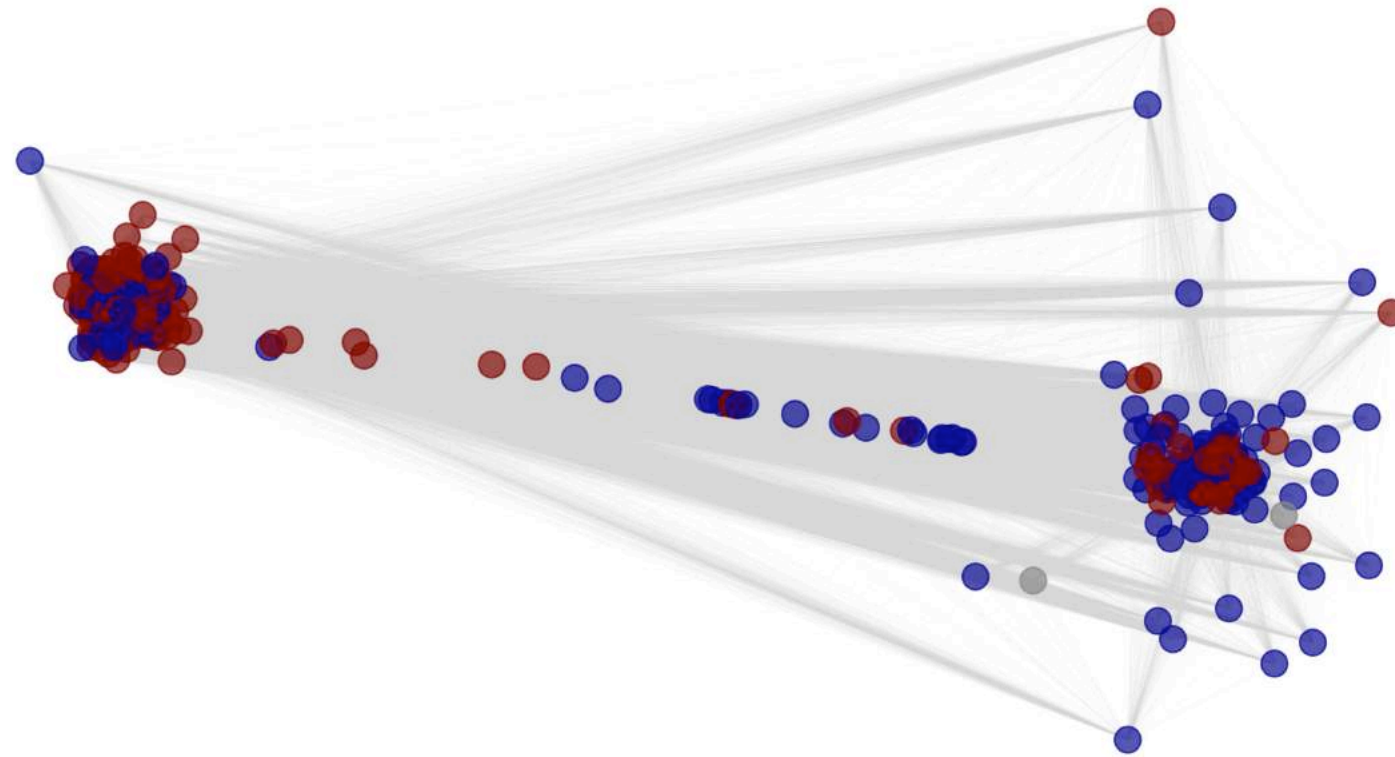# Evolution

Evolution over time

Congress 80

Senate
Voting behavior gets more polar between parties.
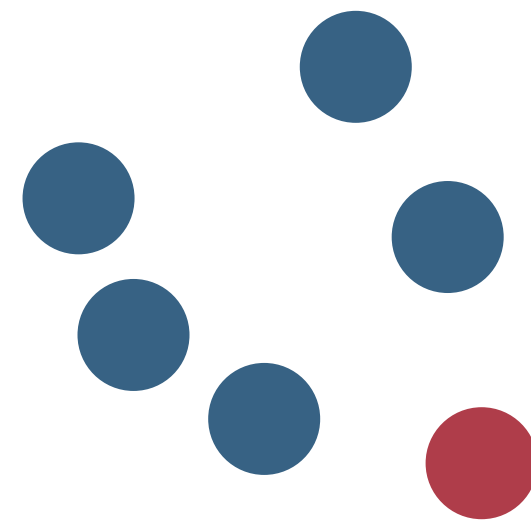
Evolution over time

Congress 80

House of Representatives

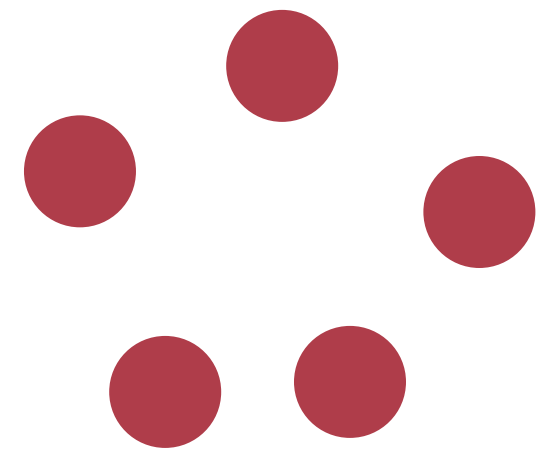Voting behavior gets more polar between parties.

Average Degree

Intra-party Similarity

How often does your party vote along party lines?
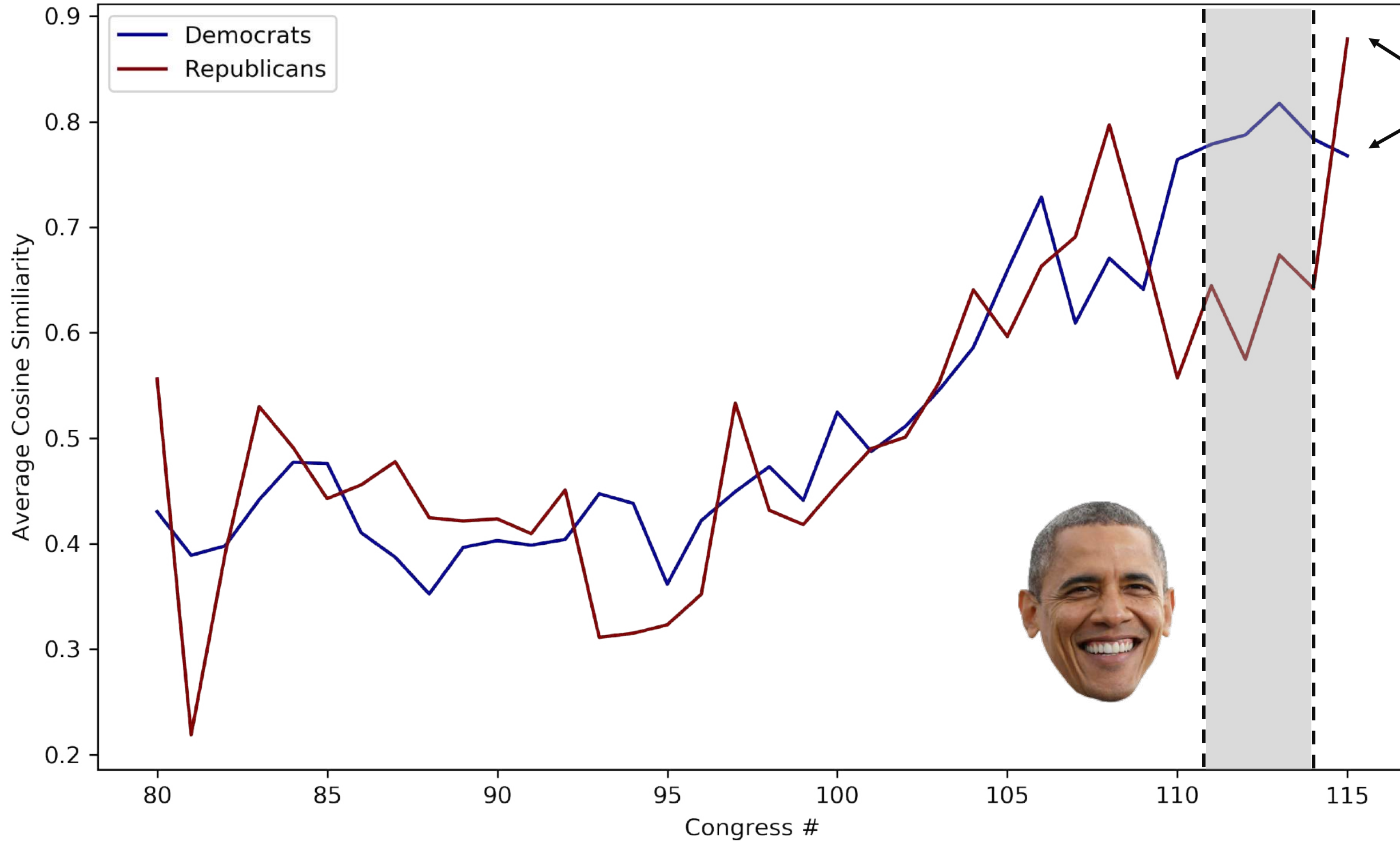

"Yea"   **"Nay"**
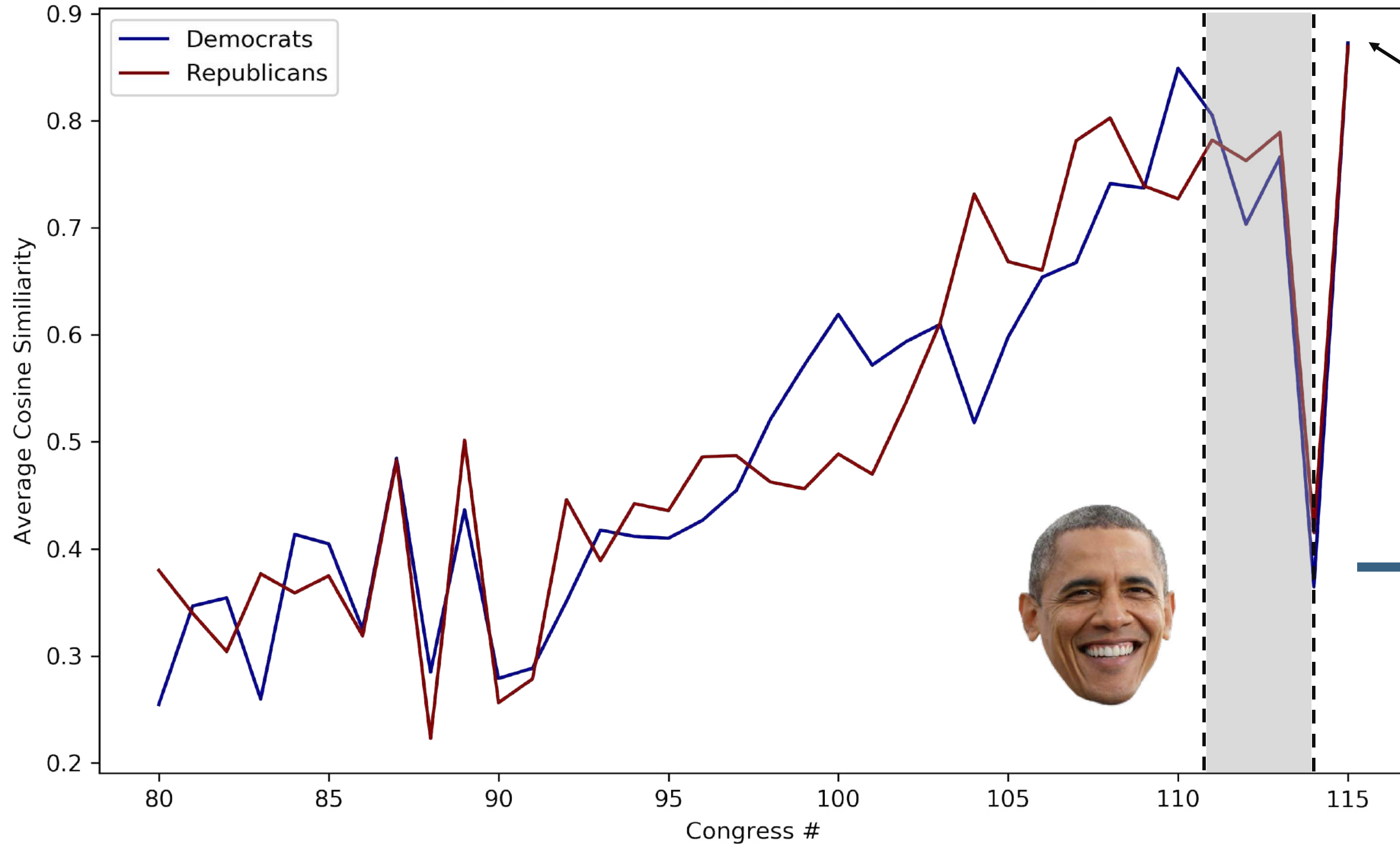
Average Degree (Senate)

Average Cosine Similiarity per Congress (SENATE)

Higher = More Partisan

Average Degree (House of Representatives)

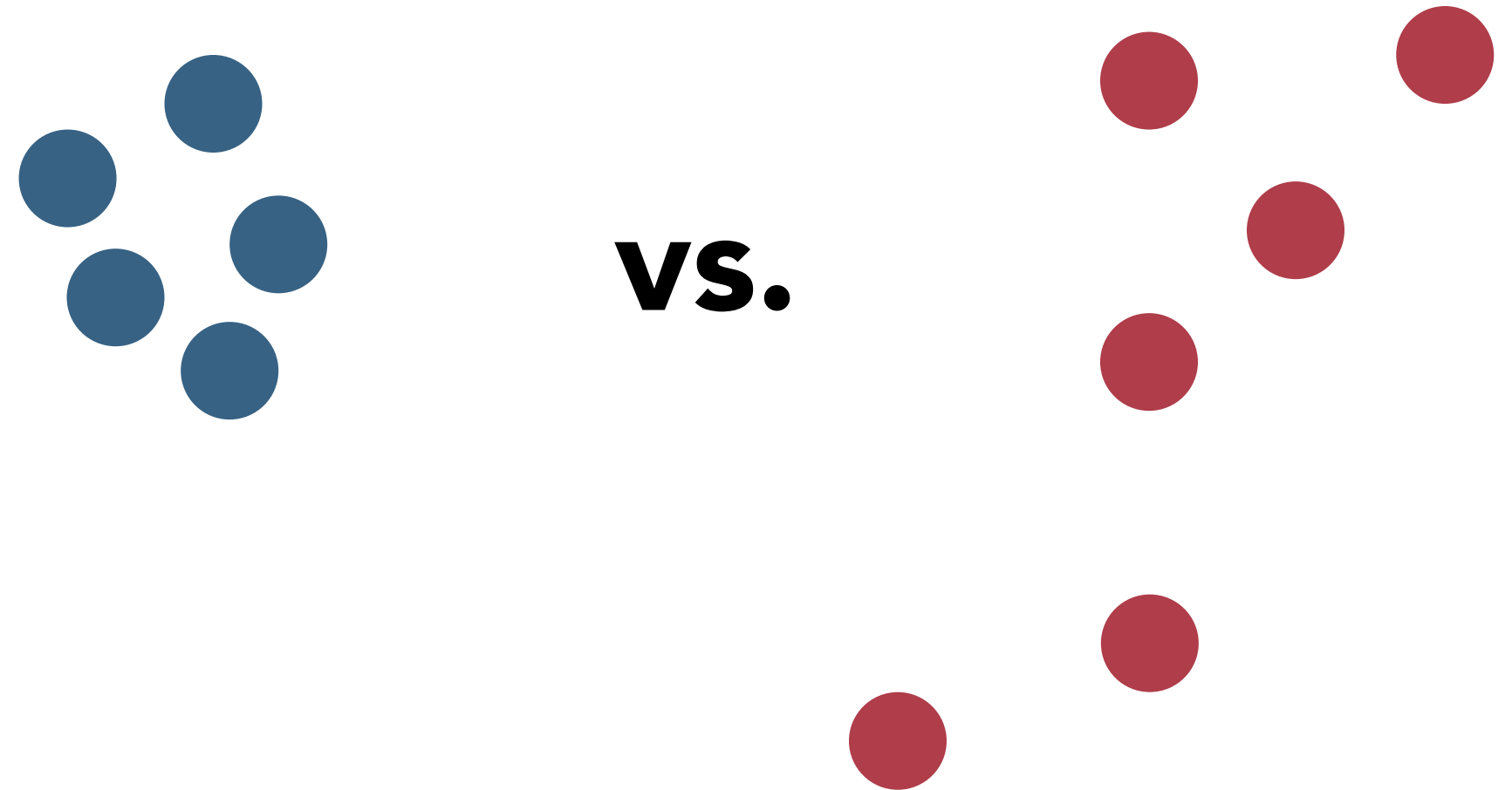Average Cosine Similiarity per Congress (HOUSE)

Obama's Last Year
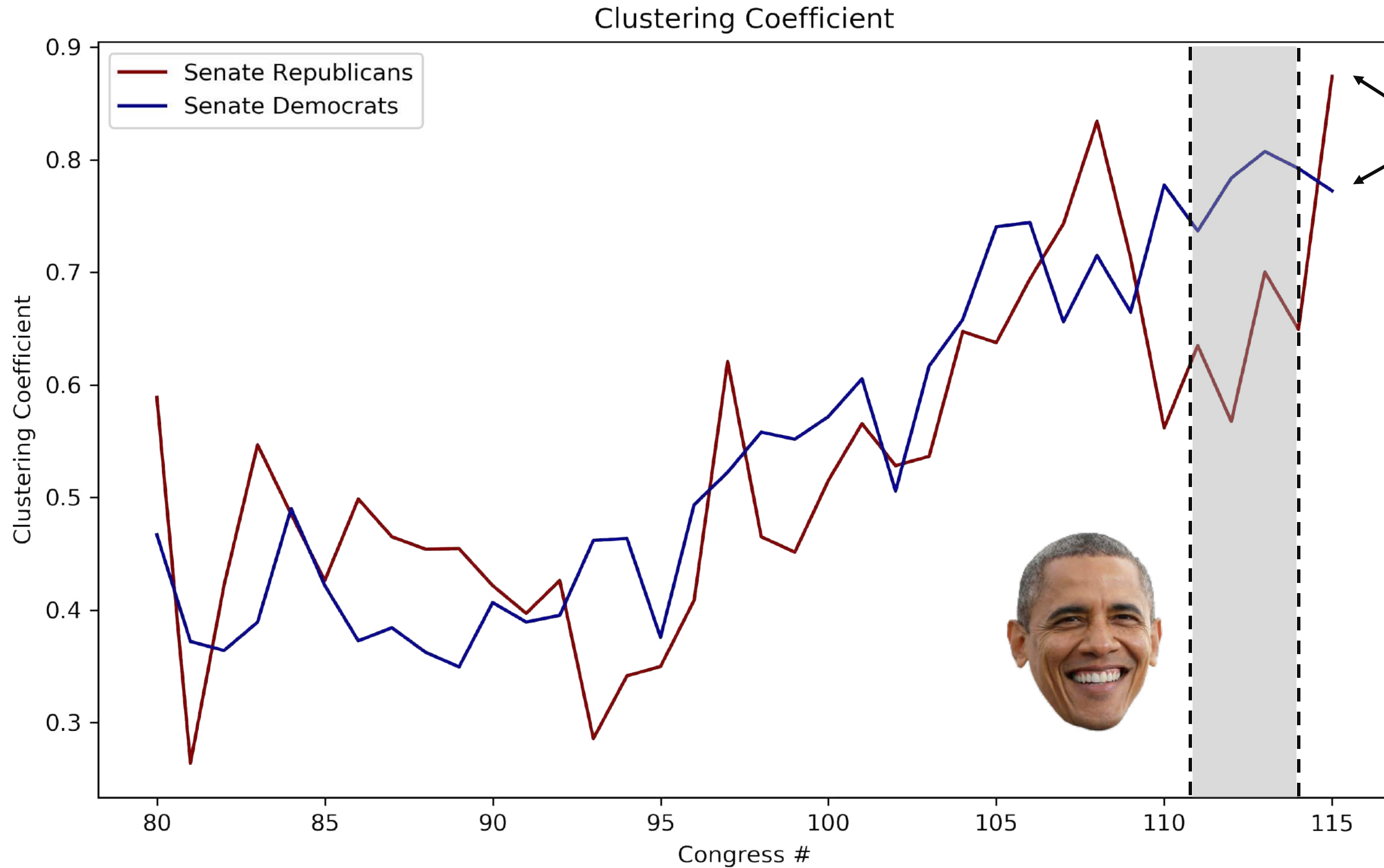...saw the most **bipartisan** House of Representatives in over 40 years.

Clustering Coefficients

Intra-party Similarity

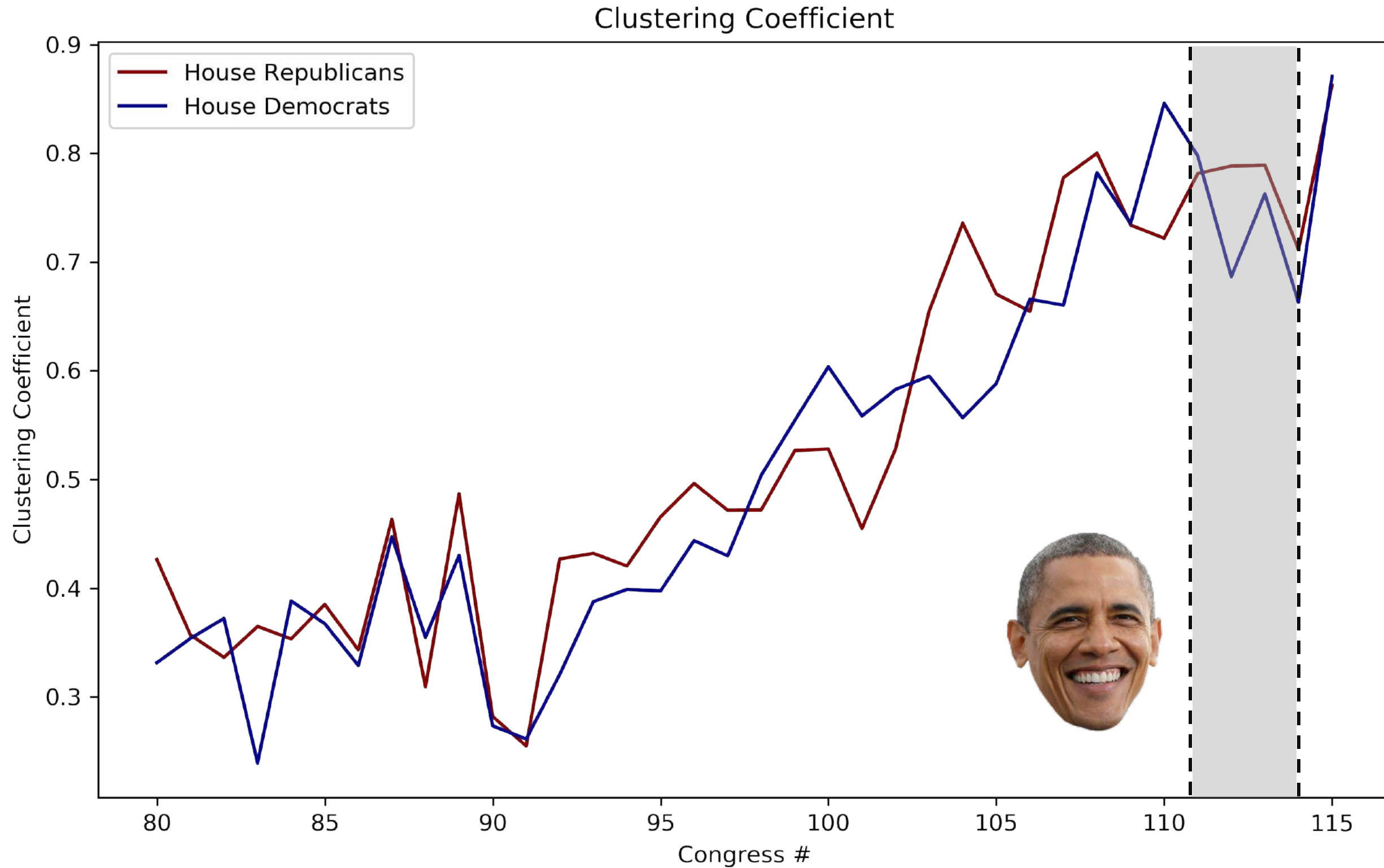How tightly knit is your party?

vs.

Clustering Coefficients

Clustering Coefficient

Senate ...ties got more ...tly knit over the years especially during the appointment of Trump.

Clustering Coefficients

Clustering Coefficient
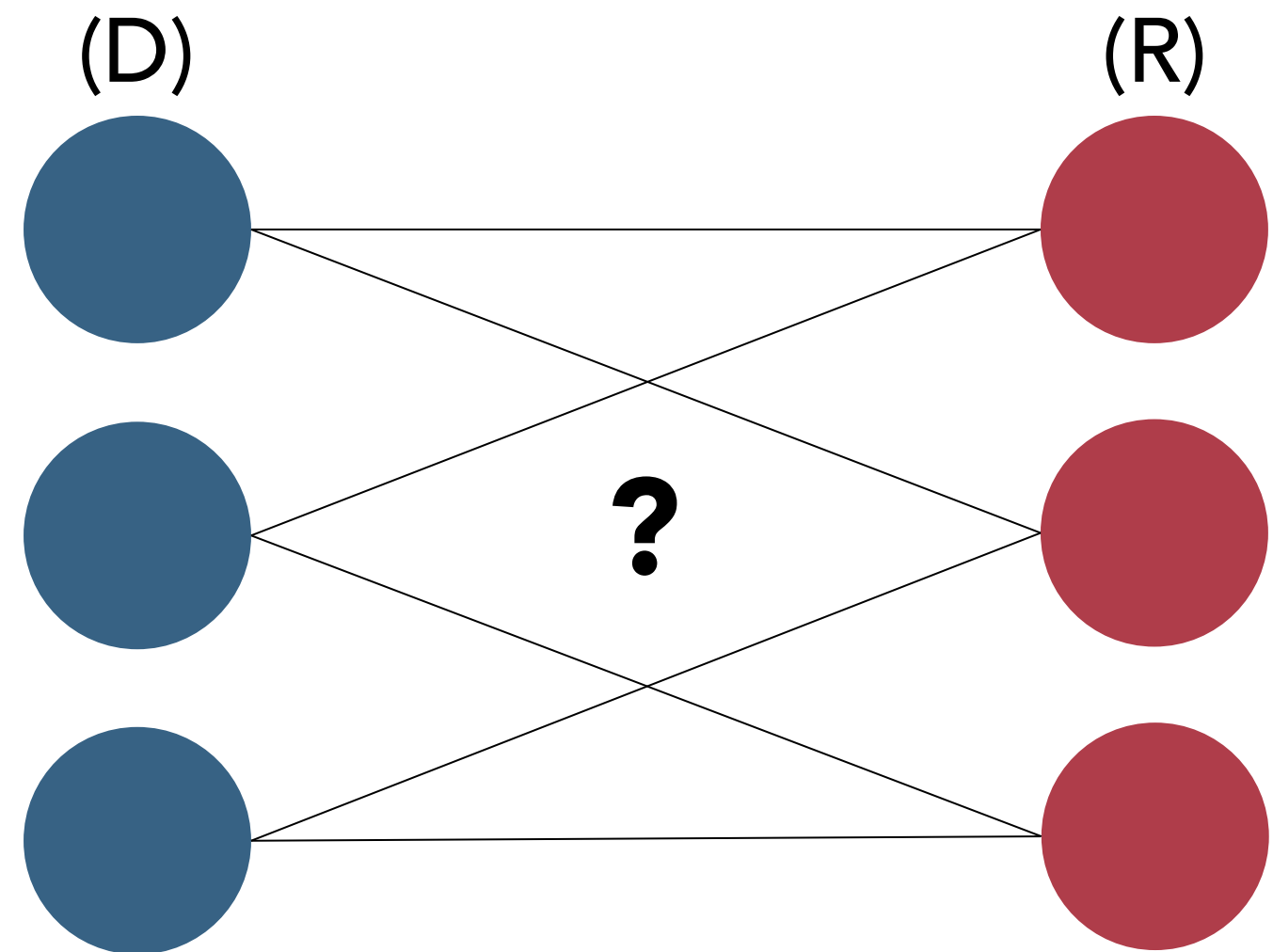
House of Representatives

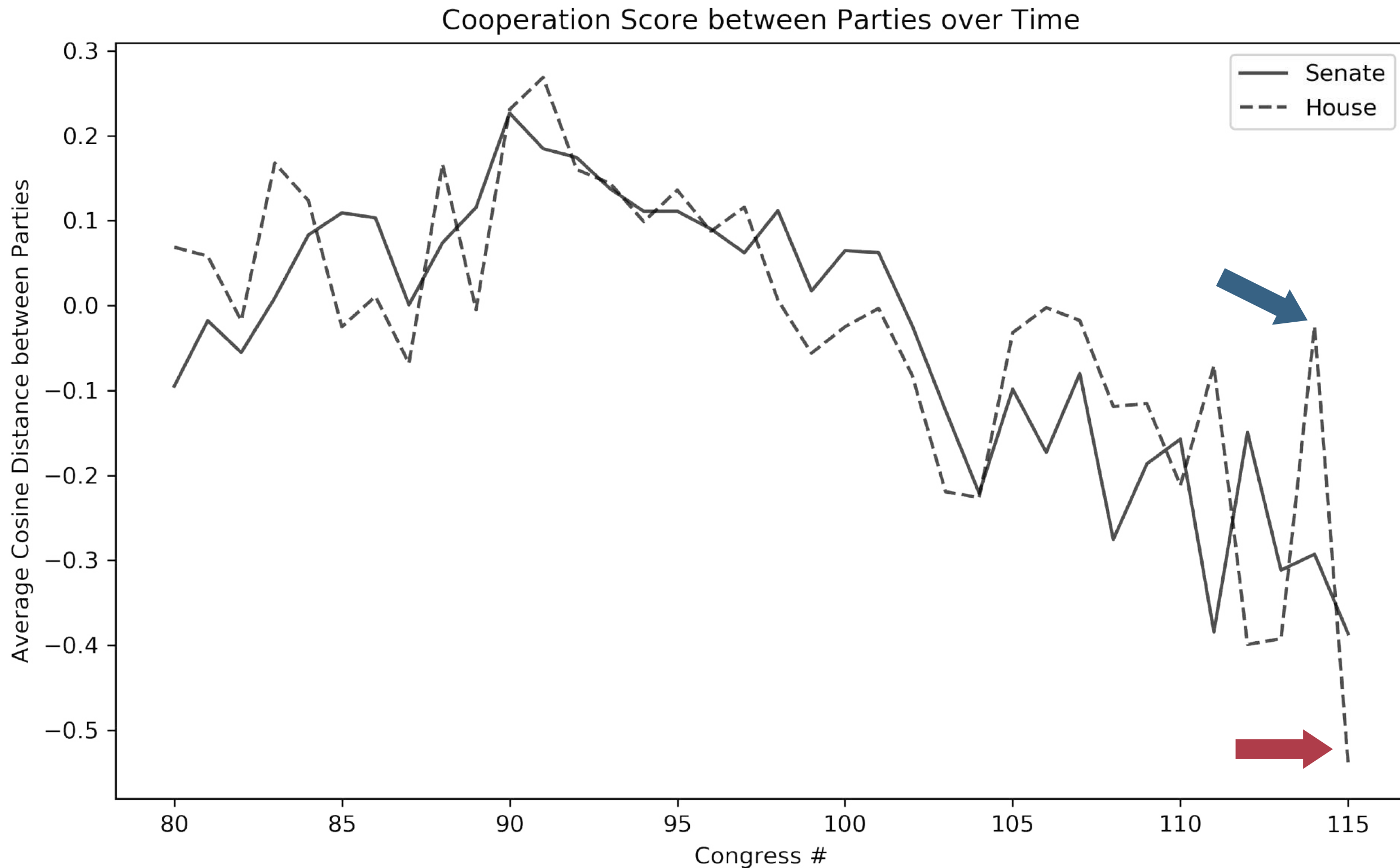Parties got more tightly knit over the years especially during the appointment of Trump.

Cooperation Score

Inter-party Similarity

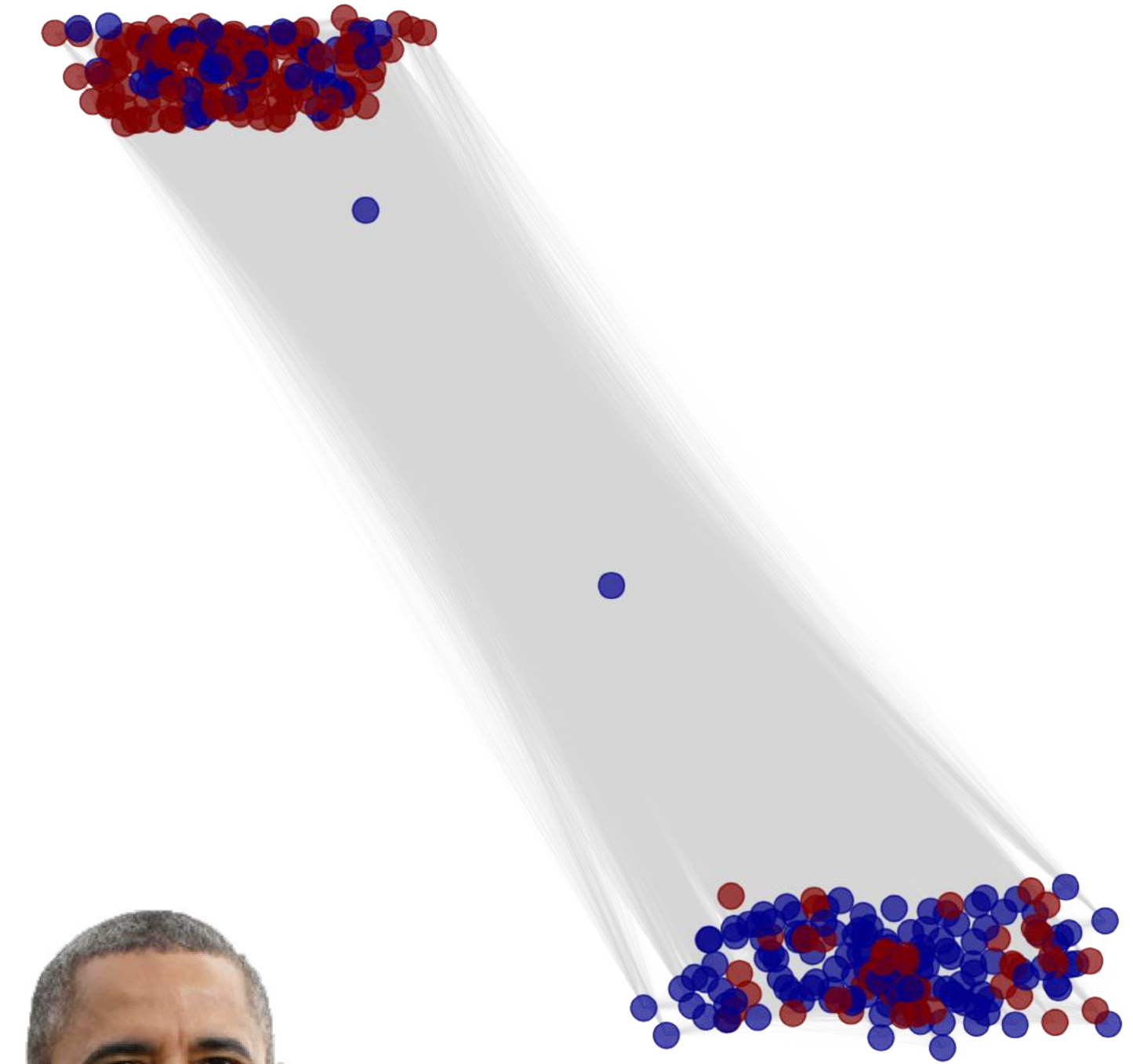How much do both parties "cooperate" across party lines when voting?

Cooperation Score

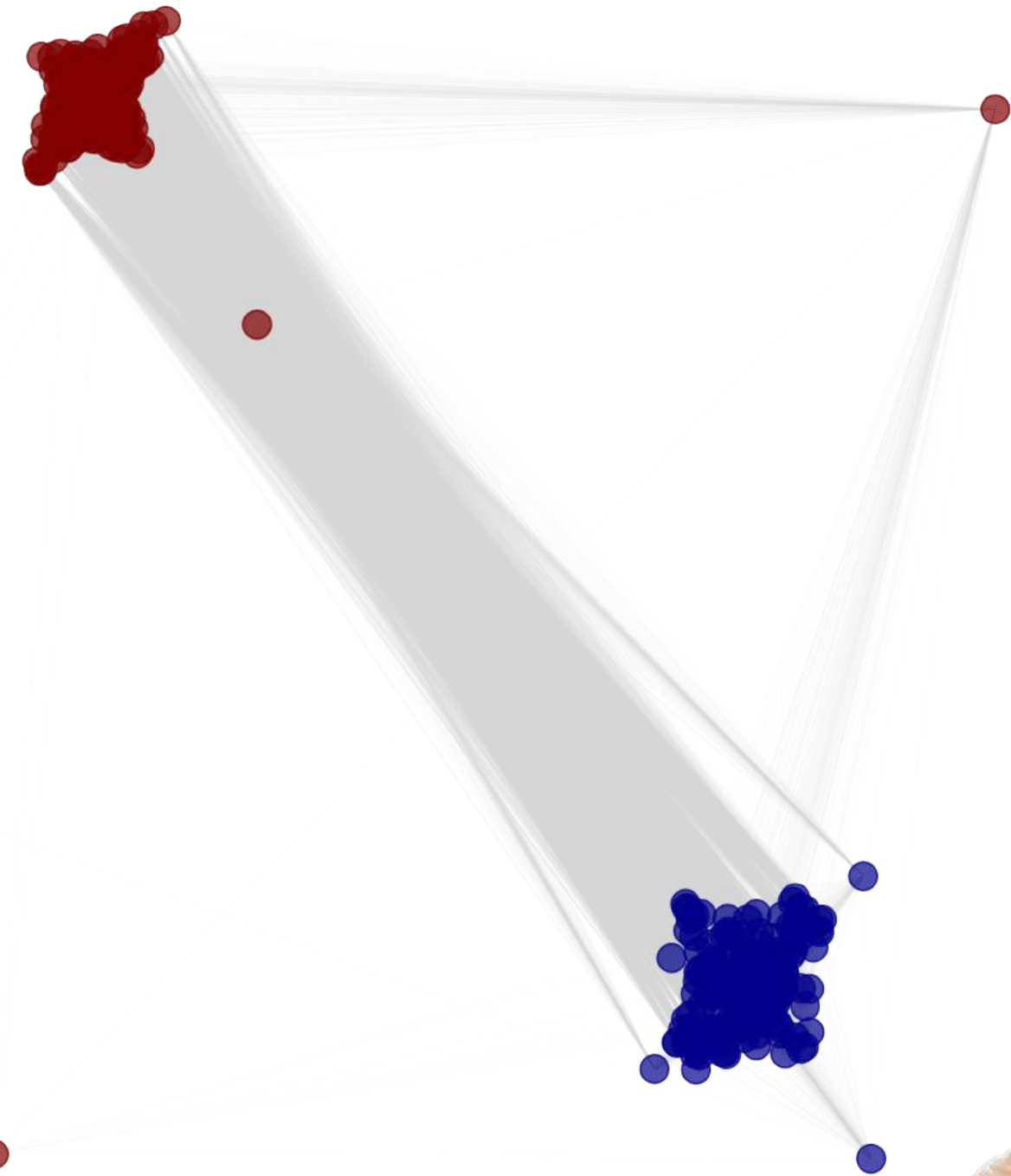Cooperation Score between Parties over Time

Collaboration between parties

decreased over the years on both chambers which confirms change in trend of partisanship. Instead of compromising, there is animosity between parties.
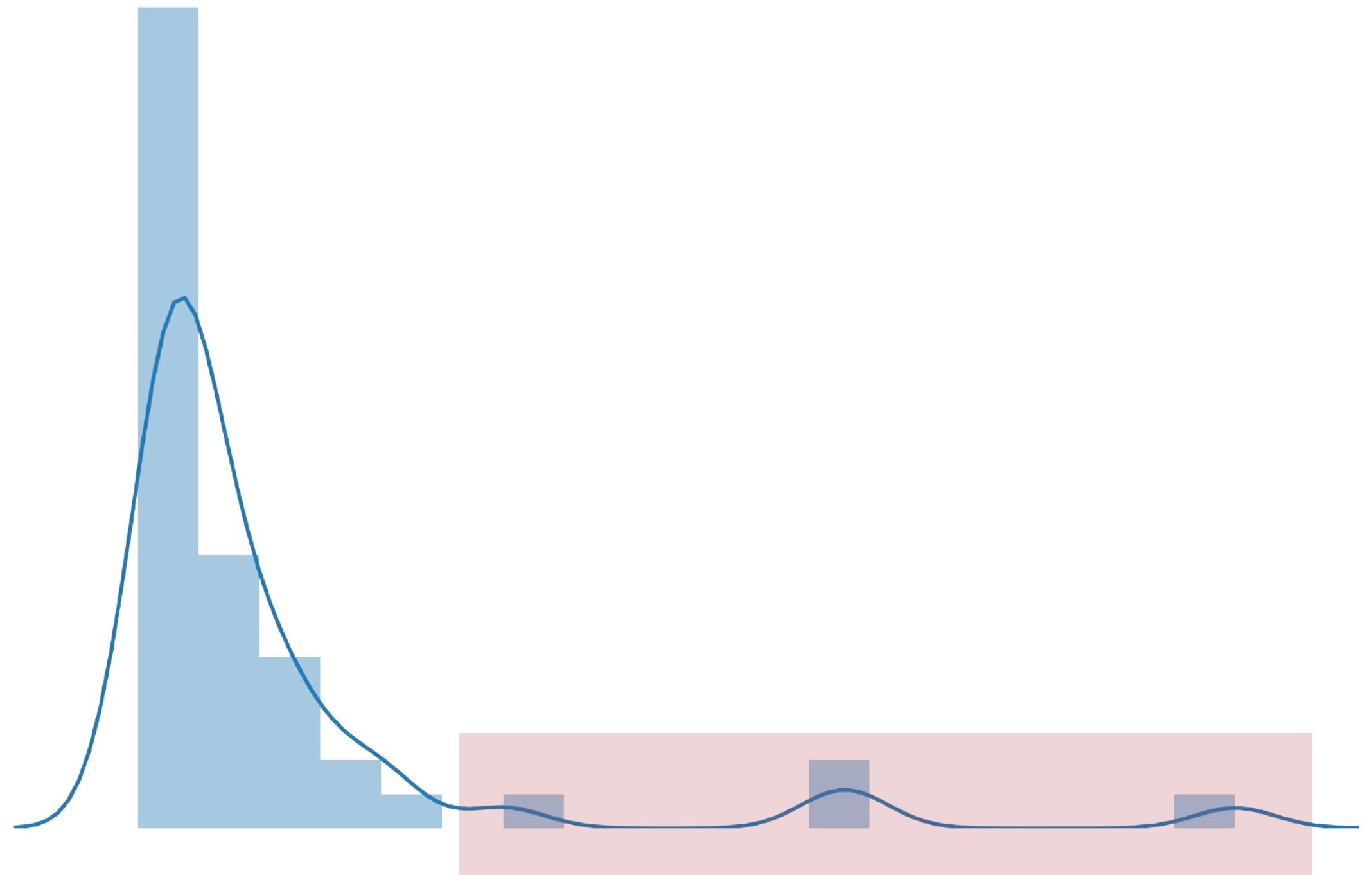
Congress 114
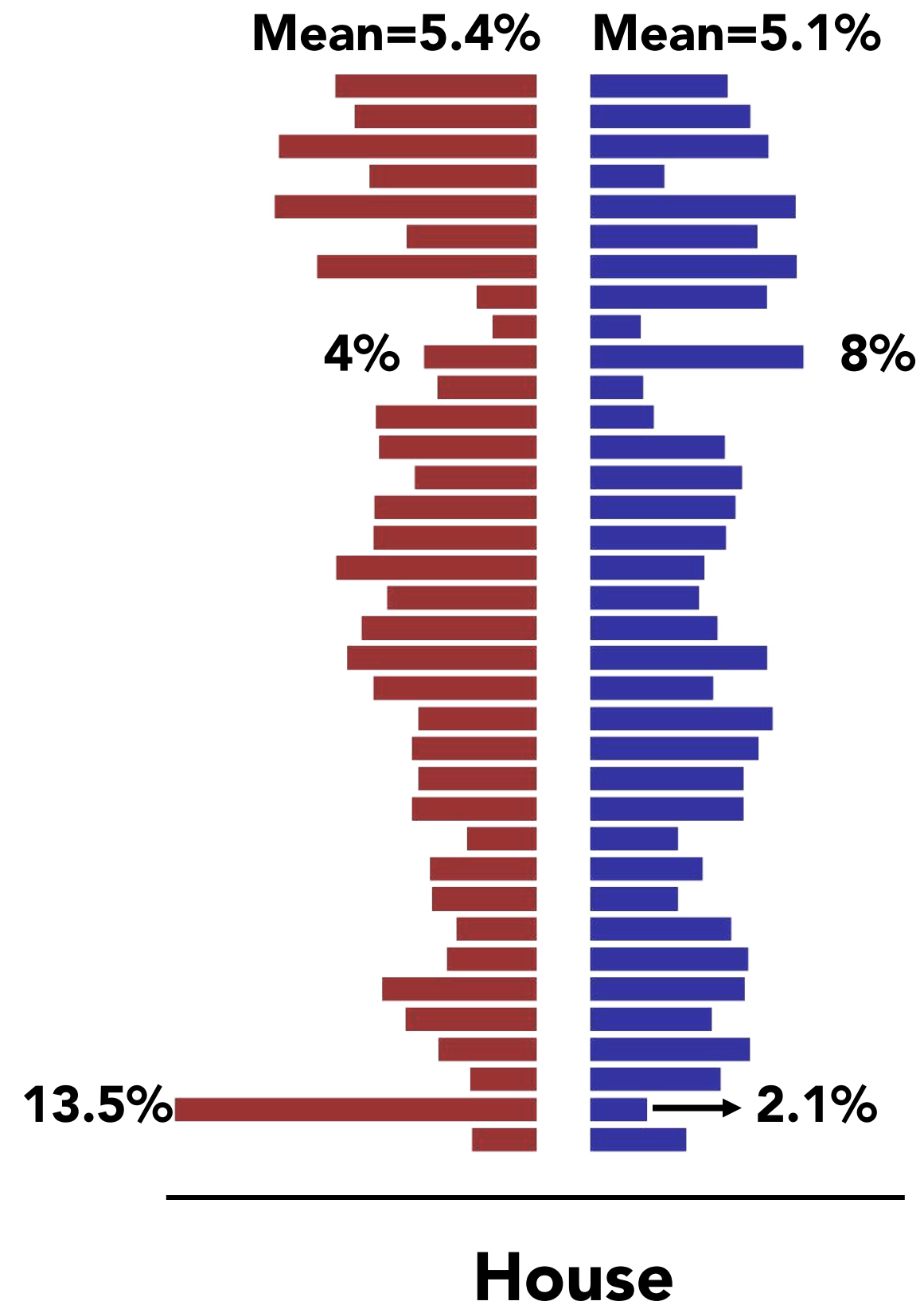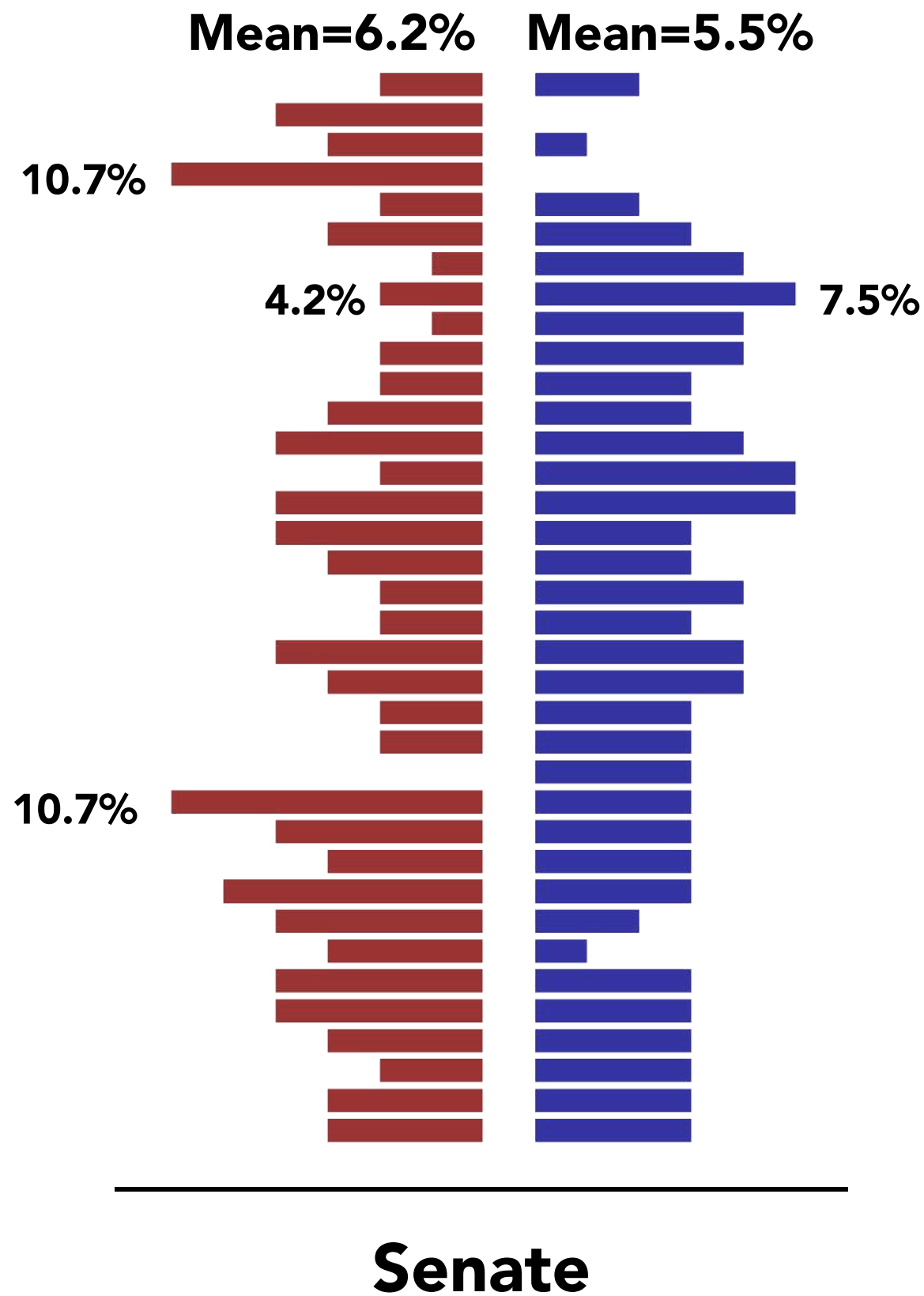(2015-2017)

Congress 115
(2017-2019)

Outliers

Intra-party Differences

Who and how many are the "dissenters" from each party?

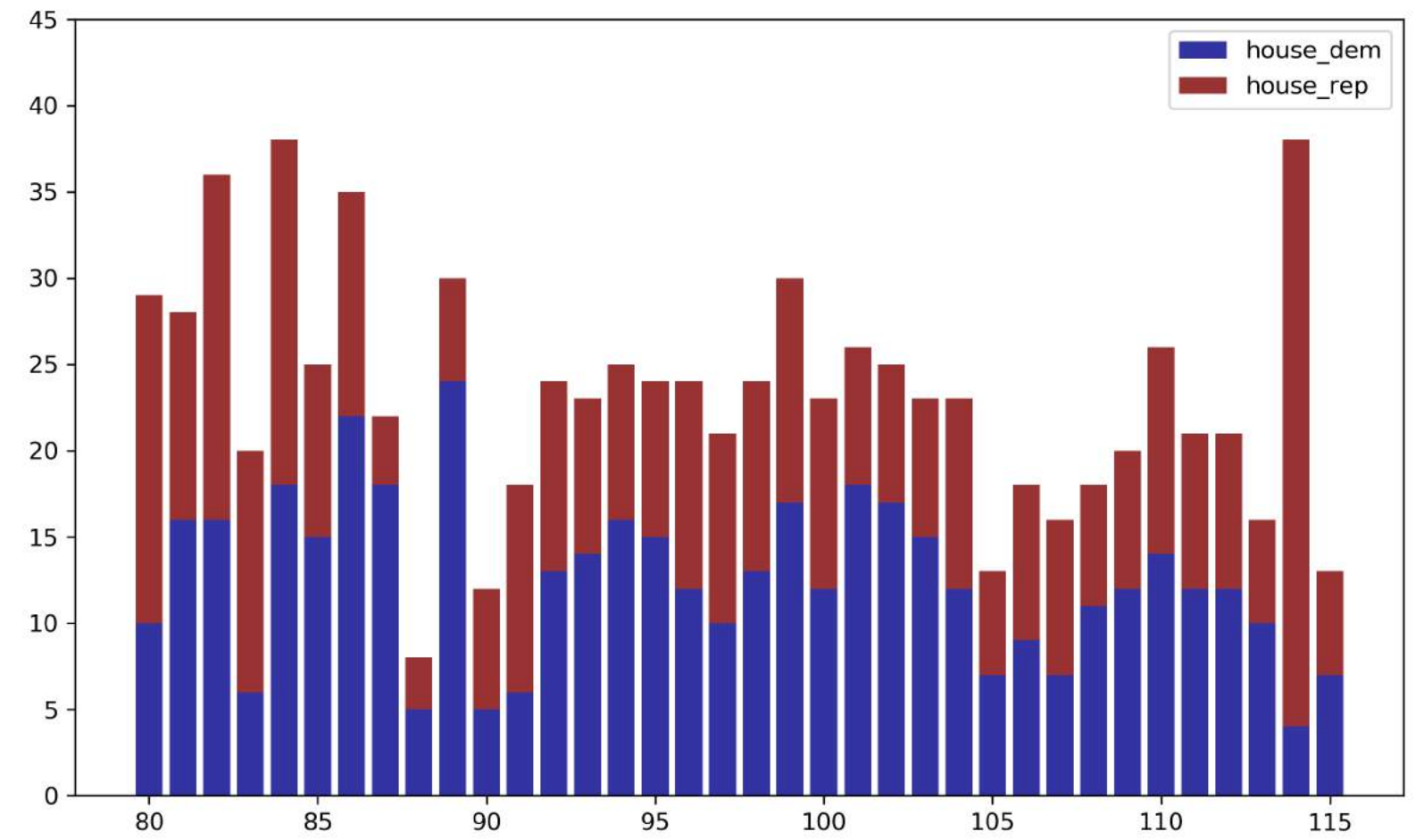# Outliers DON'T KNOW IF THIS IS USEFUL

Mean=6.2%   Mean=5.5%

10.7%

4.2%   7.5%

10.7%

Mean=5.4%   Mean=5.1%

4%   8%

13.5%   2.1%

Senate

House

Outliers

Senate
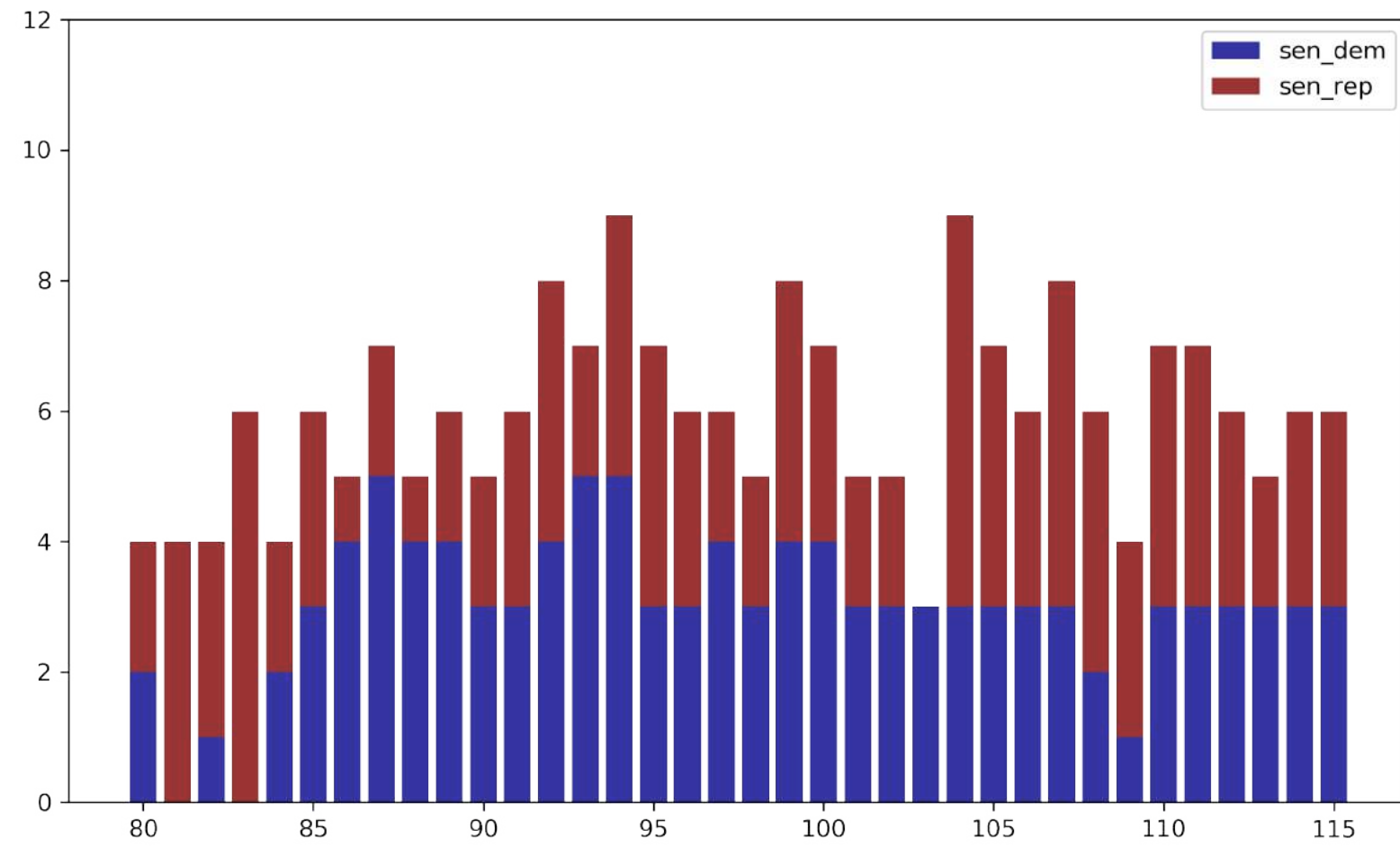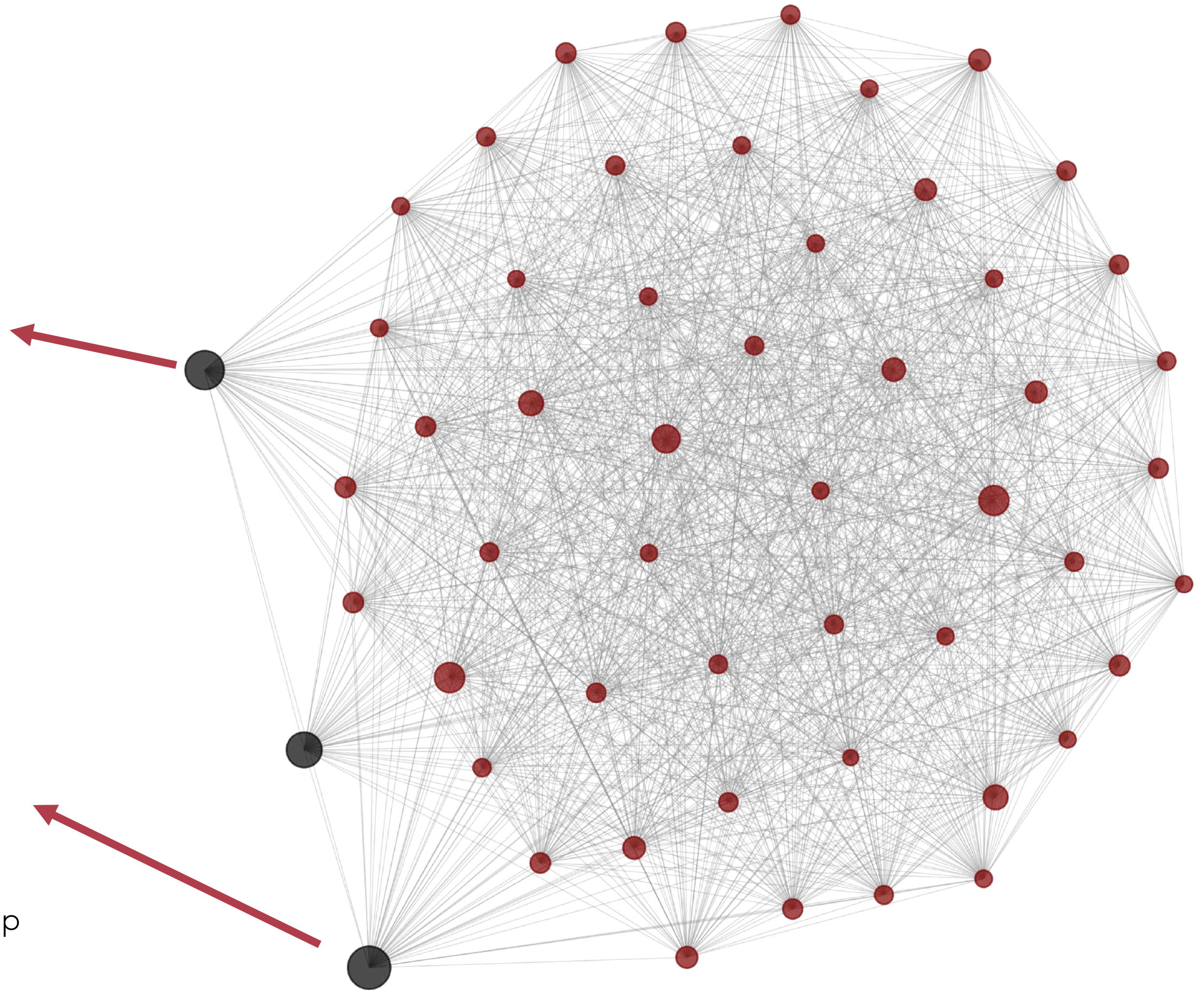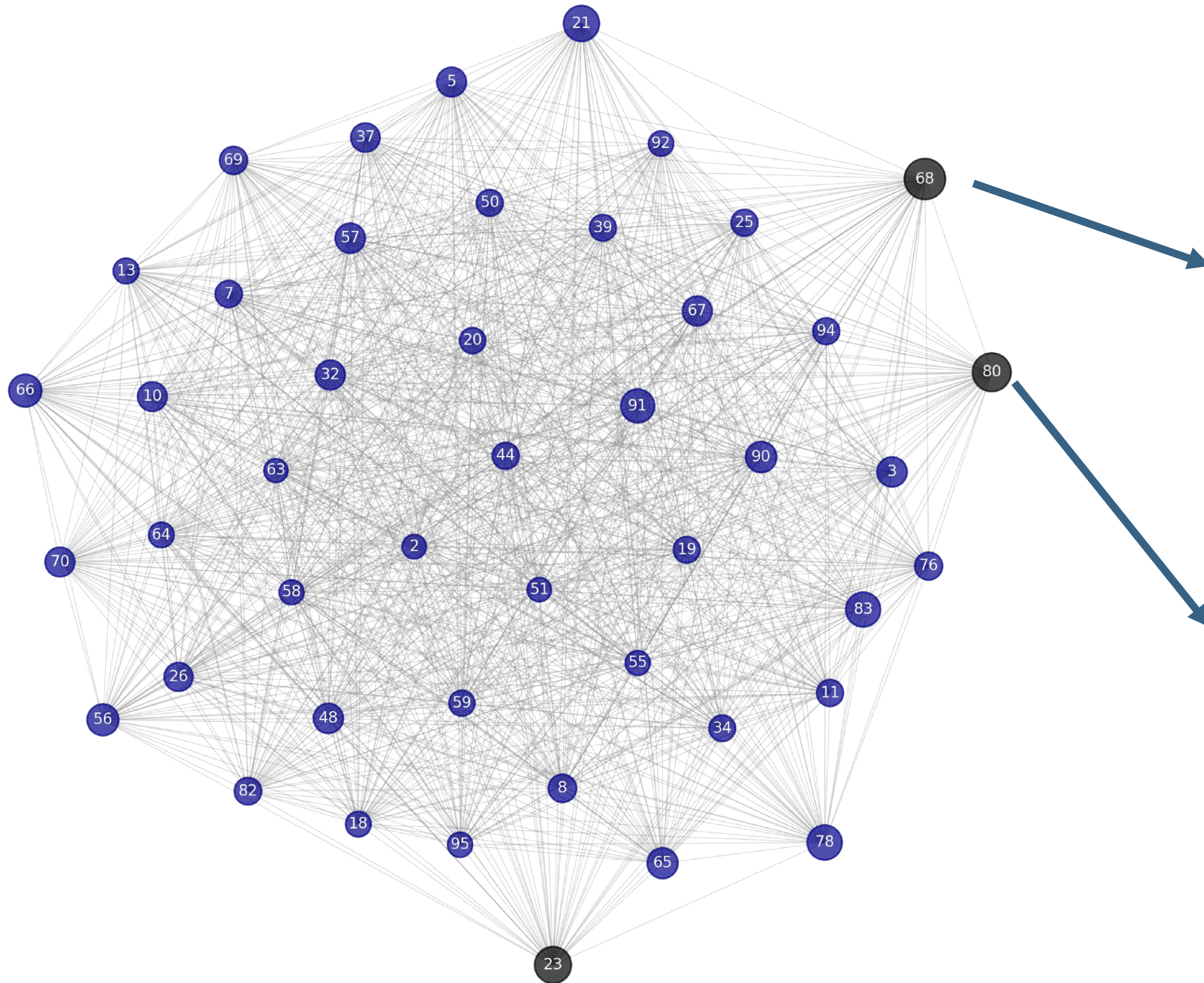
House

Outliers

Rand Paul
Votes the least in line with Trump; Libertarian

Susan Collins
Voted against Trump

Outliers

Joe Manchin
Noted Bipartisan Voter

Heidi Heitkamp
Bipartisan Voter Centrist

Conclusion

America is more divided than ever which leads to the lack of agreement across party lines. They work together a lot less than they used to.

For an administration to remain effective, members need to cooperate on an agenda.

Partisanship is driving Americans apart instead of bringing them together which results to conflict instead of compromise.

References