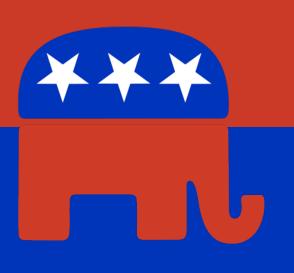
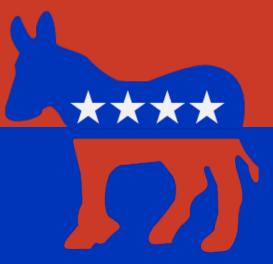
PARTY MANIFESTO TOPIC ANALYSIS



DAVID WANG | CARY WANG PROJECTS IN PROGRAMMING SPRING 2016 PROFESSOR PANOS IPEIROTIS





PROJECT GOALS

1. Assess how political party manifestos vary between Democrats and Republicans over time

2. Identify how discussion of key policy issues have trended over time

Data source: Democratic and Republican Party Manifestos (1856-2012) – Professor Vishal Singh

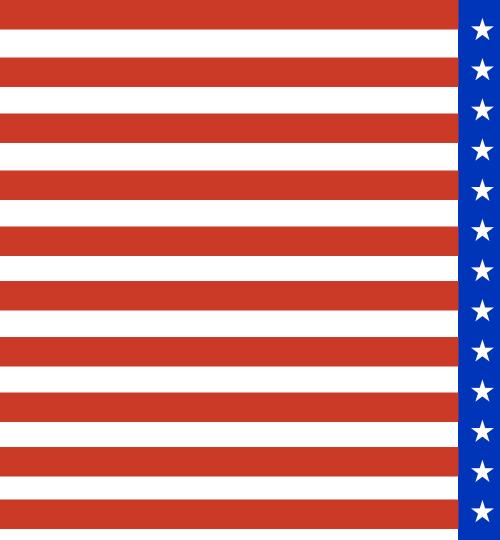
OUR PROCESS

1. Data Wrangling

- Imported .txt file for each speech -> converted each speech to a string and stored in a dictionary with year of the speech as key
- Used NLTK to help clean data through tokenization and lemmatization

2. Visualization & Insights

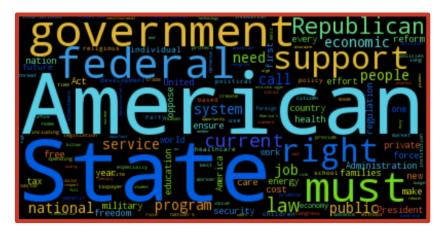
 Used Pandas, matplotlib, and ggplot2 to create wordclouds, frequency distributions, multi-series line plots, correlation matrix, and stacked bar plot



FREQUENCY DISTRIBUTION & WORDCLOUDS

FINDINGS: DEMOCRATS V. REPUBLICANS

REPUBLICAN 2012



DEMOCRAT 2012



Republicans

- Less focus on topics
- More conservative language ("support", "current")

Democrats

- More focus on key topics (labor, taxation)
- More provoking language ("demand", "change")

FINDINGS: REPUBLICANS OVER TIME

REPUBLICAN 1880



REPUBLICAN 2012



1880

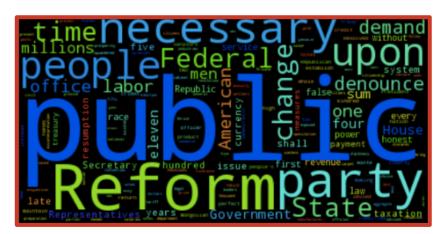
- Less focus on topics
- More populist language ("National", "State")

2012

- More repetition of words in general
- Emphasis towards "supporting" positions and bills

FINDINGS: DEMOCRATS OVER TIME

DEMOCRAT 1880



DEMOCRAT 2012

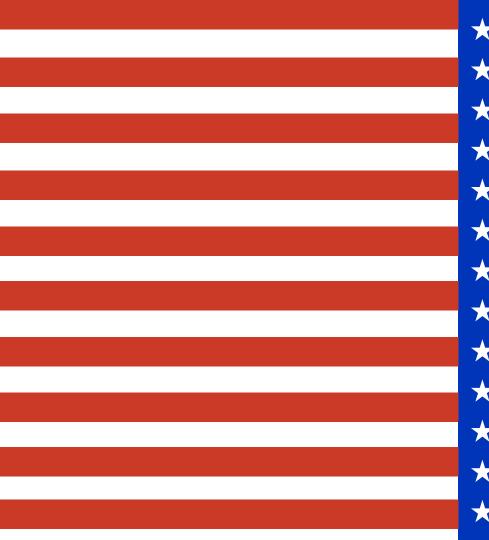


1880

 Heavy emphasis on reform ("reform", "change", "denounce", "necessary")

2012

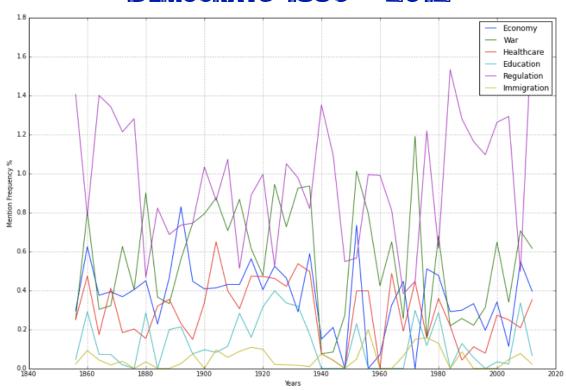
- More focus on the people ("citizen, public")
- More explicit about desired reform ("labor", "taxes")



Most Important Party Issues

TOPIC WORDS: DEMOCRATS

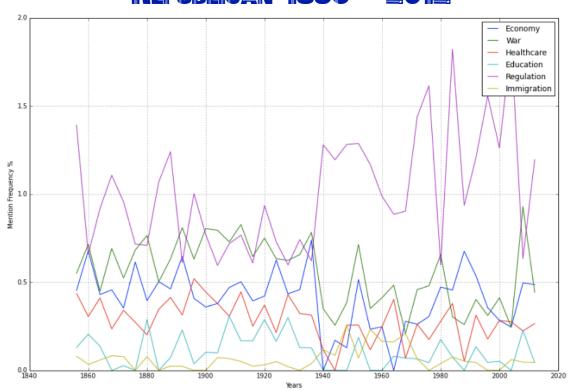
DEMOCRATS 1856 - 2012



- Regulation & War have historically dominated the conversation
- Since the 1980s, regulation outpaced all other topics as the primary focus

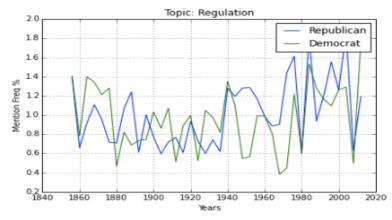
Topic Words: Republican

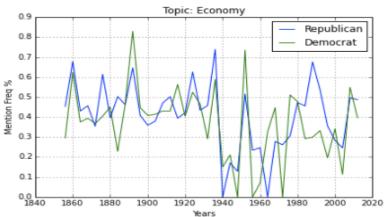
REPUBLICAN 1856 - 2012

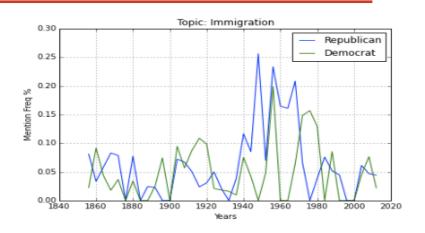


- Huge focus on regulatory matters and speech since 1940s, sparked by the New Deal
- Spike in discussion of war and economy during WWII

REPUBLICAN FOCUSED TOPICS

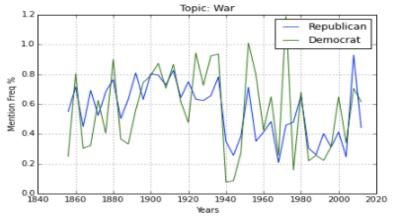


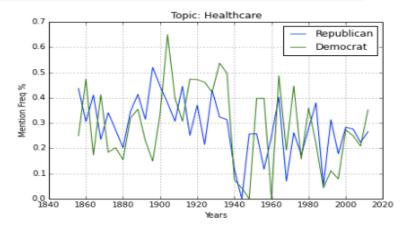


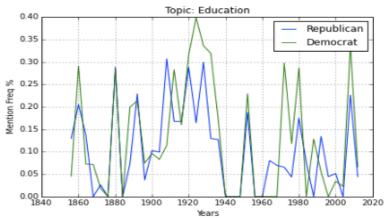


More focus on socioeconomic issues

DEMOCRAT FOCUSED TOPICS

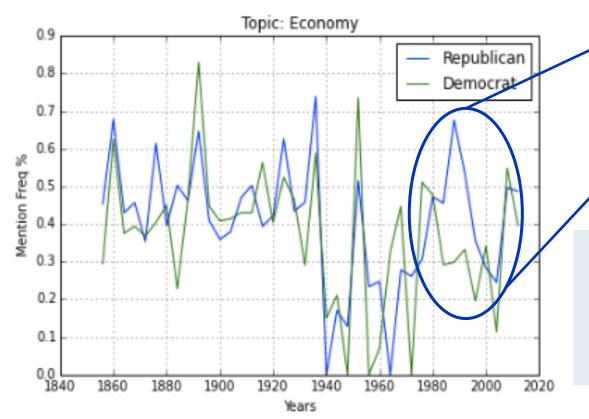






Heavier emphasis on social issues

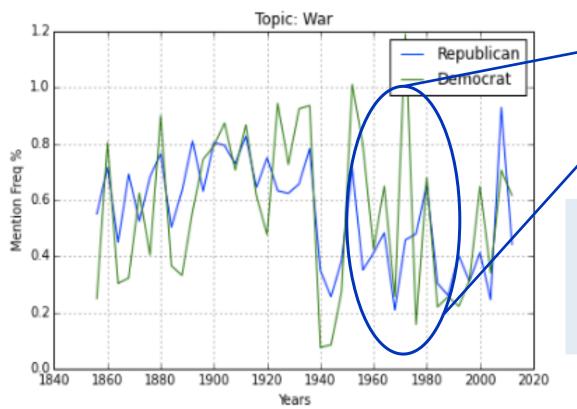
DEEP DIVE: REAGANOMICS



Praise directed towards Reagan's economic policies at the end of his administration

"The Reagan Revolution has become a Republican renaissance. Our country's back in business and back on top again."

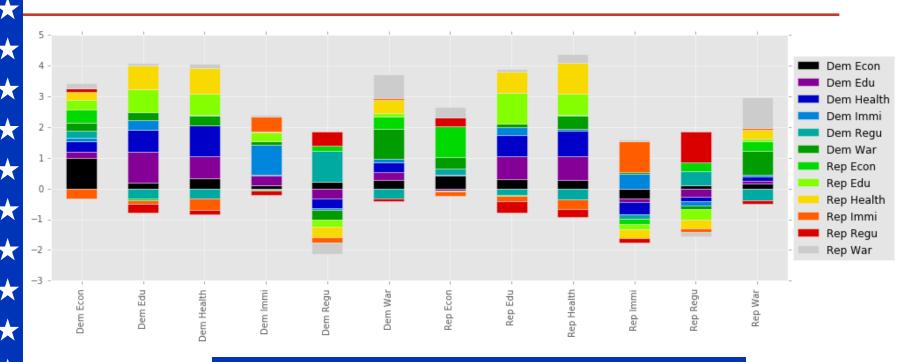
DEEP DIVE: VIETNAMESE WAR



Democratic opposition to Vietnamese War

"The next Democratic
Administration should:
End American participation
in the war in Southeast
Asia"

DEEP DIVE: TOPIC CORRELATION



What topics are frequently talked about with other topics?

- (+) Healthcare and Education
- (–) Economy and Immigration



