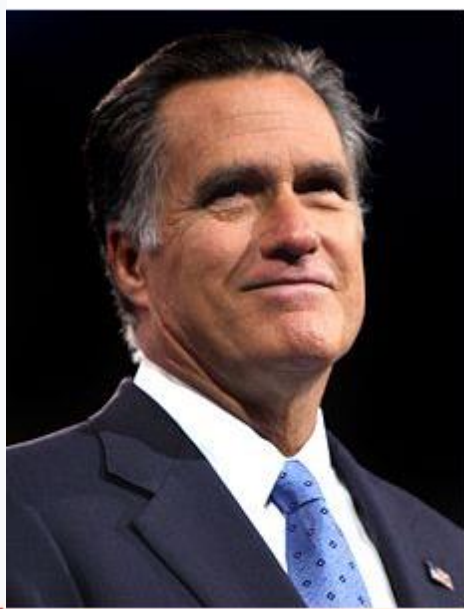


Analyzing Presidential Debates

Purvi Thakor, Akshay Kamath, Junior Ovince



2000

2004

2008

2012

2016

Data Structure

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2000_gore_v_bush_university_massachusetts_MA.txt
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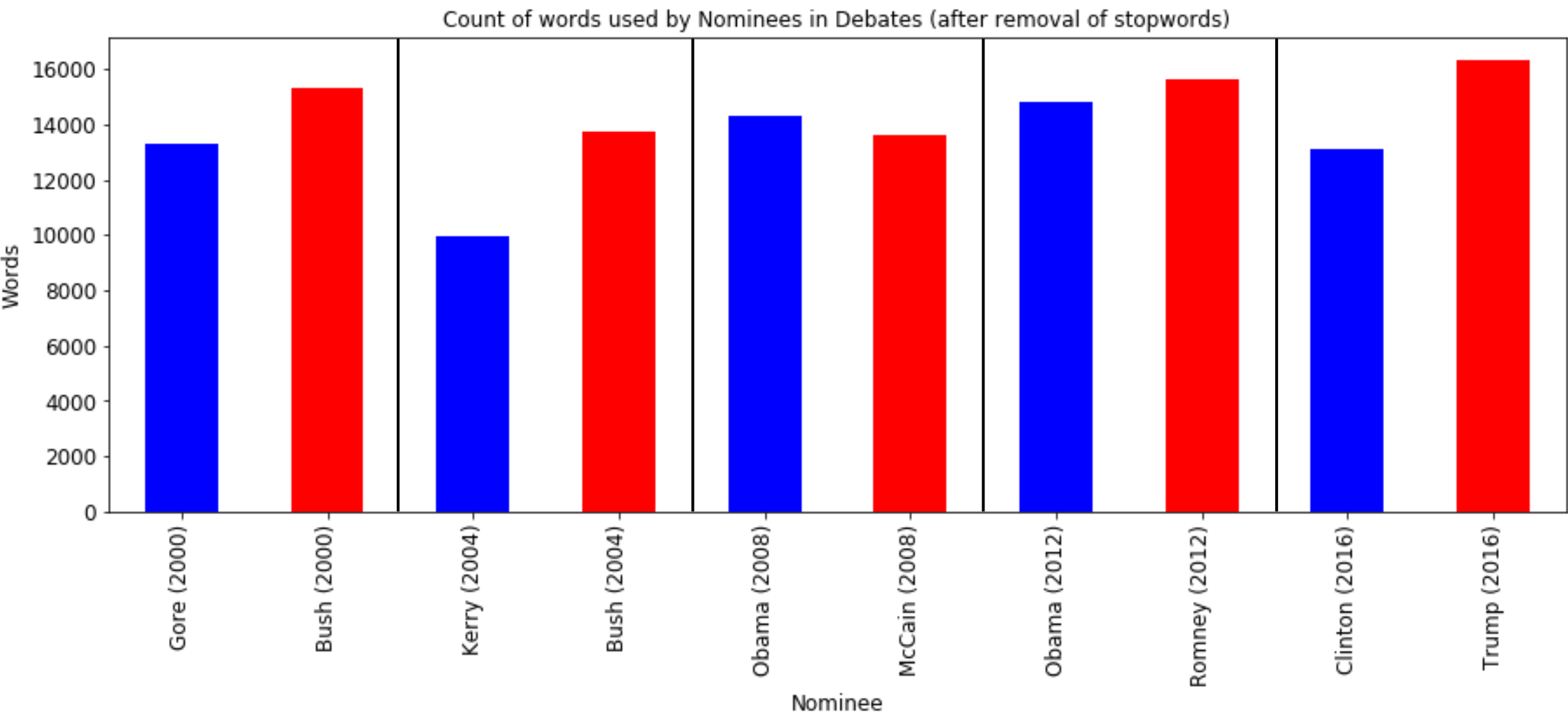
MODERATOR: Good evening from the Clark Athletic Center at the University of Massachusetts in Boston. I'm Jim Lehrer of the NewsHour on PBS, and I welcome you to the first of three 90-minute debates between the Democratic candidate for president, Vice President Al Gore and the Republican candidate, Governor George W. Bush of Texas. The debates are sponsored by the Commission on Presidential Debates and they will be conducted within formats agreed to between the two campaigns. We'll have the candidates at podiums. No answer to a question can exceed two minutes. Rebuttal is limited to one minute. But as moderator I have the option to follow up and extend any give and take any three-and-a-half minutes. Even then, no single answer can exceed two minutes. The candidates under their rules may not question each other directly. There will be no opening statements, but each candidate may have up to two minutes for a closing statement. The questions and the subjects were chosen by me alone. I have told no one from the two campaigns, or the Commission, or anyone else involved what they are. There is a small audience in the hall tonight. They are not here to participate, only to listen. I have asked, and they have agreed, to remain silent for the next 90 minutes. Except for right now, when they will applaud as we welcome the two candidates, Governor Bush and Vice President Gore.

GORE: Well, Jim, first of all, I would like to thank the sponsors of this debate and the people of Boston for hosting the debate. I would like to thank Governor Bush for participating, and I would like to say I'm happy to be here with Tipper and our family. I have actually not questioned Governor Bush's experience. I have questioned his proposals. And here is why. I think this is a very important moment for our country. We have achieved extraordinary prosperity. And in this election, America has to make an important choice. Will we use our prosperity to enrich not just the few, but all of our families? I believe we have to make the right and responsible choices. If I'm entrusted with the presidency, here are the choices that I will make. I will balance the budget every year. I will pay down the national debt. I will put Medicare and Social Security in a lockbox and protect them. And I will cut taxes for middle-class families. I believe it's important to resist the temptation to squander our surplus. If we make the right choices, we can have a prosperity that endures and enriches all of our people. If I'm entrusted with the presidency, I will help parents and strengthen families because, you know, if we have prosperity that grows and grows, we still won't be successful unless we strengthen families by, for example, ensuring that children can always go to schools that are safe. By giving parents the tools to protect their children against cultural pollution. I will make sure that we invest in our country and our families. And I mean investing in education, health care, the environment, and middle-class tax cuts and retirement security. That is my agenda and that is why I think that it's not just a question of experience.

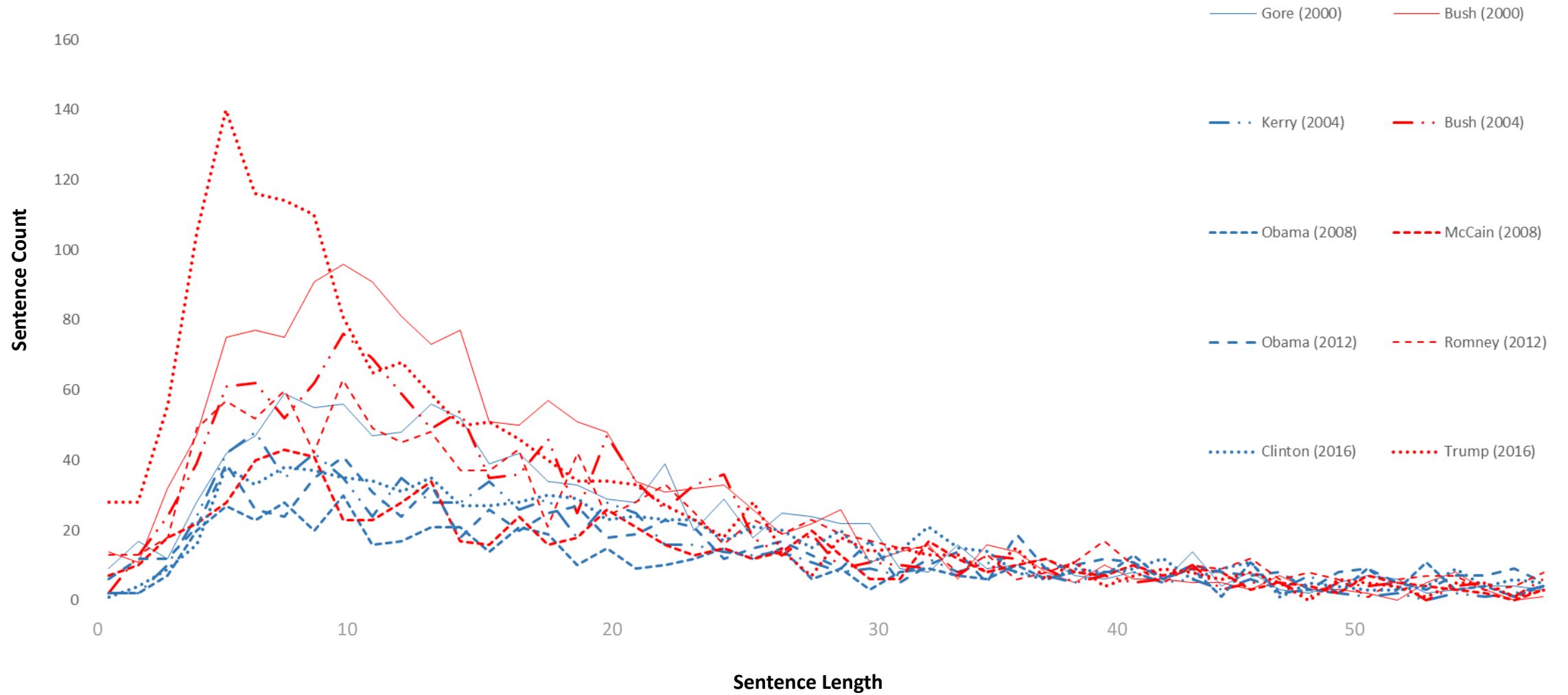
BUSH: Well, we do come from different places. I come from being a West Texas. The governor is the chief executive officer. We know how to set agendas as a governor. I think you'll find the difference reflected in our budgets. I want to take one-half of the surplus and dedicate it to Social Security. One-quarter of the surplus for important projects, and I want to send one-quarter of the surplus back to the people who pay the bills. I want everybody who pays taxes to have their tax rates cut. And that stands in contrast to my worthy opponent's plan, which will increase the size of government dramatically. His plan is three times larger than President Clinton's proposed plan eight years ago. It is a plan that will have 200 new programs -- expanded programs and creates 20,000 new bureaucrats. It empowers Washington. My vision is to empower Americans to be able to make decisions for themselves in their own lives.

MODERATOR: So I take it by your answer, then, Mr. Vice President, in an interview recently with the "New York Times" when you said that you questioned whether or not Governor Bush has experience enough to be president, you were talking about strictly policy differences.

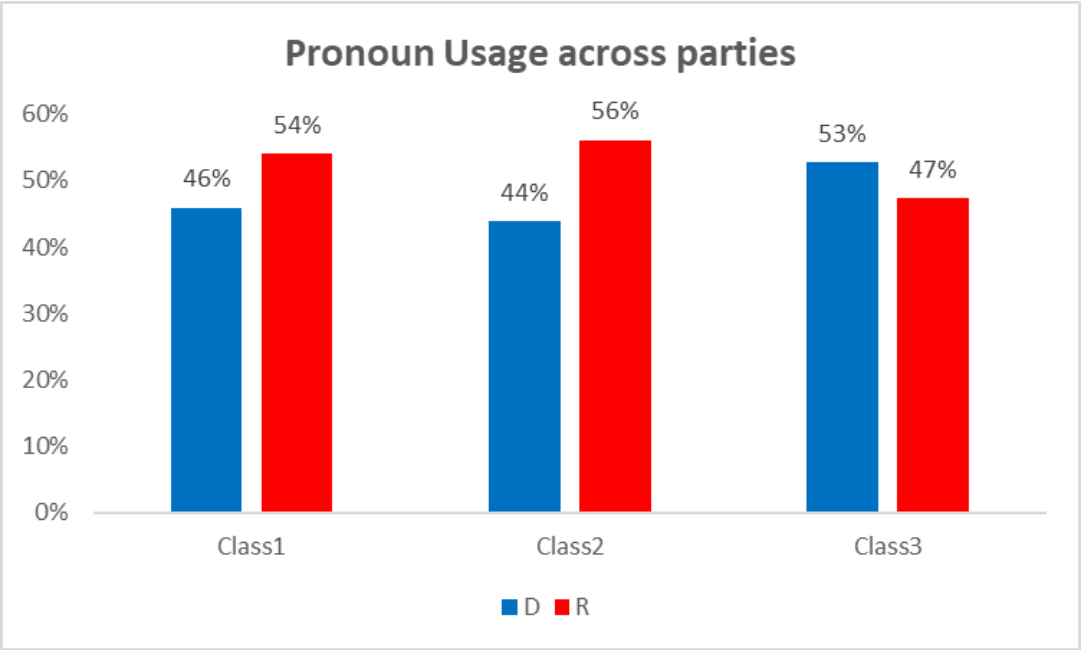
Word Count (After Data Processing)



Sentence Length vs Sentence Count



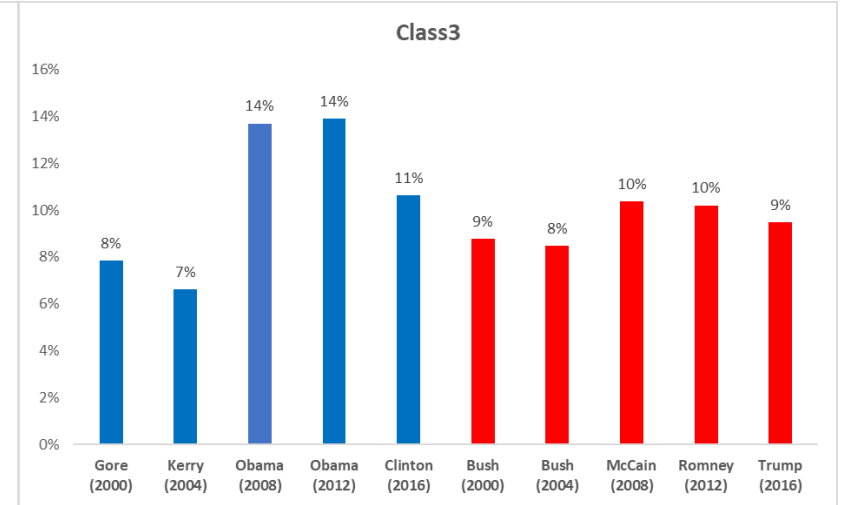
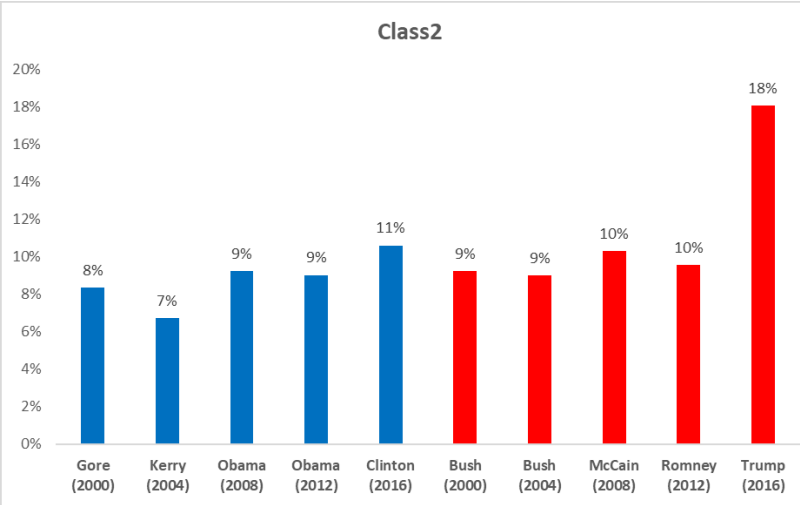
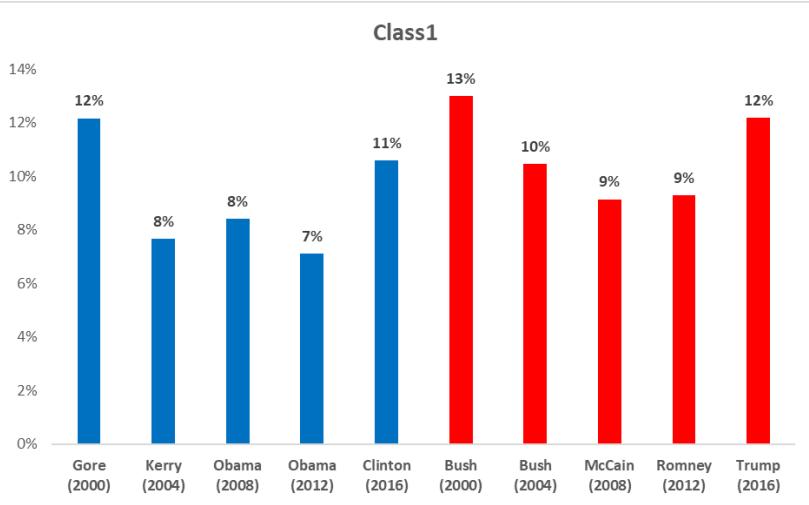
Pronoun Usage



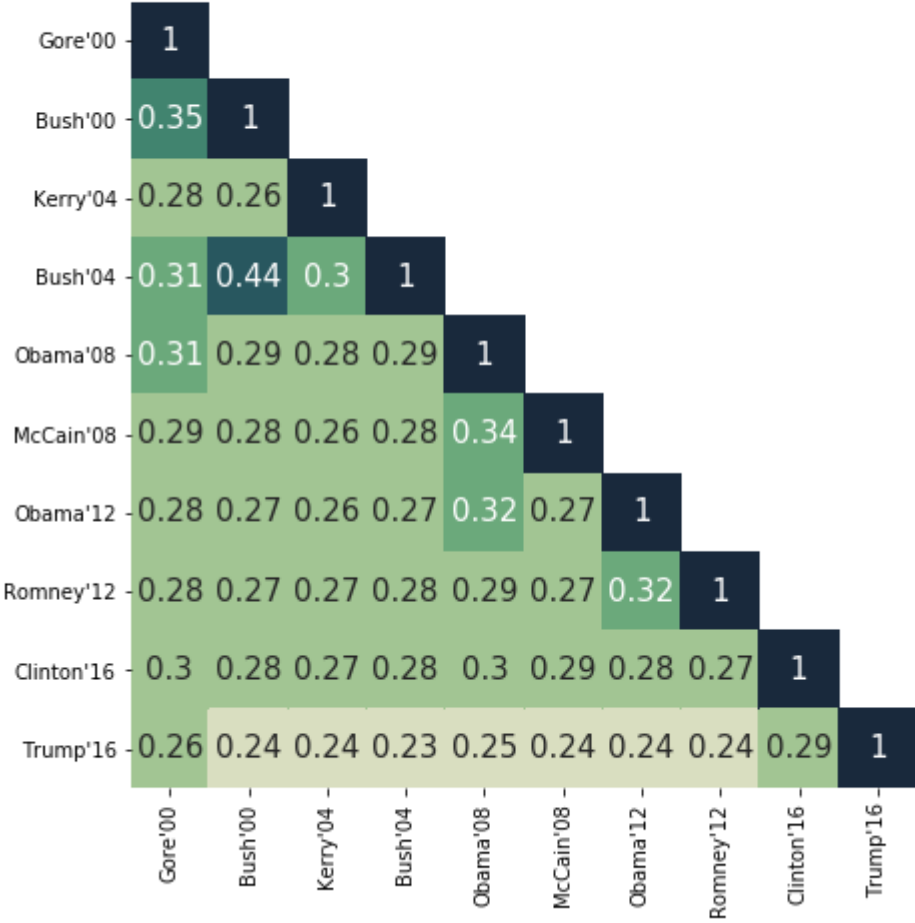
| Group | Pronoun |
|--------|---------|
| Class1 | I |
| Class1 | I've |
| Class1 | Me |

| Group | Pronoun |
|--------|---------|
| Class2 | He |
| Class2 | Her |
| Class2 | Him |
| Class2 | His |
| Class2 | She |
| Class2 | Their |
| Class2 | Them |
| Class2 | They |
| Class2 | They've |
| Class2 | You |
| Class2 | Your |

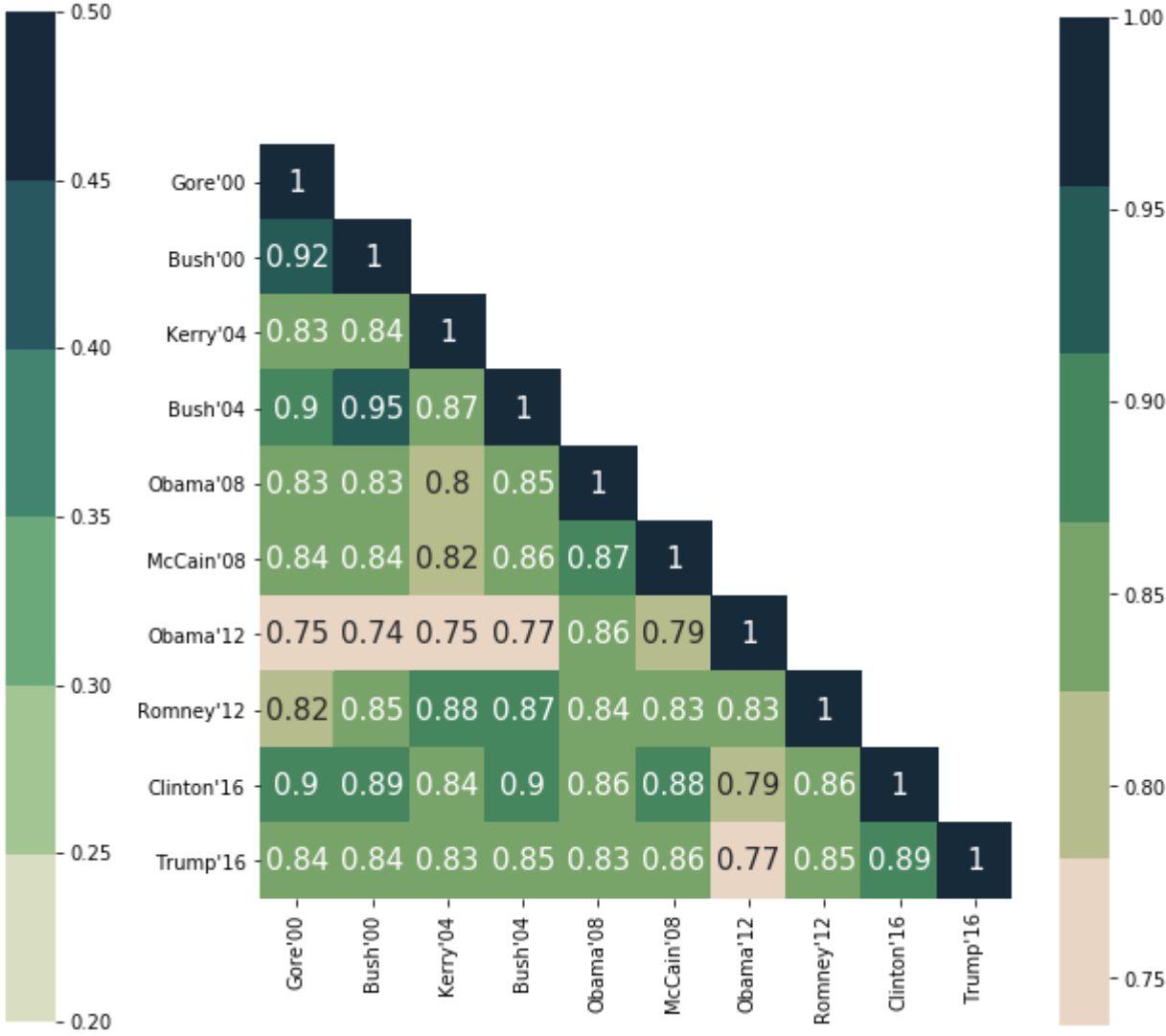
| Group | Pronoun |
|--------|---------|
| Class3 | Our |
| Class3 | Us |
| Class3 | We |
| Class3 | We've |



Speech Similarity



Jaccardian Similarity



Cosine Similarity

LDA

OBAMA (2008)

'0.034*"health" + 0.020*"spend" + 0.017*"invest" + 0.017*"insur" + 0.016*"program" + 0.015*"budget" + 0.012*"feder" + 0.012*"peopl" + 0.012*"polici" + 0.012*"propos"'



Topic - Healthcare ?

OBAMA (2012)

'0.031*"israel" + 0.023*"presid" + 0.021*"state" + 0.017*"unit" + 0.014*"nuclear" + 0.012*"question" + 0.012*"peopl" + 0.011*"opportun" + 0.010*"american" + 0.010*"answer"'



Topic - National Security ?

Term Usage Across Parties

The plot displays the frequency of various terms used by different political parties. The vertical axis represents the frequency of the term (Infrequent to Frequent), and the horizontal axis represents the average frequency (Infrequent to Frequent). The data is categorized by party affiliation: Democratic (blue), Republican (orange), and Independent (green).

Democratic Frequency (Blue)

- Terms: governor romney, senator mccain, donald, romney, john, already, trump, making sure, bin, invest, mccain, bush, true, class, families, cuts, jim, ago, means, kind, last, into, got, think, i, the, going, america, taxes, she, obama, strong, happen, texas, washington, answer, mr, friends, opinion, citizens, rid, love, must, vice, principles, relief, vice president, society, my opponent, hillary, senator obama.

Republican Frequency (Orange)

- Terms: sen mccain, invest in, faith, few, close, new jobs, george, approach, weeks, meet, already, trump, making sure, bin, invest, mccain, bush, true, class, families, cuts, jim, ago, means, kind, last, into, got, think, i, the, going, america, taxes, she, obama, strong, happen, texas, washington, answer, mr, friends, opinion, citizens, rid, love, must, vice, principles, relief, vice president, society, my opponent, hillary, senator obama.

Independent Frequency (Green)

- Terms: middleclass families, 95, trust fund, closing, wealthiest 1, 've tried, 18, ten, civil, chris, 40, play, 200, itself, 23, soon, six, ally, 7, guess, 8, fully, ad, c, sir, spread, mr vice, sen obama, senator obama.

governor romney
donald
romney
mccain
senator mccain
governor
bush
families
've got
here
cuts
class
insurance
american

obama
obamacare
middleclass
romney
middleincome
usama
doddfrank
africanamerican
petraeus
mccain
trillion
wealthiest
mosul
employerbased
earmarks
loopholes
longterm
asad
barack
smallbusiness
preexisting
renegotiate
litmus
qaida
bipartisan
crosstalk
ought
assad
isis
russians

senator obama
obama
she
washington
look at
strong
ought
government
state
taxes
federal
'll
bad
nation

Thank You!