HW4 - Text Analytics Project

Final Write-Up

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**Dialogue Text of Choice: Hamilton Musical**

The dialogue we chose to do for our final project is the lyrics from Hamilton. Hamilton is a musical written by Lin-Manuel Miranda, chronicling the life of Alexander Hamilton, one of the founding fathers of the US. The musical is unique in that it combines traditional musical themes and show tunes with the language of hip-hop to represent the American Revolution.

Our corpus spans all the lyrics of the musical, save for a few things that we note in the key assumptions below. We chose this body of text because there seems to be a lot of subtle wordplay and evolution of topics that we hope to capture in our analysis. One question we would love to answer is looking at how characters’ sentiments might change throughout the musical or perhaps analyzing which characters are more like Burr or Hamilton. Another interesting analysis would be to use topic modeling to see which topics are associated with which characters. We all love the musical, so we are hoping to delve deeper into what makes Hamilton so special.

Before we jump into our analysis, we should note the key assumptions we made about our corpus. The first thing is that we excluded some of the very minor characters, such as Samuel Seabury and Phillip Hamilton. Many of these characters only have a couple of lines of lyrics, so it would have been too little to analyze. Another thing that we are wary about is the size of the corpus for other characters -- it may turn out that we do not have enough for proper topic modeling or sentiment analysis. We will try to address these facts in our analysis.

**Characters Used:**

Alexander Hamilton

Aaron Burr

George Washington

Elizabeth Schuyler

Angelica Schuyler

John Laurens

Marquis de Lafayette

Hercules Mulligan

Thomas Jefferson

**Vocabulary Size: 2370**

**Number of Tokens: 10534**

**Analysis Sections:**

Character Classifcation - More like Hamilton or Burr? (Adit)

Topic Modelling - Assigning a Topic to each Character. (Kevin)

Topics in LDA model:

Topic #0:

angelica sister father revolution eliza word change cuz want way york schuyler freedom leave city til story whoa life thomas

Topic #1:

president ry life gon eye city mr look wait break france guy stand word want na ask hold revolution lafayette

Topic #2:

happen father city angelica home york wait day story eliza win thomas meet turn sure people way jefferson yo mr

Topic #3:

wait happen sir look jefferson die story world run rise oh alive meet na gon way whoa ry day son

Topic #4:

president stand gon cuz ha day god inside word plan france mr ry revolution ya guy assume thing york change

Topic #5:

whoa yo rise ooh father ta ya john matter freedom win want hold god word oh tonight schuyler sister great

Topic #6:

vote day god revolution alive word watch want york tonight hold lafayette eliza freedom ta oh eye gon life plan

Topic #7:

win thomas president france stand change word guy home hold ask adams great john people plan meet tonight vote assume

Topic #8:

wait na gon sir tonight em rise freedom story jefferson son ta mr hand oh til lafayette run meet watch

Topic #9:

jefferson na em gon leave watch ya life alive eliza ry revolution freedom hand meet hear son sir oh city