## Project Fletcher Proposal Sentiment Trend in News Articles

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Since Donald Trump was elected President of the United States in November 2016 I believe there has been a shift in attitudes in the United States. I would like to quantify this shift by looking at news articles from the last two years.

## My proposed methodology is:

- 1. For subsets of time in the last 2 years (perhaps one month periods), use unsupervised learning to determine some major themes in the news articles.
- 2. Using these themes, train a model to detect the themes.
- Go back through the data and determine how much the theme is encountered in the data in some data range, perhaps a week or month. In this way the trend for this theme can be quantified for the last 2 years.

## I see two choices for data

- 1. The New York Times has a robust API for their articles or AP News articles. This would only only provide a single point of view.
- 2. Pull articles from Fox News and MSNBC, representing two similar news sources from the left and the right. I have requested a 2 week trial from newswhip.com which would provide this news feed but have not heard back from the site. With the opposing views I could then look at how the trends vary for political views from the left and the right.

## Challenges:

- I can easily see the need to constrain the data, perhaps to politics, to make the project size
  more manageable. I do not want to constrain the time range as the changes since Trump
  was elected president is the main goal of the project.
- I'm not sure what sentiments I will be able to extract from the data or how to go about this
  process, so it's not clear what direction things will take. My thoughts in this area will evolve
  as we learn more NLP skills.