

Text Mining of Tweets of Trump

Fei Shi

December 18, 2017

Introduction

After June 6, 2016, Hillary Clinton became the presumptive Democratic nominee, and after that Trump began campaigning against Hillary Clinton, we want to know what changes of Donald Trump before and after knowing campaigning against Hillary Clinton, is he some feared or disappointed?

Material and Methods

The data are tweets from Donald John Trump range from 2015-12-14 to 2016-08-08. There are 1512 with 16 variables in the original data, we only use variables 'id', 'created', 'text' in our analysis:

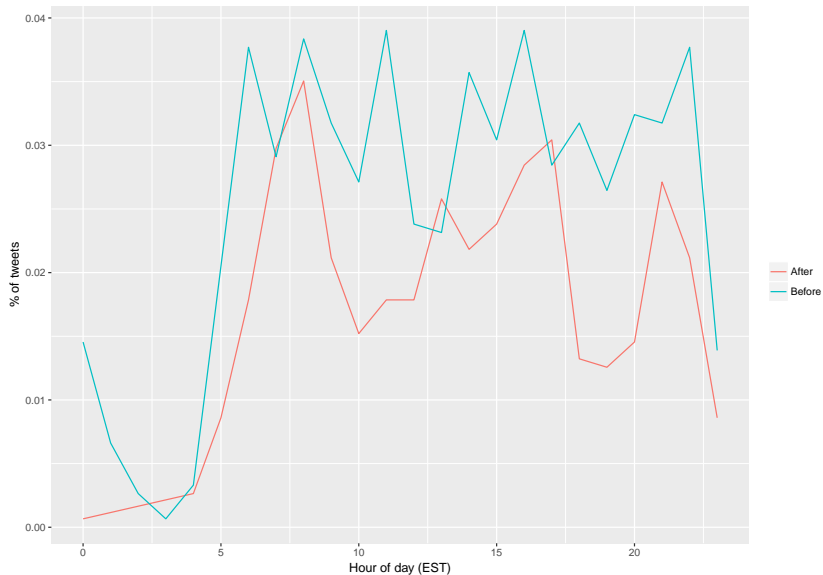
- ▶ 'id' is the unique identifier for each tweet
- ▶ 'created' is the time line
- ▶ 'text' is the content of the tweet

Tools

- ▶ reference from the text book
<https://www.tidytextmining.com/> as well as github
https://github.com/dgrtwo/dgrtwo.github.com/blob/master/_R/.
- ▶ r packages

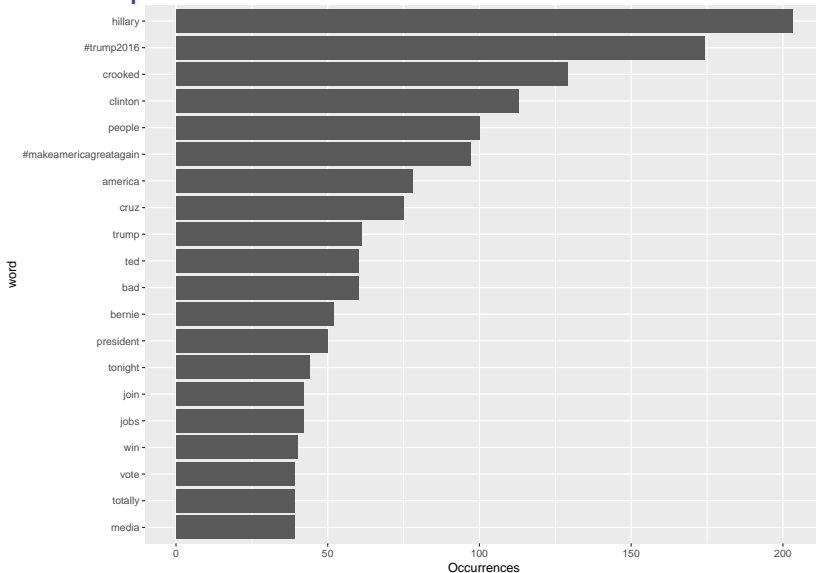
```
library(dplyr)
library(tidyr)
library(lubridate)
library(scales)
library(ggplot2)
library(stringr)
library(tidytext)
library(broom)
library(wordcloud)
```

Time series



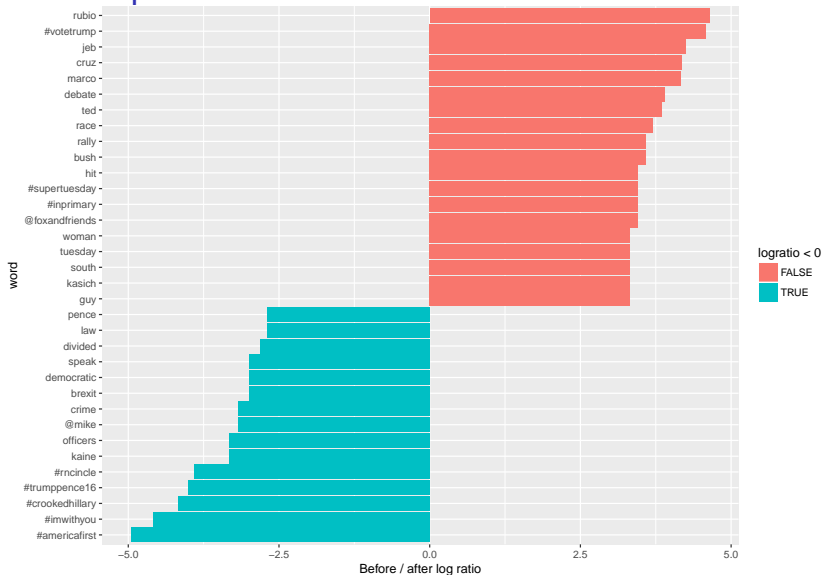
Trump becomes much more busy while having much less time to post tweets after knowing campaigning against Hillary Clinton.

Words comparisons



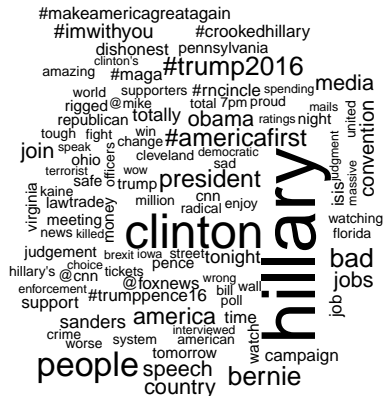
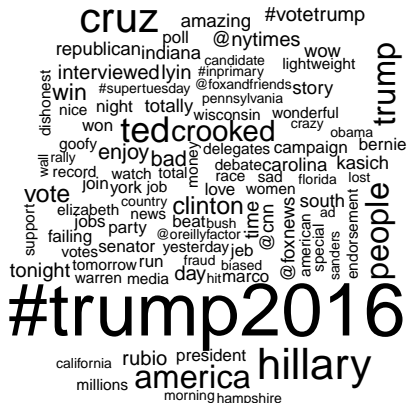
We remove tweets which are likely not be posted by Trump himself,
Obviously, he care more about hillary clinton than himself.

Words comparisons



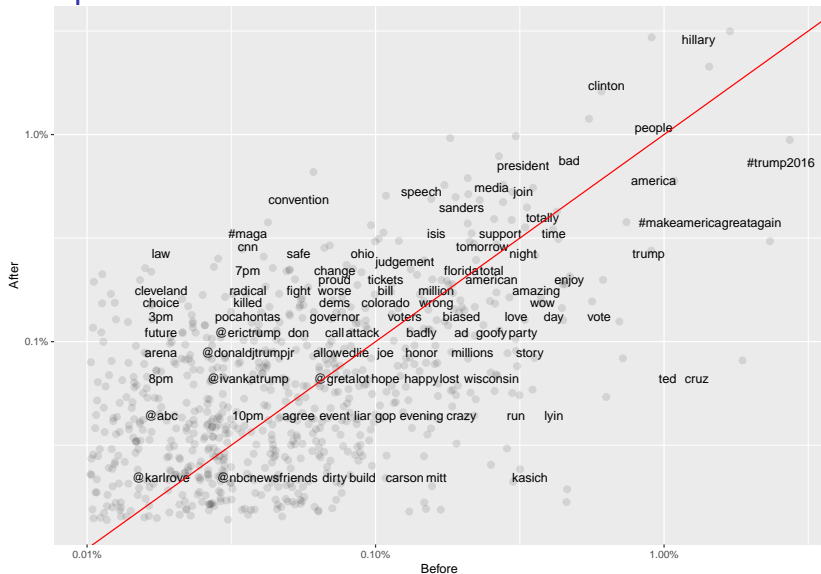
The words most different from two status he cares about 'vote trump' and 'debate' as well as 'woman' after campaign against

wordclouds



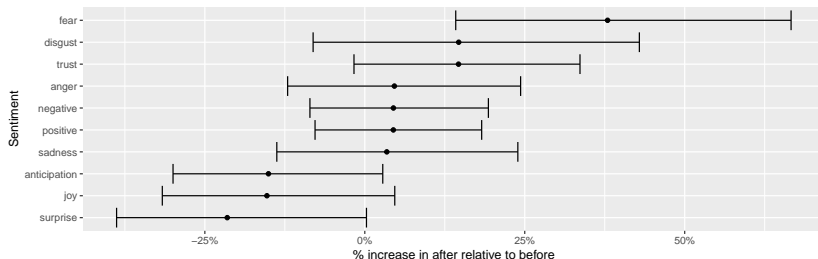
Trump is selfish before but more care hillary, clinton after
2016-06-06.

scatter plot



Trump cares about job and people also voters as the three words are in the line, also, Trump always like joke, so joke is shown in the line

Sentiment analysis



Use Exact Poisson tests to test whether the ratio between two rate parameters are equal or not as well as compute confidence intervals.

Sentiment analysis

- ▶ fear, anger, negative, disgust, sadness are the main sentiments after campaigning against Hillary Clinton

on one hand, Trump might fear failure, on the other hand, he defamed Hillary Clinton. However, he sometimes feels anger and sadness about rumors from Hillary Clinton.