FAKE NEWS

Fake News

Is All Over the News

1.

Why Fake News?

What's the big deal?

▷ Social Media
▷ Elections
▷ Political Polarization

Donald J. Trump ✔
@realDonaldTrump

Follow

The FAKE NEWS media (failing @nytimes, @NBCNews, @ABC, @CBS, @CNN) is not my enemy, it is the enemy of the American People!

4:48 PM - 17 Feb 2017

↩   ⇄ 51,209   ♥ 162,084

Goals

▷ **Is fake news…**
  ○ More negative?
  ○ More subjective?
  ○ Absolute nonsense?
▷ **Is there consistency across sites?**

2.

SCRAPING

How to get the data?

Dataset

▷ Over 10,000 articles
▷ 200 different sites
▷ Dataset - "Getting Real About Fake News"
   ○ Most articles from late 2016
▷ Manual Scraping for real news and some fake news
   ○ Most articles from last 2 months

Fake News - Data Cleansing

▷ Satire sites
▷ Word count
▷ Faulty data
▷ Watermarks
▷ Foreign Language
▷ Removed ~35% of datapoints

Fake News - Data Cleansing

Jesus hurry back. . To much suffering..thk u. Julian Assage.

Comments as Articles

Alex Jones Declares Trump Landslide Victory 10/27/2016 In todayâ€™s video,
Christopher Greene of AMTV reports on Alex Jones Prediction of a Donald
Trump Landslide Victory. 10/27/2016 TRUTH REVOLT
http://youtu.be/PsVNKmb6jEc Thereâ€™s a lot of accusations going around
that the 2016 election is r ... Netflix Ceo: TVâ€™s Future includes
Hallucination Pills 10/27/2016 INDEPENDENT The future of TV might everyone
taking hallucinogenic drugs, according to the head of Netflix. The thr ...|

Incomplete Articles

Faulty data

Real News

▷ APIs and manual scraping
▷ Variety of left and right wing sources
  ○ Based on Pew Research Center
▷ News drawn from politics section

3.
ANALYSIS

What Did We Find?

Tools Used

▷ **textblob**
  ○ Sentiment Analysis
▷ **JMP**
  ○ Visuals
▷ **wordcloud**
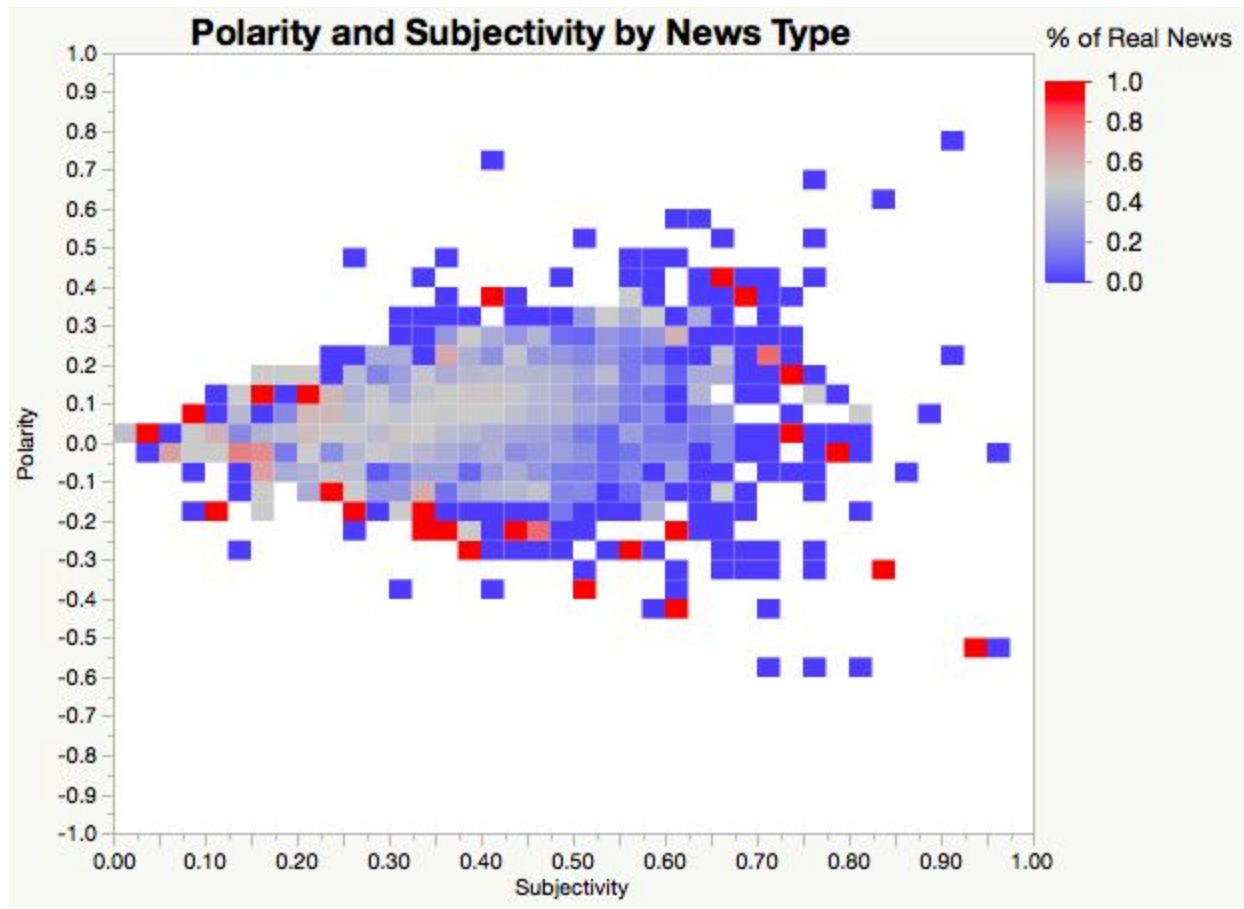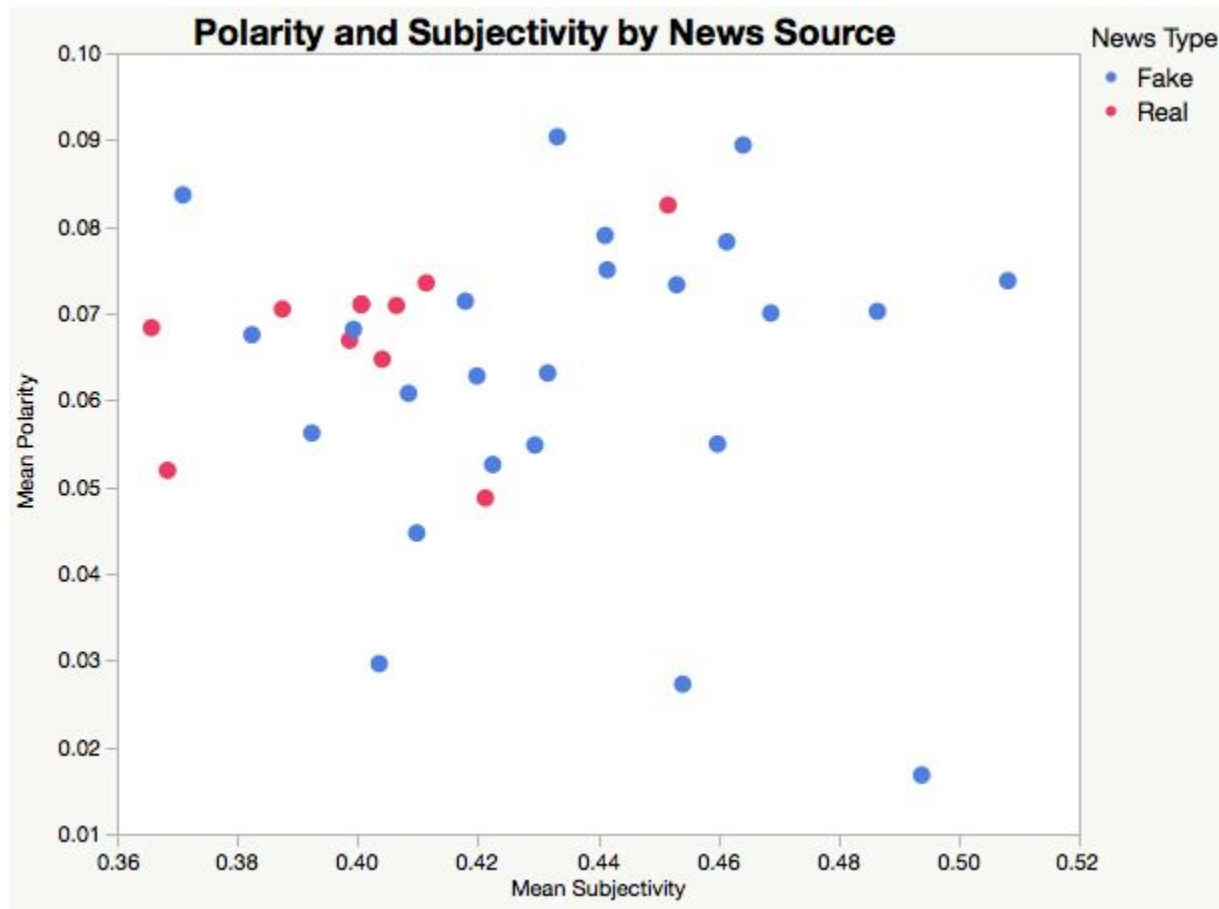
Polarity and Subjectivity by News Type

*excludes fake news sites with fewer than 95 articles

Absolute Polarity and Subjectivity by News Source
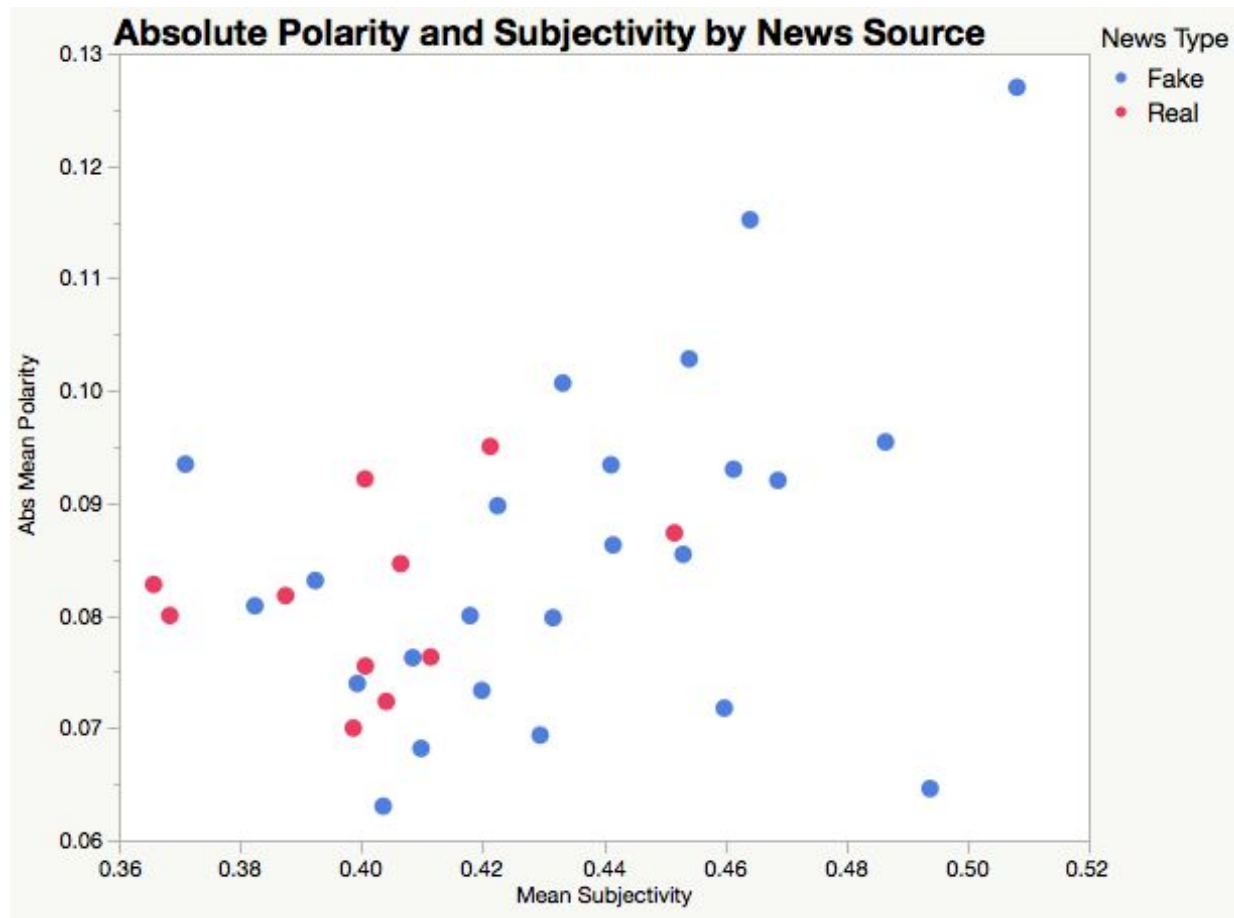
*excludes fake news sites with fewer than 95 articles

Fake News Word Cloud

Real News Word Cloud

Fake v. Real News

Mean (S.D.) of News Sentiment Analysis

	Real News	Fake News
Subjectivity***	0.399 (0.086)	0.428 (0.098)
Polarity***	0.069 (0.070)	0.063 (0.093)
Absolute Polarity***	0.081 (0.055)	0.086 (0.072)

***p < .0001

Polarity and Subjectivity by News Political Leaning
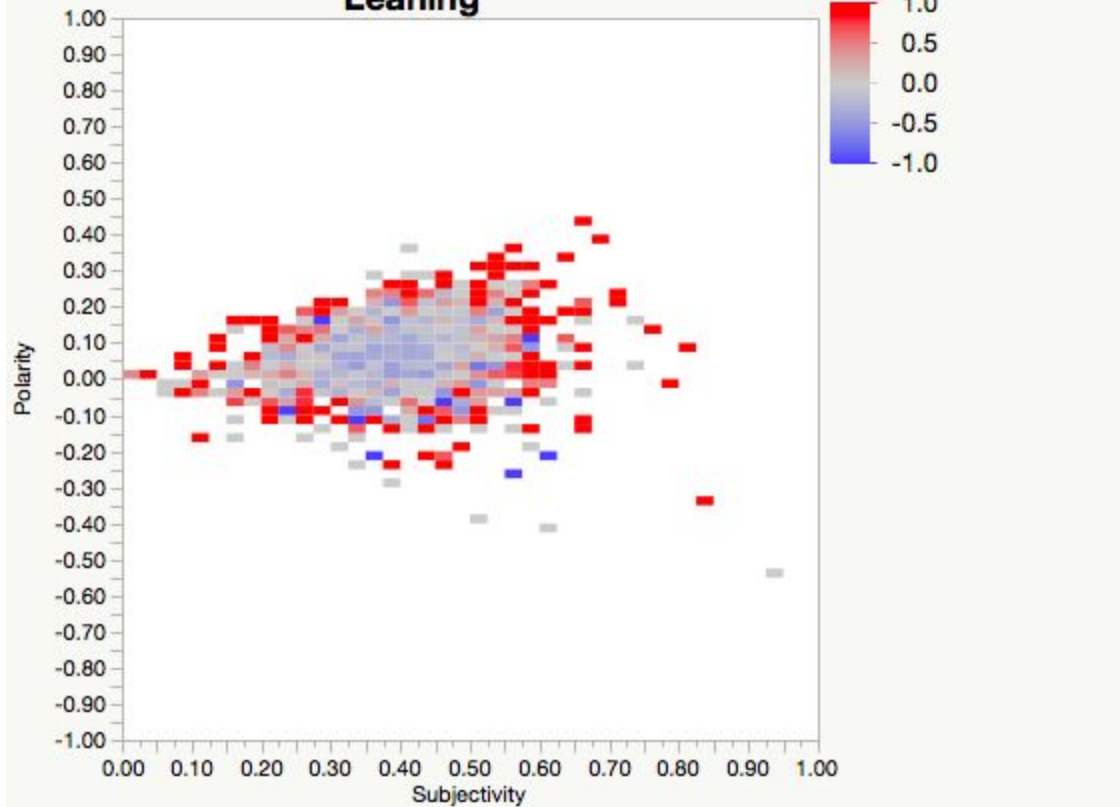
4.
CONCLUSIONS

What are the takeaways?

Fake News Is…

▷ More opinionated
▷ More negative
▷ More extreme in general

Thanks!

Any questions?