

A collage of five news anchors' faces, from left to right: a woman with blonde hair, a man with grey hair, a woman with dark hair, a man with dark hair, and a man with grey hair wearing a suit and striped tie. The text "FAKE NEWS" is overlaid in large, bold, red letters with a black outline across the middle of the collage.

FAKE NEWS

Fake News

Is All Over the News

1.

Why Fake News?

What's the big deal?

- ▷ Social Media
- ▷ Elections
- ▷ Political Polarization



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

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Faulty data

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

Real News

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

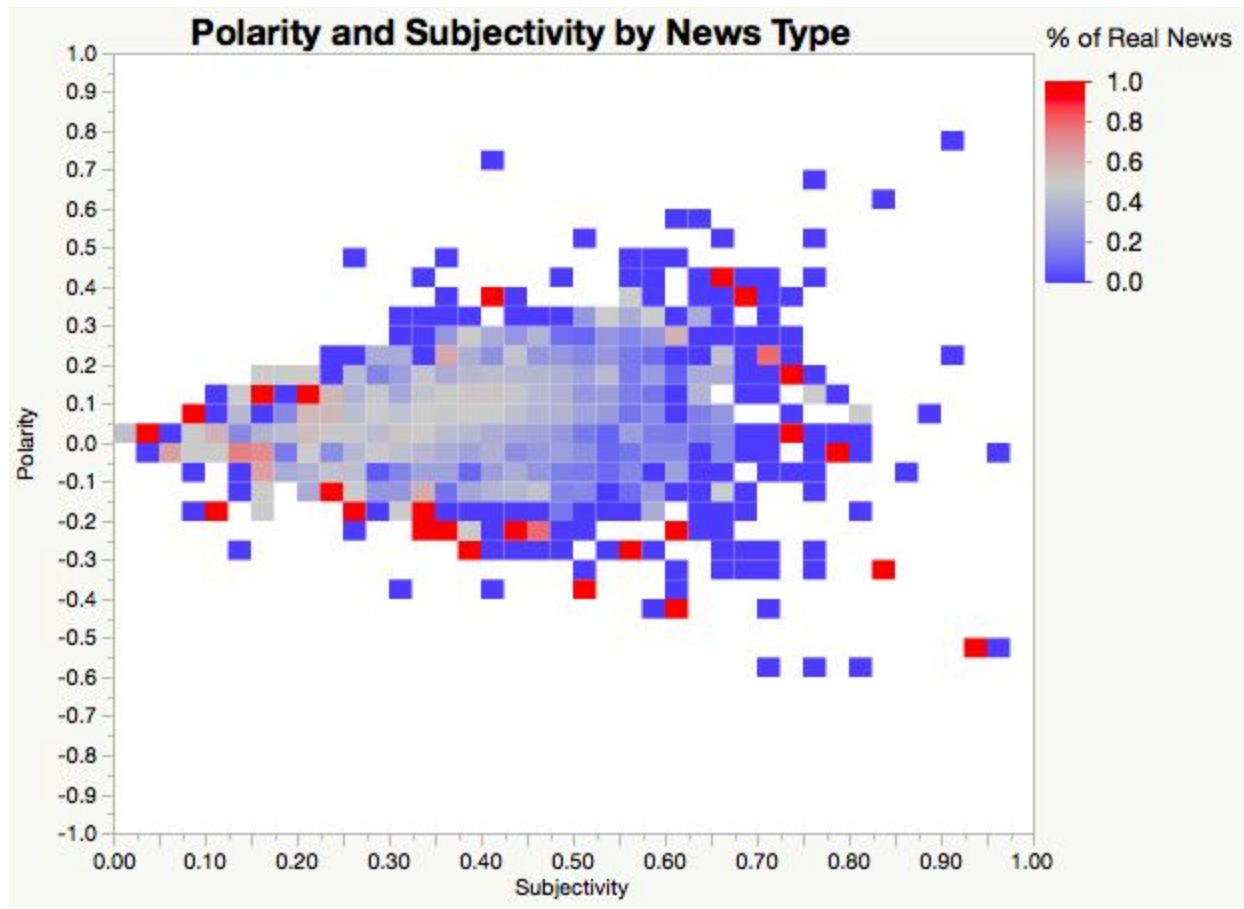
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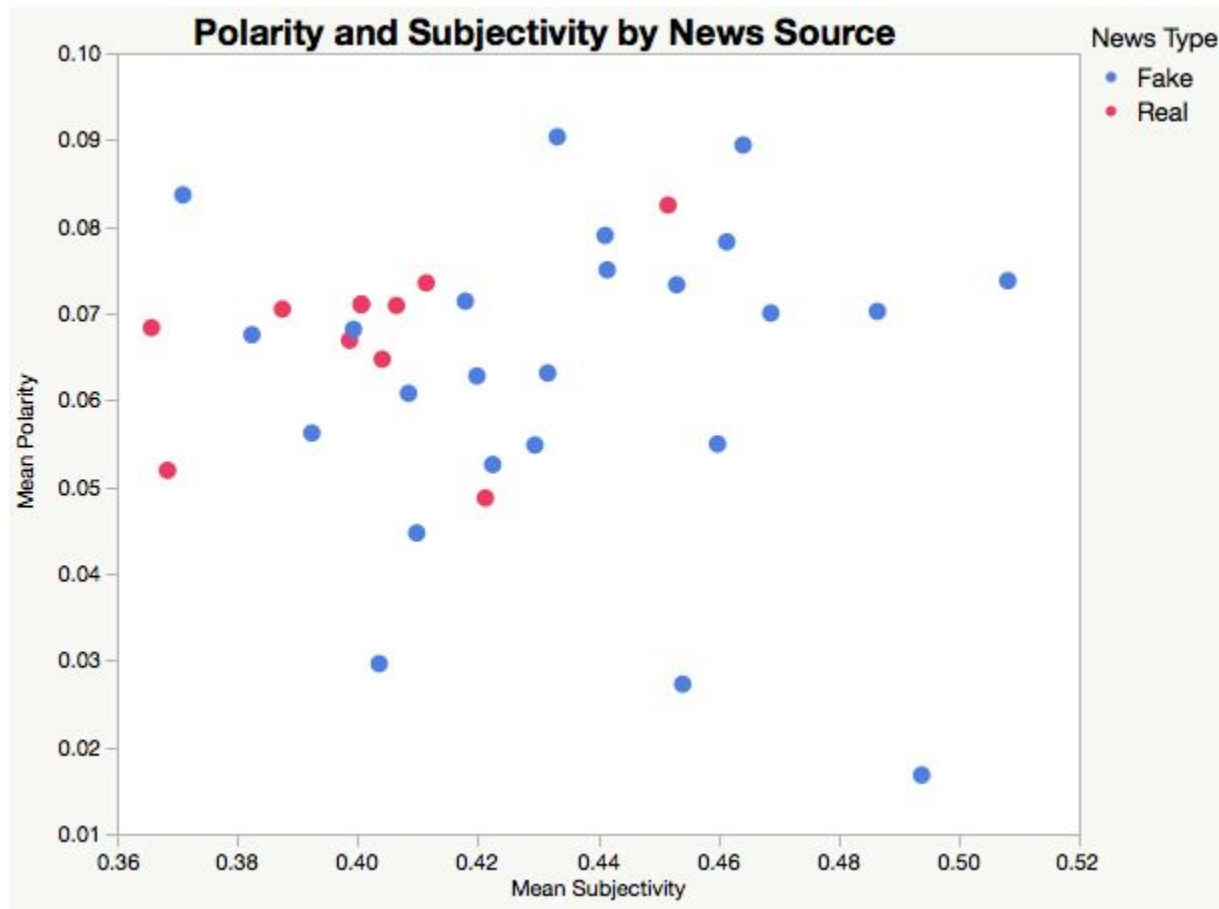
ANALYSIS

What Did We Find?

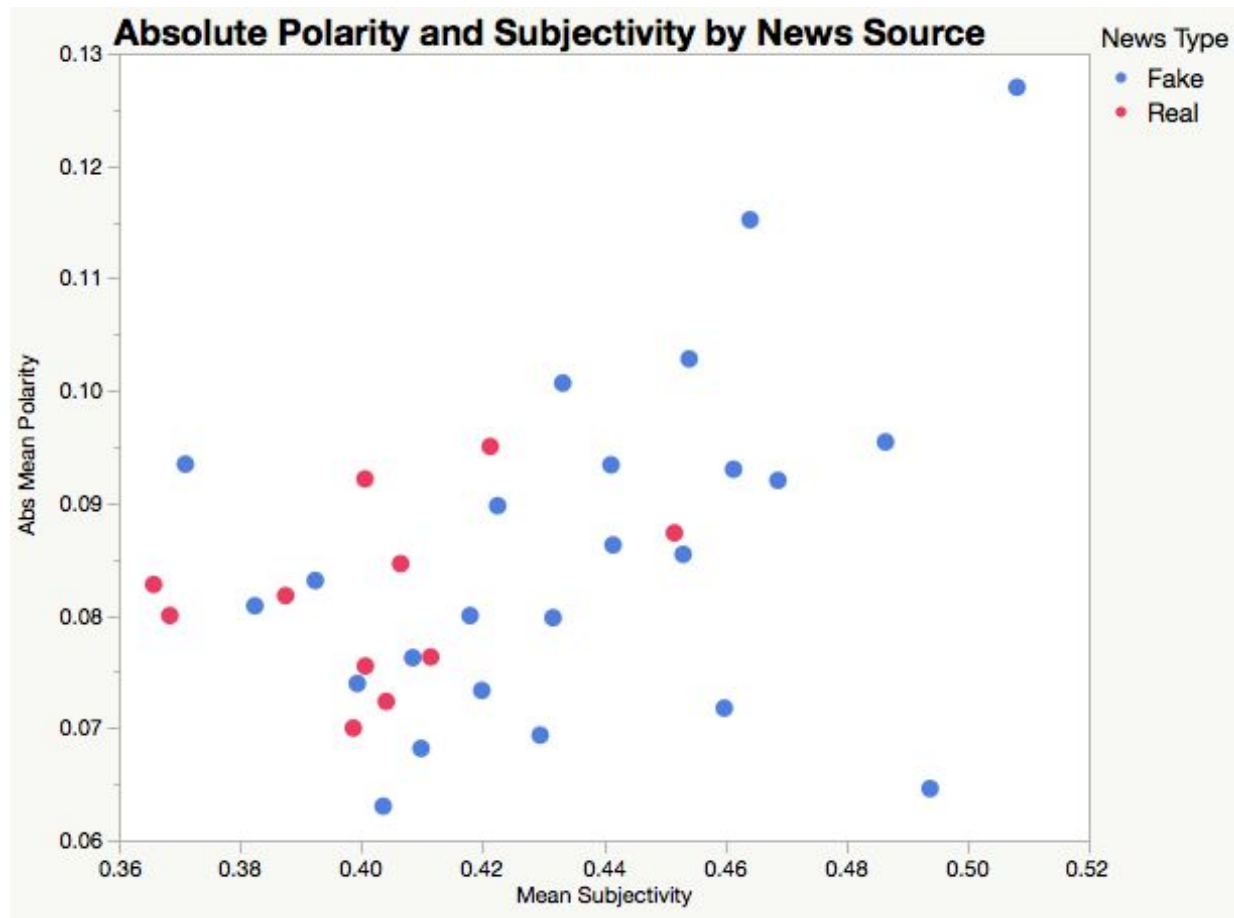
Tools Used

- ▷ textblob
 - Sentiment Analysis
- ▷ JMP
 - Visuals
- ▷ wordcloud





*excludes fake news sites with fewer than 95 articles



*excludes fake news sites with fewer than 95 articles



Fake News Word Cloud



Real News Word Cloud

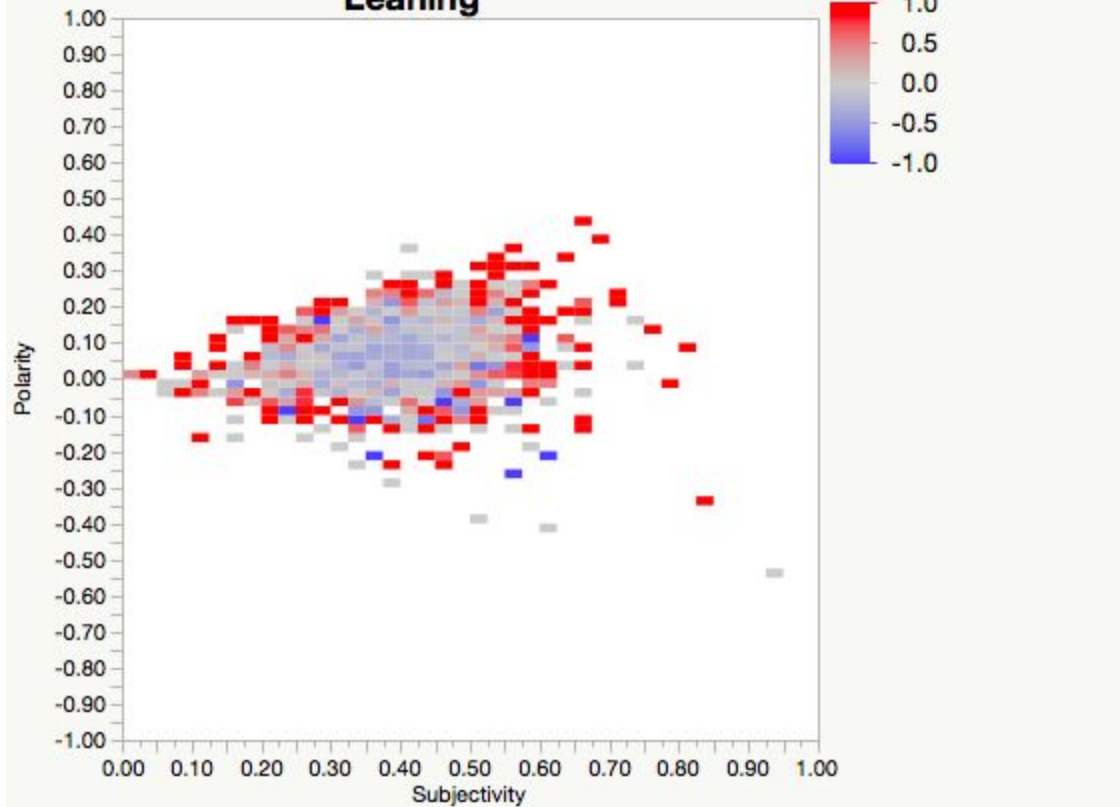
Fake v. Real News

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?