Facebook Reactions: Who Cares?

- Aggregated user reactions = clues for **volume** and **sentiment** of public engagement with coverage
- Effect of entities people, organizations, products, and geopolitical entities measures readers' **gut response** to subjects of coverage

	Understanding Readership	Comparing Readerships
Example Users / Use	 Social media manager for the source: maximizing revenue 	 Marketing representative: shopping ad blitz featuring a particular celebrity
Cases	 Sponsored content creator: capitalizing on readers' preferences 	 Political campaign manager: pursuing key endorsement
Analytical	Start with a fixed source	Start with a fixed entity or set of entities
Approach	Explore patterns for an entity, and/or	Explore patterns by source, and/or
	 Find entities who drive volume, or a certain sentiment, most strongly 	 Find sources where volume, or certain sentiment, driven most strongly

Looking for pure reaction to entities, so also controlling for extreme wording that affects reactions

A Multi-"Teared" Analytic Approach

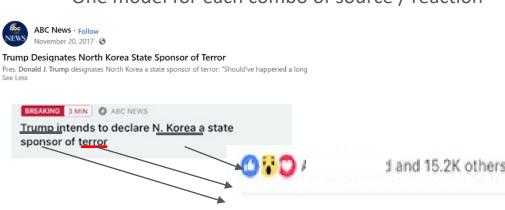
Data Source

Until live querying available, used <u>publicly available data from February-June 2016</u>

• h/t to GitHub user @minimaxir

Modeling Approach

- Recognize named entities mentioned in each post
- Engineer features:
 - Entity-wise dummy variables
 - Sentiment of other words used
- Fit regressions to predict reader reactions:
 - One model for each combo of source / reaction





- Coefficients from each regression model yield:
 - Estimate of each entity's effect on reaction volume and sentiment
 - Effect of general sentiment in words of the post



