

SPRING 2017

How We Talk About Terrorism

By CHRIS FRANZINI

METIS NYC -- Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam rhoncus a ante ut euismod. Cras sed ante vitae sapien venenatis hendrerit. Curabitur efficitur turpis nulla. Sed ac elementum massa. Nam maximus consequat odio ac laoreet. Maecenas viverra lectus vulputate felis aliquam bibendum. Ut dictum lacinia bibendum. Curabitur neque enim, vulputate quis augue et, gravida pharetra odio. Morbi metus turpis, aliquam eget imperdiet vitae, varius porta sapien. Cras

Motivation

Illustrate claims of Critical Terrorism Studies (CTS).

In particular, highlight association with Islam and the Middle East.

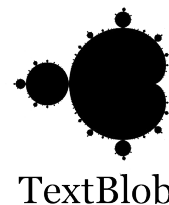
Data and Tools

NEW YORK TIMES API

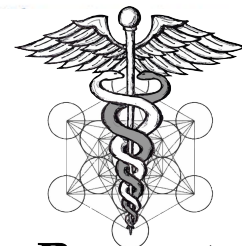
- Query for “terror”
- ~15,000 articles
- 1993 to present (25 years)
- Adjectives and adverbs



pandas



TextBlob



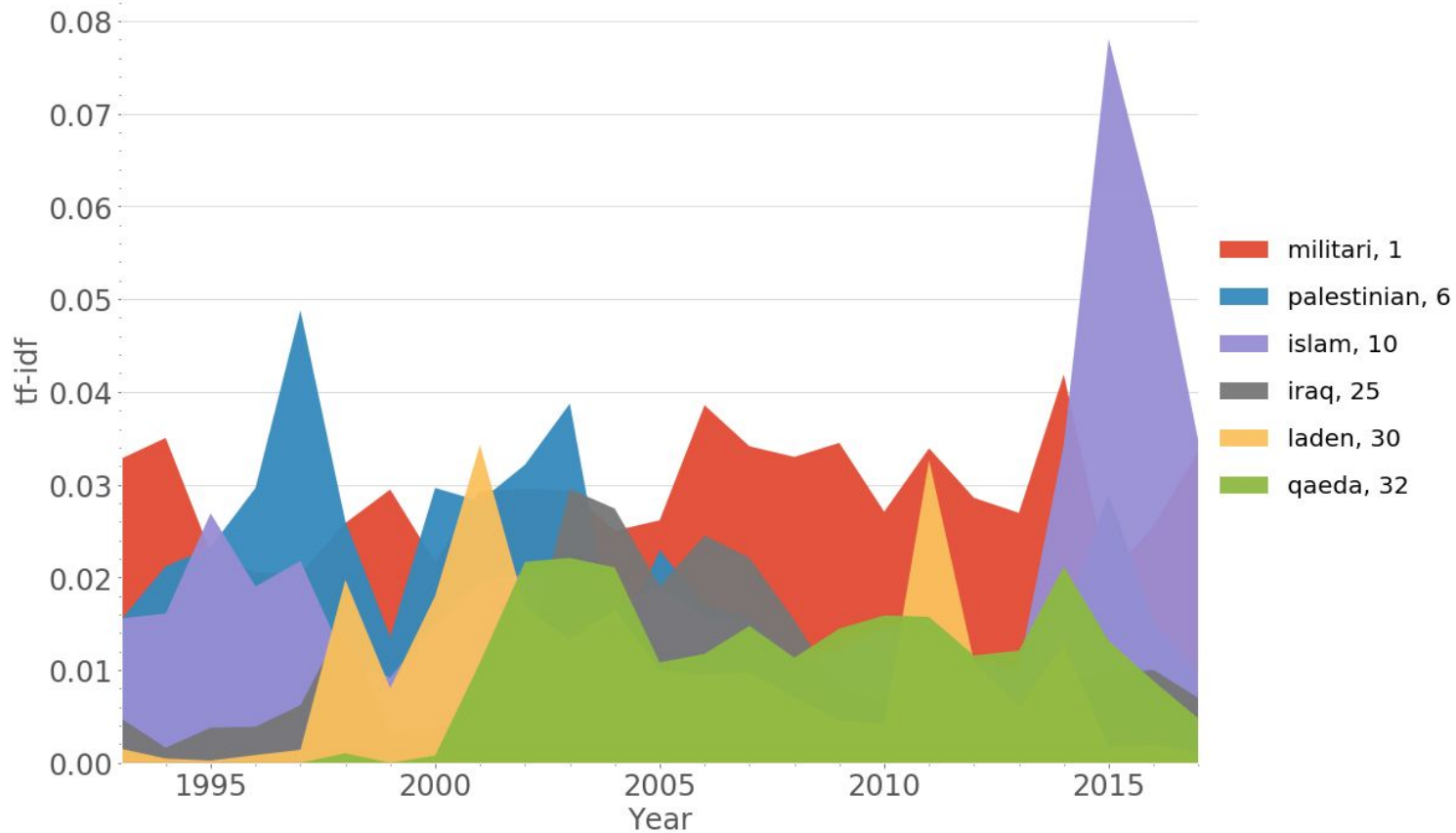
Requests
http for humans



matplotlib

LDAvis

TF-IDF for Select Stems in New York Times Articles Addressing Terrorism (1993 to Present)

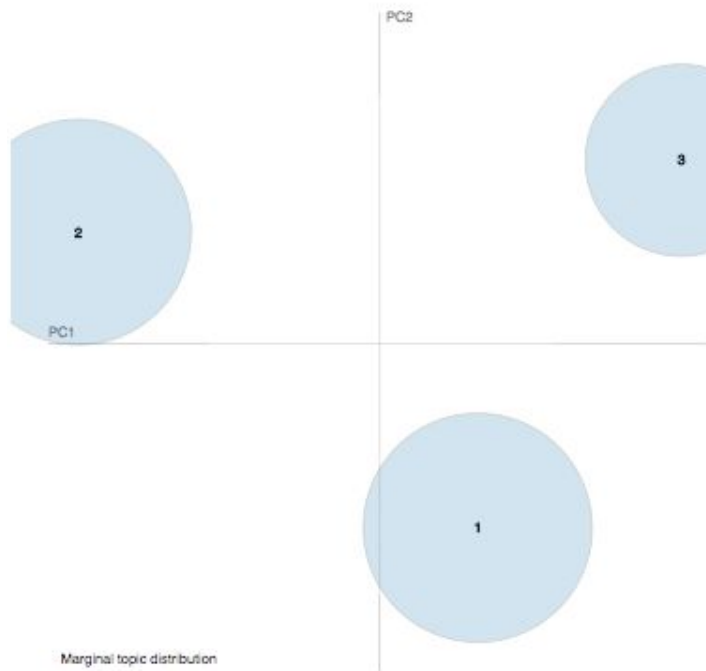


tf-idf

Selected Topic: 0 Previous Topic Next Topic Clear Topic

Slide to adjust relevance metric:(2) $\lambda = 1$ 0.0 0.2 0.4 0.6 0.8 1

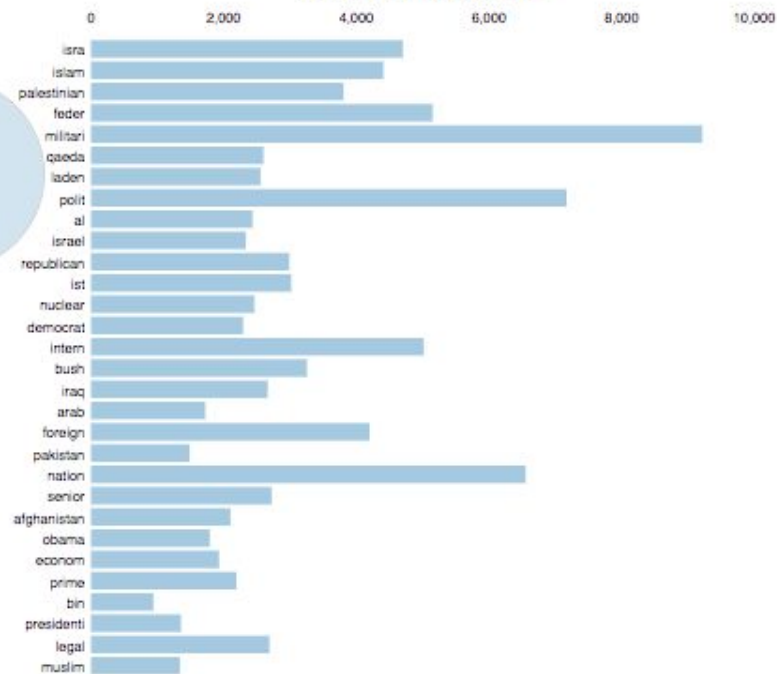
Intertopic Distance Map (via multidimensional scaling)



Marginal topic distribution



Top-30 Most Salient Terms¹



Overall term frequency
Estimated term frequency within the selected topic

¹ $\text{salency}(\text{term } w) = \text{frequency}(w) * [\sum_t p(t|w) * \log(p(t|w)/p(t))]$ for topics t ; see Chuang et. al (2012)

² $\text{relevance}(\text{term } w | \text{topic } t) = \lambda * p(w|t) + (1 - \lambda) * p(w|t)/p(w)$; see Sievert & Shirley (2014)

LDA

Next Steps

Look at how different events are described.

Look at other data sources.

Improve preprocessing, particularly filtering out unwanted words.

Thank you.