



# Event Analysis through QuoteKG – a Multilingual Knowledge Graph of Quotes



## Motivation

- Quotes provide vital context to historical research.
- Authenticity and contextual information of quotes need to be verified for accurate analysis
- Linguistic, national, and cultural communities may have different perspectives on quotes

## Availability & Statistics

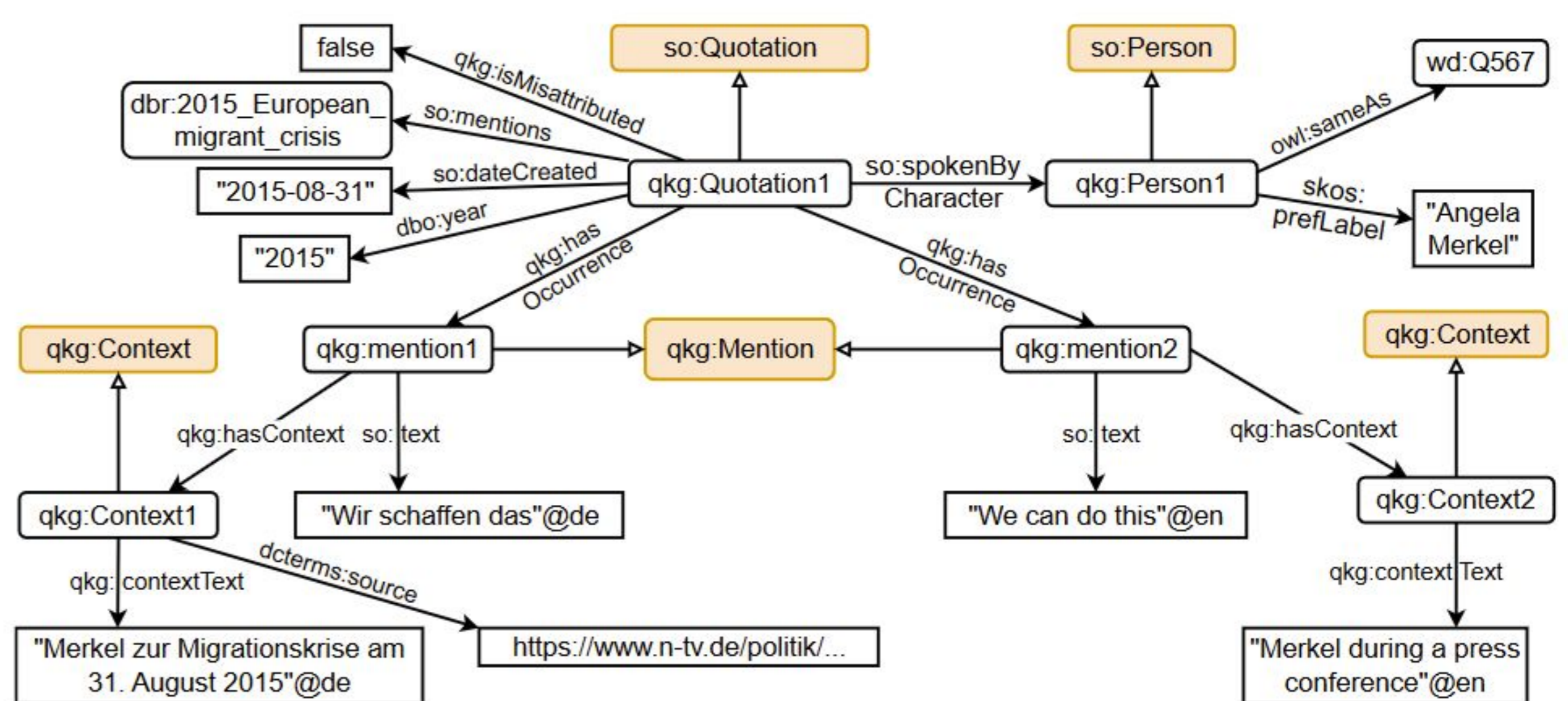
- QuoteKG, an interface and SPARQL endpoint are available online: [www.quotekg.l3s.uni-hannover.de](http://www.quotekg.l3s.uni-hannover.de)
- QuoteKG contains nearly one million quotes in 55 languages

| Language      | Persons | Quotes  |
|---------------|---------|---------|
| English       | 19,073  | 271,541 |
| Italian       | 18,803  | 146,103 |
| Hebrew        | 2,985   | 48,330  |
| Farsi         | 3,407   | 28,699  |
| All Languages | 69,467  | 961,535 |

Language Statistics

## Creation

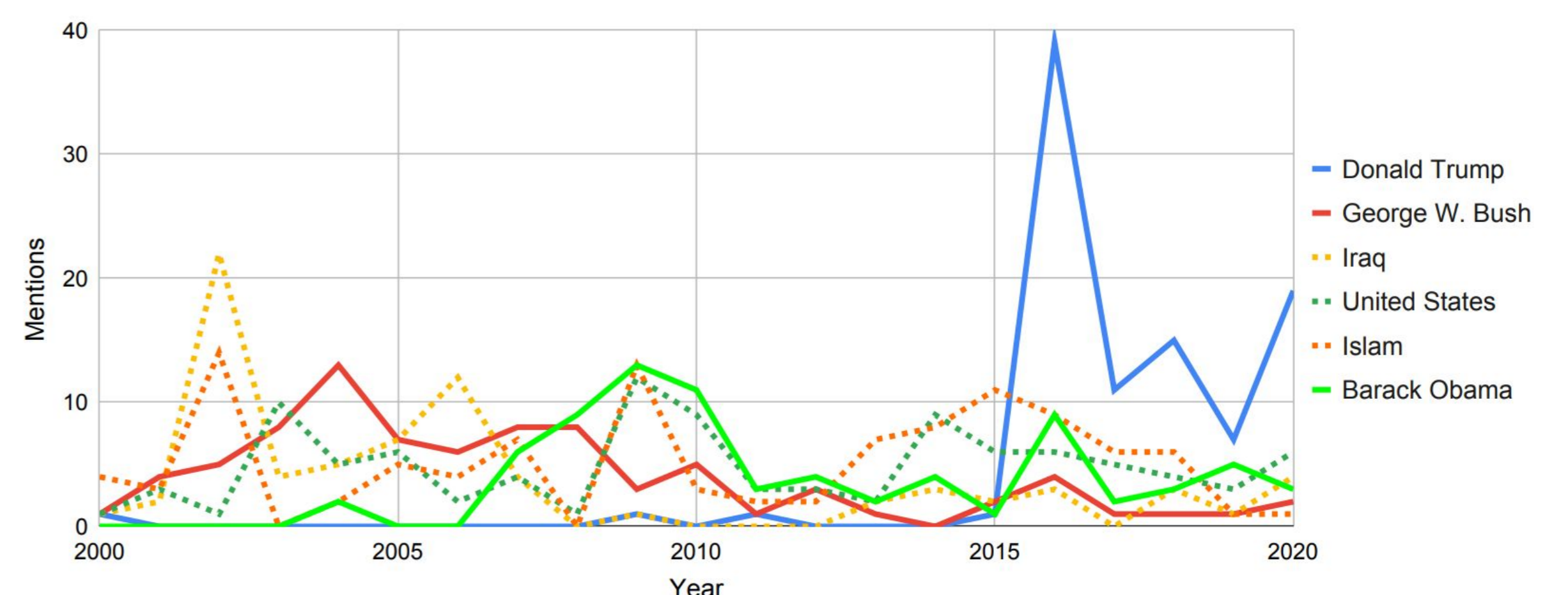
- Quotes are extracted from Wikiquote
- We create a processing pipeline for extracting, aligning, and systematizing quotes
- QuoteKG is built with cross-lingual alignment of contextually enriched quote mentions



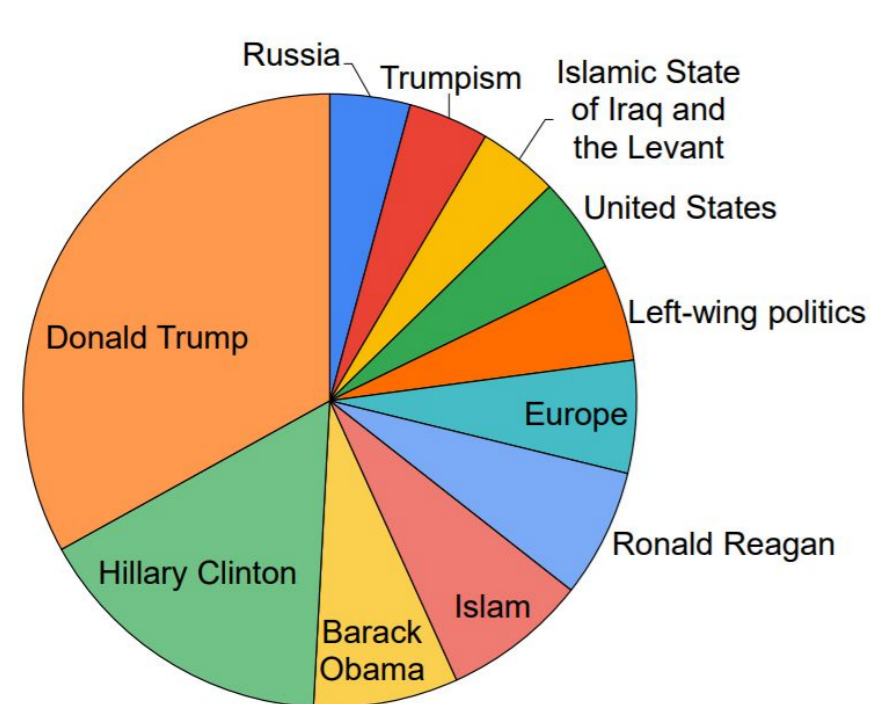
Example quote in QuoteKG

## Event Analysis using QuoteKG

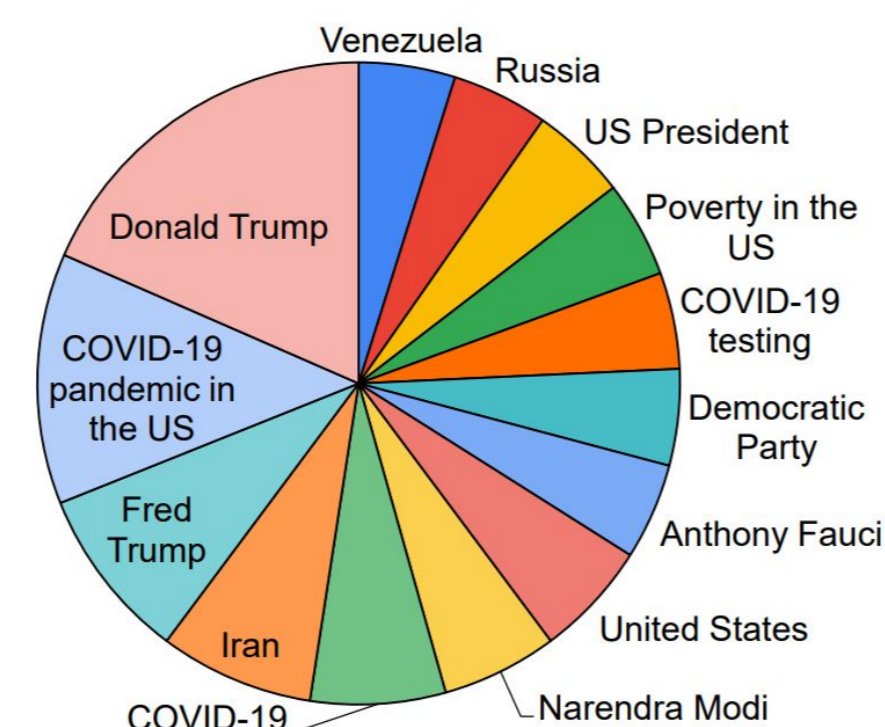
- QuoteKG can be used for event analysis to gain insights from quotes by public figures:
  - Creation of quote collections
  - Temporal analysis of events through quotes
  - Exploration of the cultural Impact of events through multilingual sentiment analysis



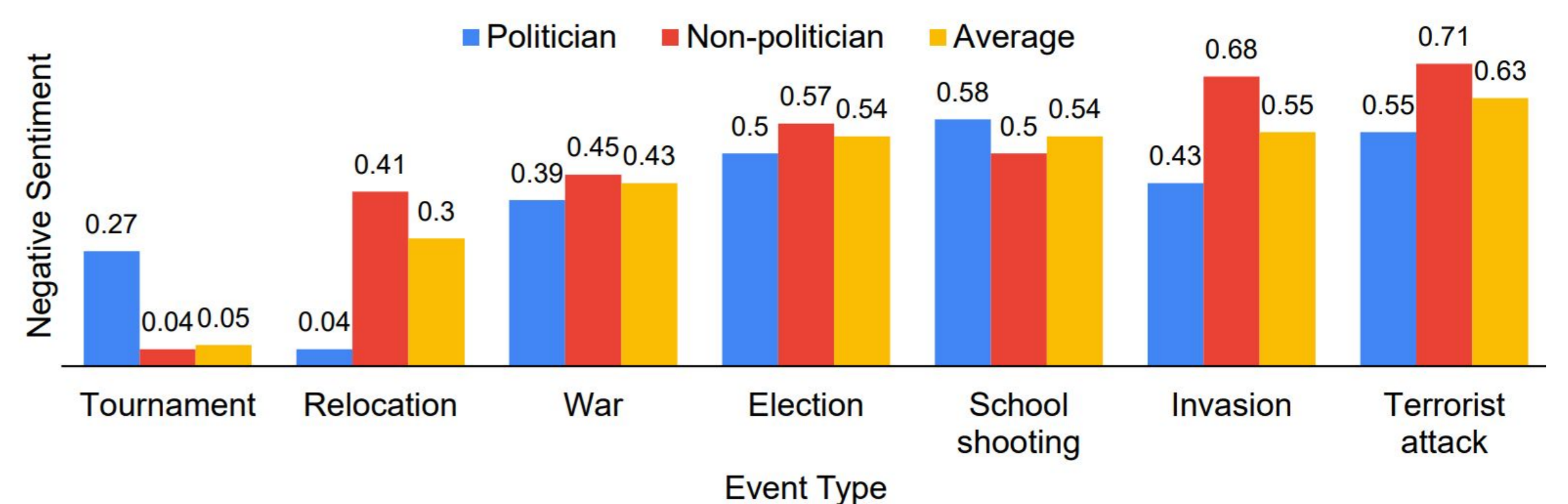
Most mentioned entities in quotes over time



(b) Distribution of entity mentions in quotes from 2016.



(c) Distribution of entity mentions in quotes from 2020.



Negative Sentiment of quotes about specific event groups

Most mentioned entities in selected years

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