

Assignment 3: Text Analytics using Quanteda

(a) Analysis of Biden-Xi Summit Data

The analysis of the Biden-Xi summit data provides insights into key themes discussed during the summit. Using Quanteda, a co-occurrence network was constructed from hashtags in the text corpus. Prominent hashtags included #biden, #xi, #china, #taiwan, #humanrights, and #uyghurs.

The co-occurrence network revealed clusters of related topics:

- **Cluster 1:** Focused on geopolitics, including terms like #biden, #xi, #china, and #taiwan.
- **Cluster 2:** Highlighted human rights issues with hashtags such as #uyghurs, #humanrights, and #uyghurgenocide.

These findings suggest that public discourse surrounding the summit was dominated by two primary themes: geopolitical tensions between the U.S. and China and human rights concerns, particularly regarding the Uyghur population.

The frequency of terms like "human rights," "trade," and "democracy" underscores the global significance of the summit and the competing priorities of the two nations.

(b) Analysis of U.S. Presidential Inaugural Speeches

Similarities Across Speeches

Inaugural speeches consistently reflect common themes of national unity, governance, and democratic values. Frequently used terms include:

- **"Nation," "freedom," and "justice":** Signifying foundational American principles.
- **"America" and "citizens":** Indicating a focus on collective identity and inclusivity.

These recurring themes demonstrate continuity in presidential rhetoric, emphasizing the enduring values of American governance.

Differences Over Time

A deeper analysis of individual speeches revealed how rhetoric evolves with time and political context:

- **Barack Obama:** Frequently used terms like "change" and "hope," reflecting his campaign's themes of transformation and optimism.

- **Donald Trump:** Emphasized "America first," "jobs," and "borders," highlighting a nationalistic agenda and economic focus.
- **Joe Biden:** Used terms like "unity," "democracy," and "justice," reflecting the challenges of political division and the need for healing.

Lexical Dispersion Analysis

Terms like "freedom" and "liberty" appear consistently across all speeches, while "unity" sees a significant spike in Biden's inaugural speech. This highlights how specific terms reflect the immediate priorities of an administration.

(c) Wordfish and Its Application

Wordfish is a scaling model used in text analysis to position texts or speakers along a latent dimension, often representing ideology or rhetorical focus. By applying Wordfish to the corpus of U.S. presidential inaugural speeches, it is possible to:

1. Map ideological shifts in rhetoric over time.
2. Compare presidents based on their thematic focus and stylistic differences.

For instance, Wordfish could position speeches on a scale from progressive to conservative based on word usage patterns. This method could also be applied to summit-related data to identify differences in rhetoric between nations.

Conclusion

The Biden-Xi summit analysis highlighted the dominance of geopolitical tensions and human rights in public discourse. The inaugural speech analysis demonstrated continuity in core American values, alongside shifts in rhetoric reflecting each administration's priorities. Finally, the use of Wordfish presents an opportunity for further exploration of ideological and rhetorical patterns in these texts.