Just Stop Oil: Climate Activism Narratives in the UK

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Research Question

How do narratives about climate activism differ between mainstream media and activists themselves?

Motivation

- Relevance of climate change issues and high coverage of such topics

- Same actions described by the people who performed them and mainstream media

- UK: big English language corpus of articles

Data Collection

Collected all articles published over the last year on two sources:

- BBC: big mainstream media outlet

- Just Stop Oil: website of an environmental nonviolent civil resistance group in the UK founded in 2022

BBC Data Collection

- First attempt: BBC API
  - Only 100 articles per day and country
  - Multiple news sources

- Used RSelenium to click through (only one url for all pages)

- Scraped articles published in the last year, that contained "stop" and „oil" (not possible to filter by the expression „just stop oil")

- Extracted articles until 15 June 2023

- Collected 2000 articles

BBC Structure
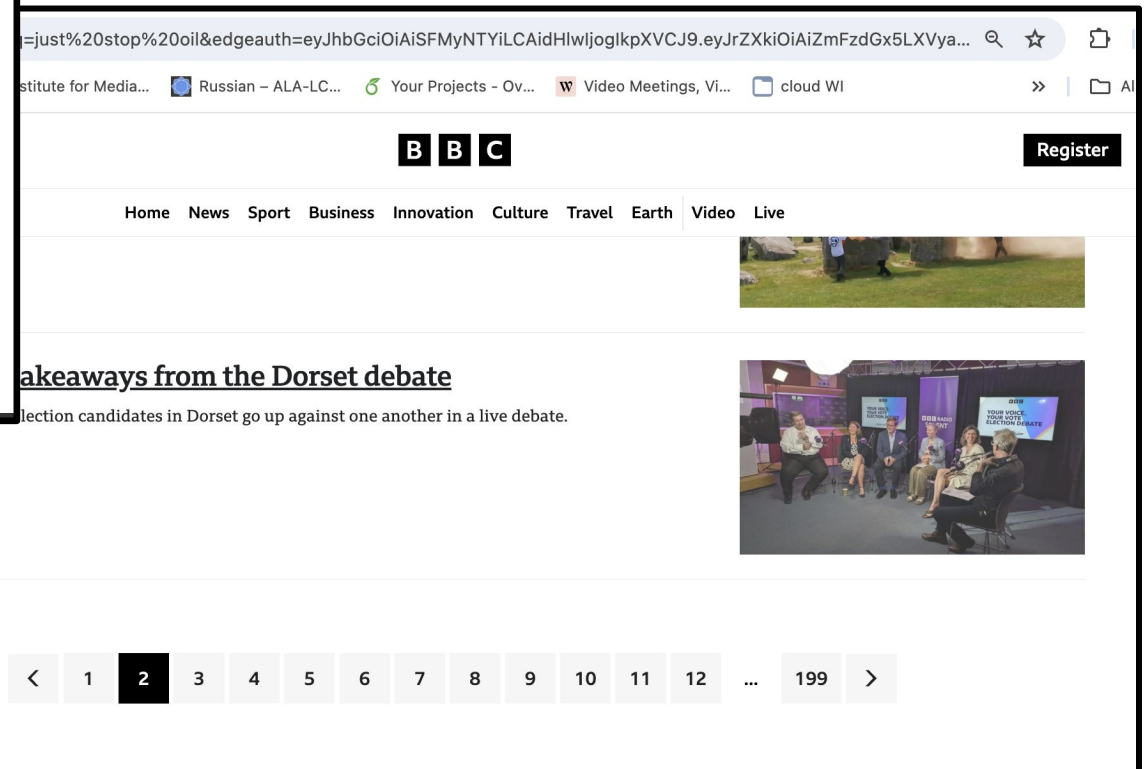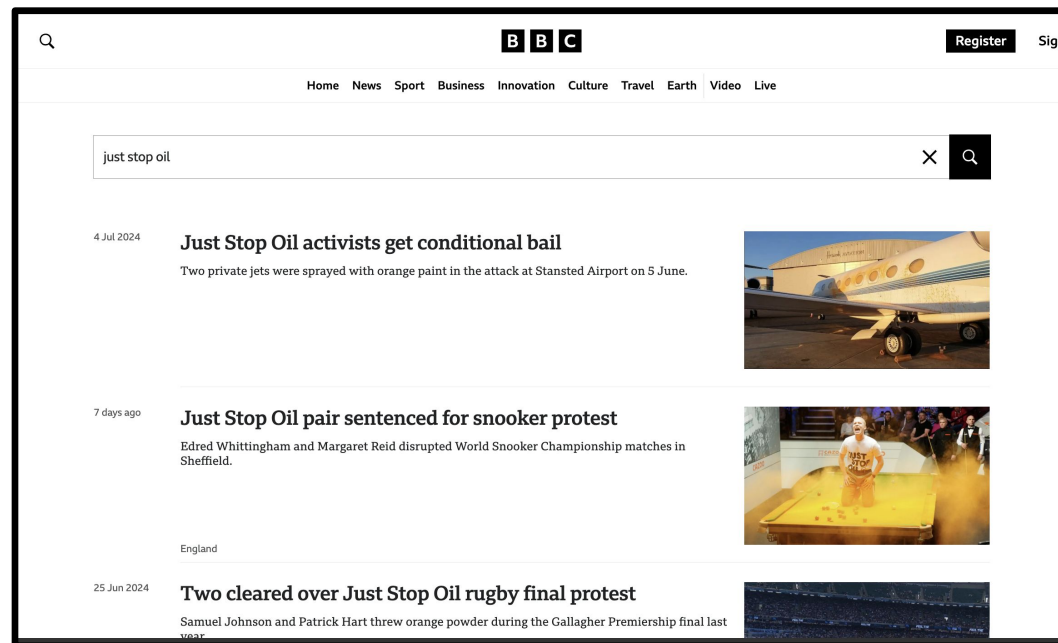
Number of pages but no difference in the URL!

Just Stop Oil

Website organized in 3 text sections and 1 video section

Our dataset

Just Stop Oil Data Collection

- Used RSelenium to load all press releases until selected date

- Scrape in one go

- Skipped "Blog Post" and "Court & Prison Updates"

- Collected press releases from their own website until June 15th, 2023

Data cleaning

- Adjust date of newer articles

- Remove irrelevant text of body (copyright, social media)

- Filter article urls and texts (no collections, videos…)

- Split articles into reports with "Just Stop Oil" and "benchmark"

- Cut out videos and other other text sources using URLs

- Remove social media section (used "ENDS" keyword)

Final data

234 articles
97 JSO + 137 bench

192 articles

Keyness Plot for BBC Articles including "Just Stop Oil"
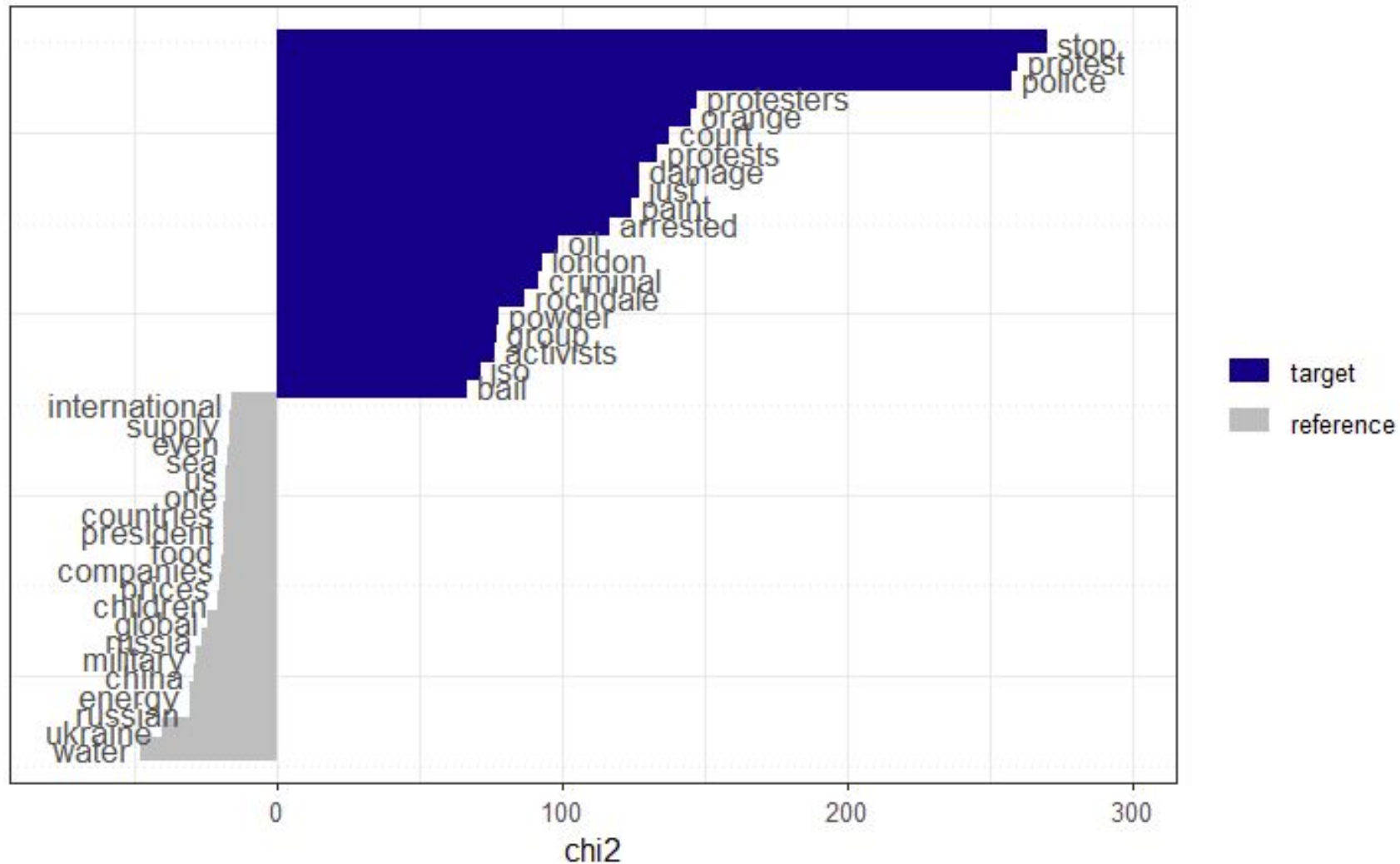
Keyness Plot for Just Stop Oil Articles before and after January 2024

Keyness Plot of BBC Articles

Comparison of Terms Before and After January 2024
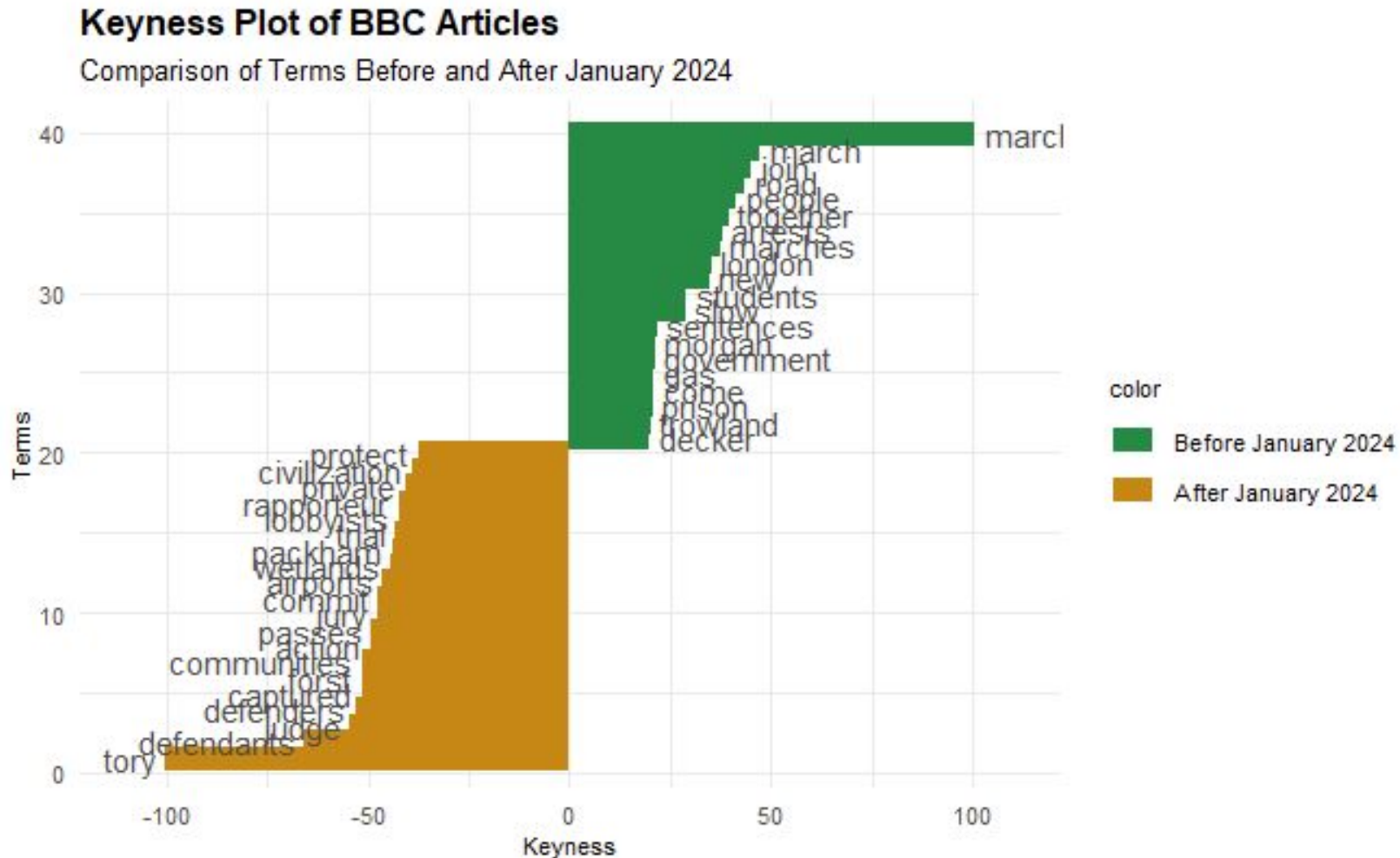
When combining data frames and trying to create a Keyness Plot

Error in textstat keyness.dfm(all_dfmPP, target =
docvars(corpus all, :
  logical target value length must equal the number of
documents

Other Issues

- changing the text size
- Stemming in pre-processing (march & maching)
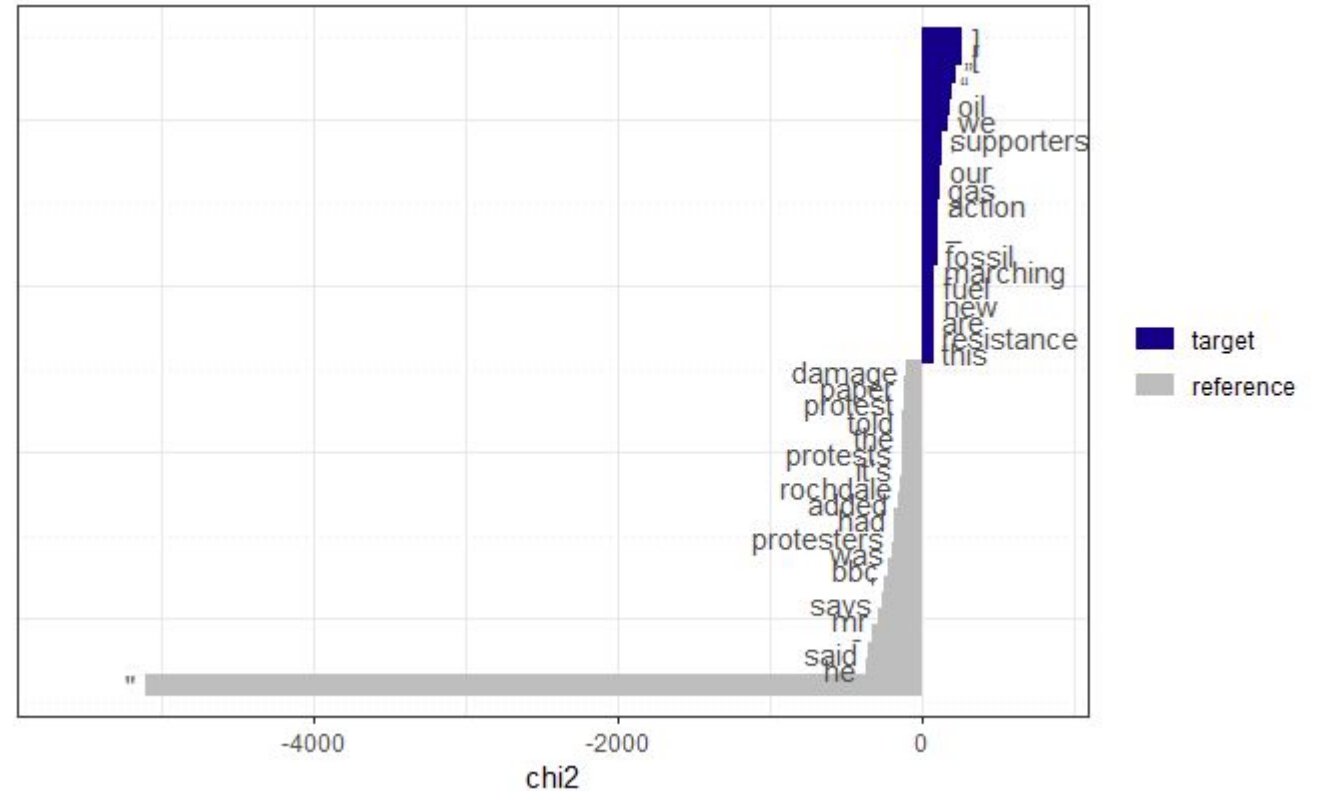
Methodology: Sentiment Analysis

- Pre-processing of dataframes (tokenization, no stop words…)

- Use binary sentiment lexicon "bing"

- Compare and contrast articles
  - Press releases from Just Stop Oil
  - BBC about Just Stop Oil
  - General articles from BBC for reference
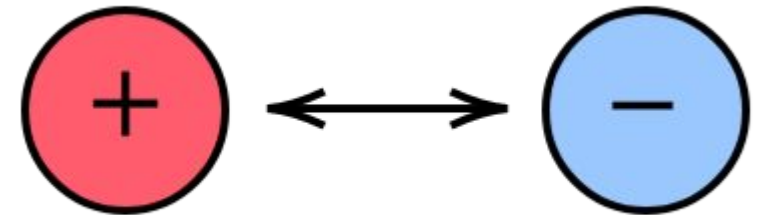
Results: sentiment analysis

Just Stop Oil

BBC - Just Stop Oil

BBC - Bench

Number of Articles

Sentiment Score
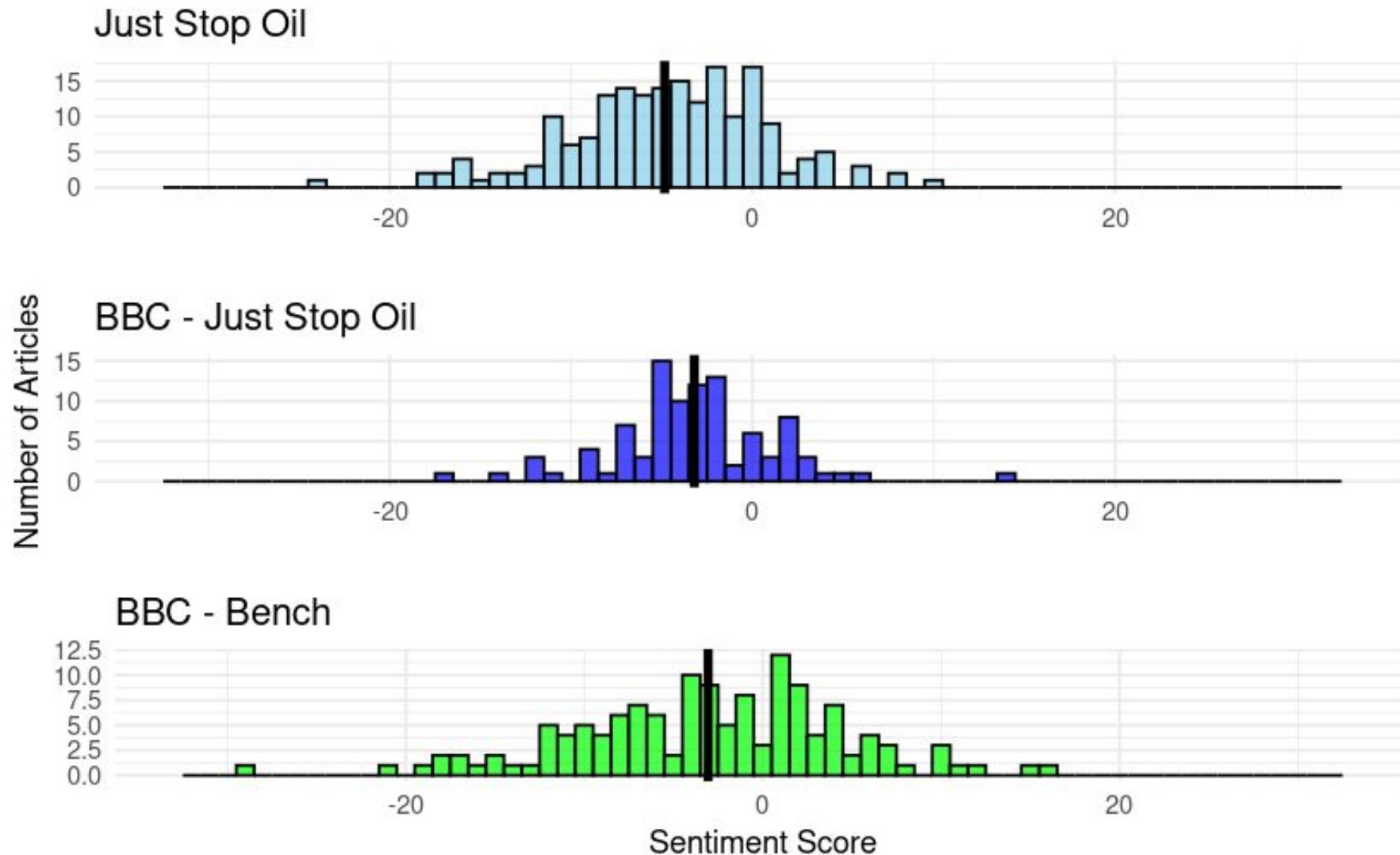
- Slightly negative attitude from BBC

- More negative attitude from Just Stop Oil

Methodology: Clustering and topic finding

- SentenceTransformer for embedding of titles

- Kmeans clustering of articles titles:
  - Just Stop Oil press releases
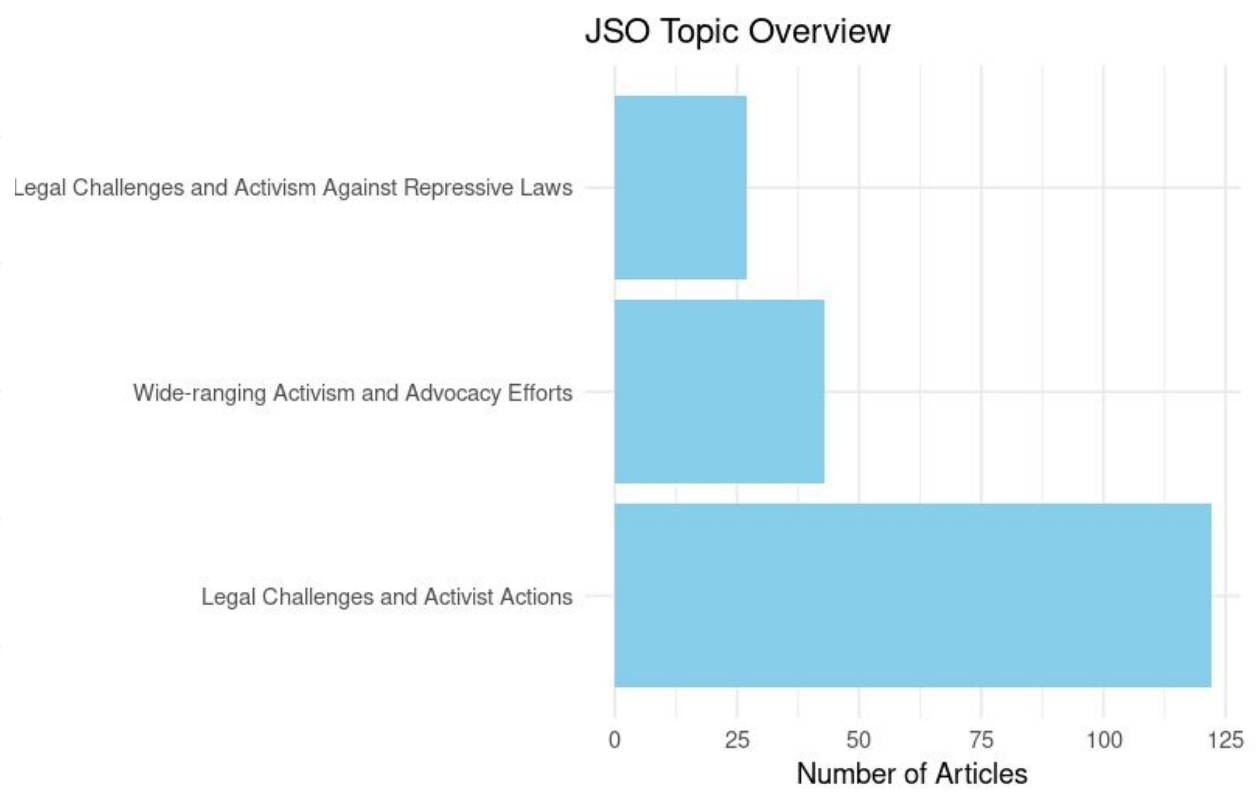 - BBC articles about Just Stop Oil

- Test different cluster sizes (k = 3, 5)

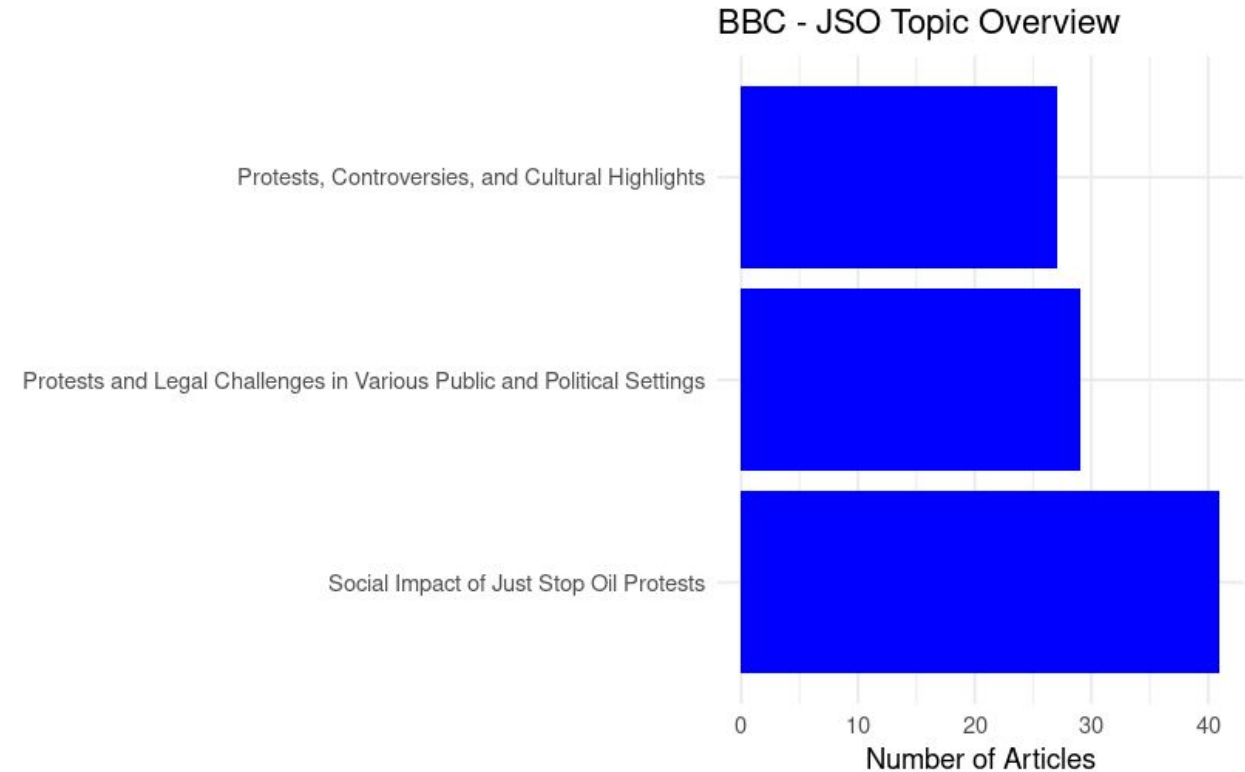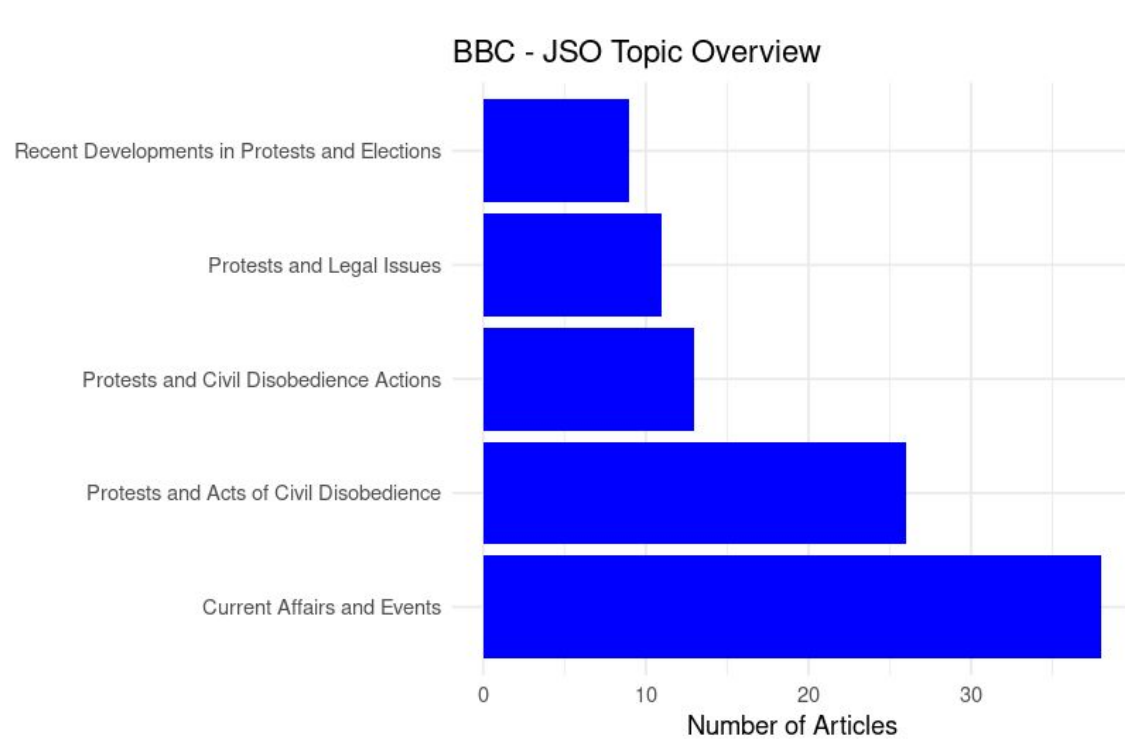- OpenAi prompt titles for topic finding via ChatGPT directly

Topic clustering - Just Stop Oil

Some topics consistent, some topics get lost (student protest)

Topic clustering - BBC

Legal aspects often discussed, social impact, not much diversity in topics

What would you do differently next time

- Find a slightly more straightforward website to scrape from as a start

- Include news sources with political leaning to investigate polarization

- Scrape a longer timespan and analyze topic evolution

Summary & Outlook

- Use an additional news source for cross comparisons

- Calibrate topic modeling

- Trying out different topic model methods (BERT, LDA)

- Look at other countries

- Extend time frame