



THERESA MAY | BORIS JOHNSON

BREXIT SENTIMENT ANALYSIS

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OBJECTIVE

HAVE FEELINGS ABOUT BREXIT CHANGED THROUGHOUT 2019?

METHODOLOGY

1

Twitter Scraping

28K Tweets referring to Brexit

2

Processing

Pre-process data.
Transform data to a vectorized form with Gensim.

3

Vader Sentiment Analysis

Library most suited for social media text

4

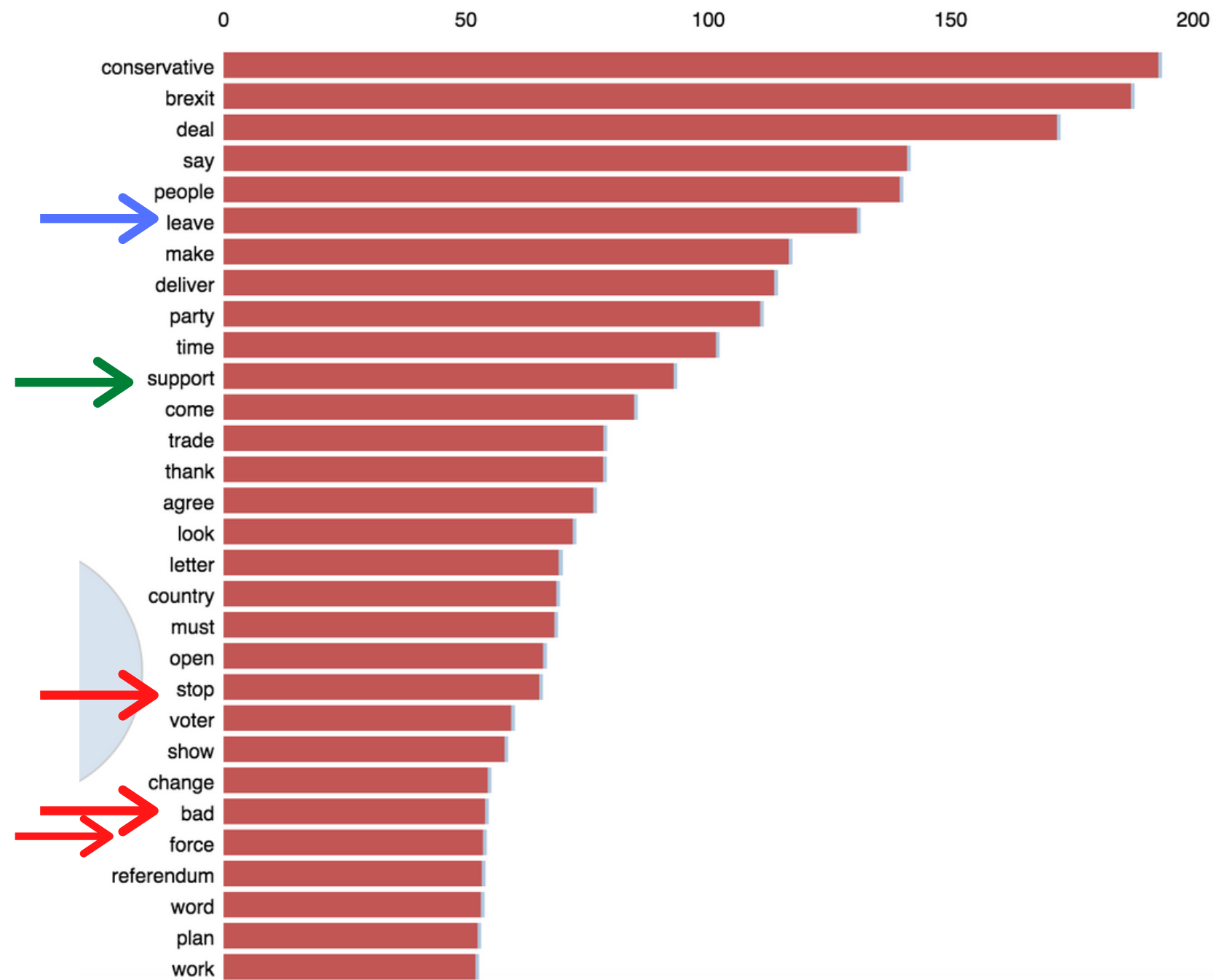
Latent Dirichlet Allocation (LDA) for Topic Classification

Unsupervised learning algorithm
2 Topics per range of time chosen based on most frequent words.

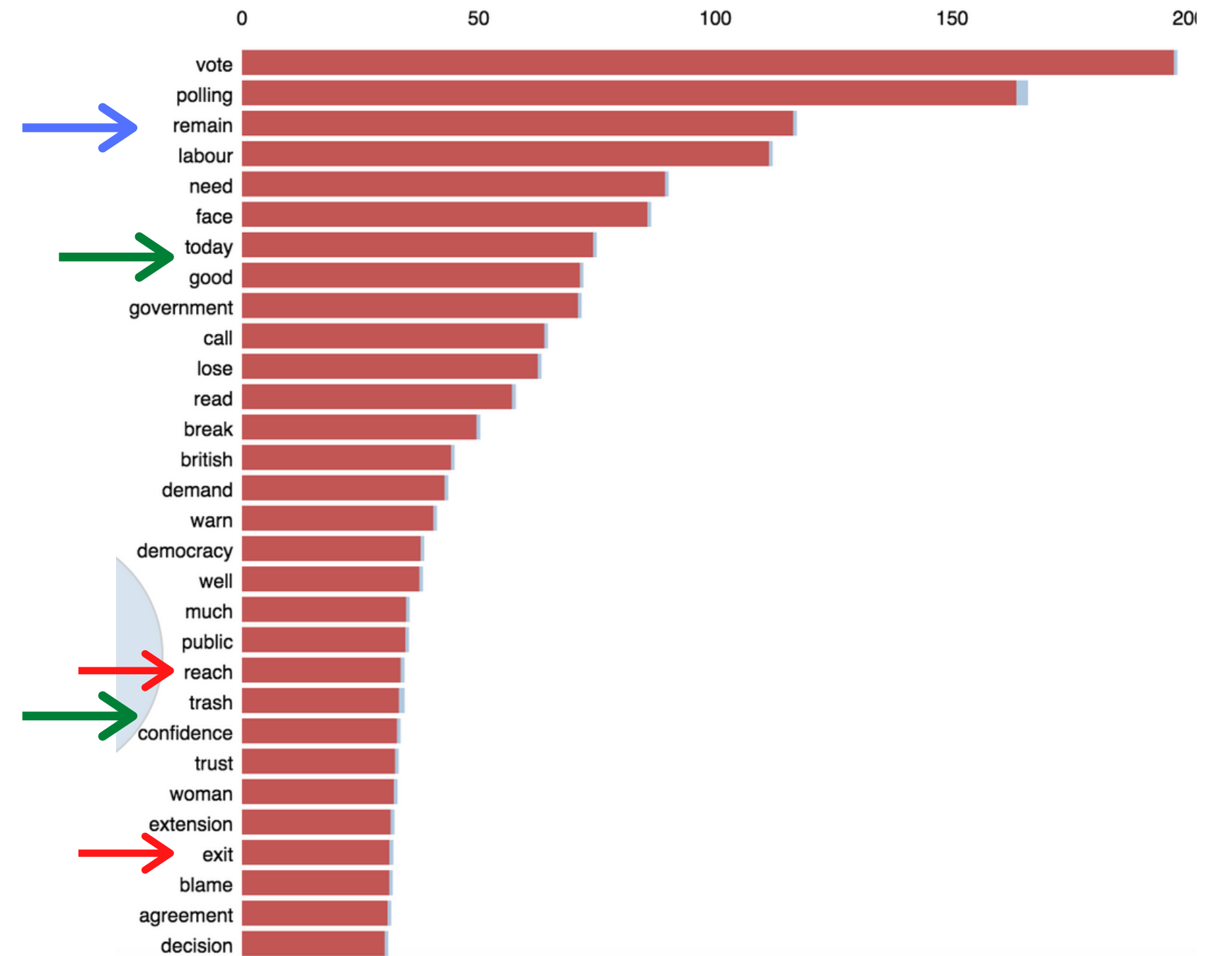
TOPIC ANALYSIS

JANUARY - APRIL

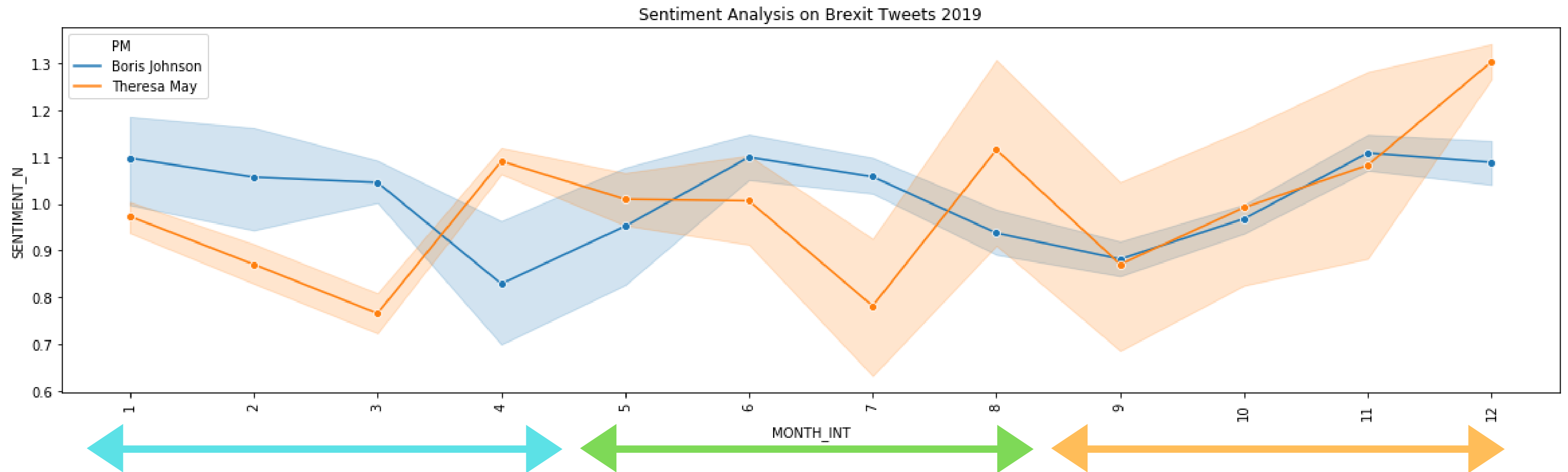
Top-30 Most Relevant Terms for Topic 1 (38.8% of tokens)



Top-30 Most Relevant Terms for Topic 2 (22% of tokens)



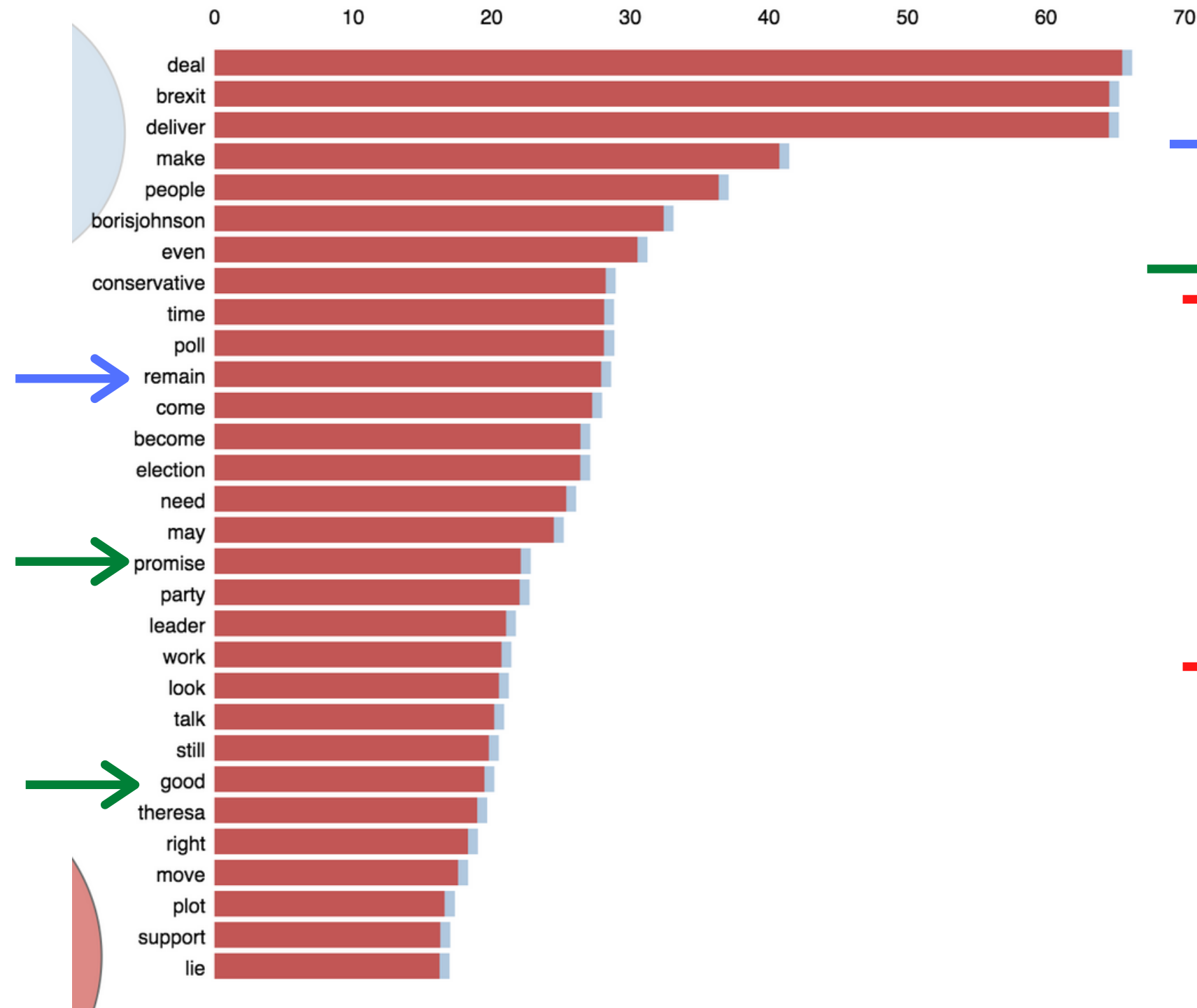
SENTIMENT ANALYSIS



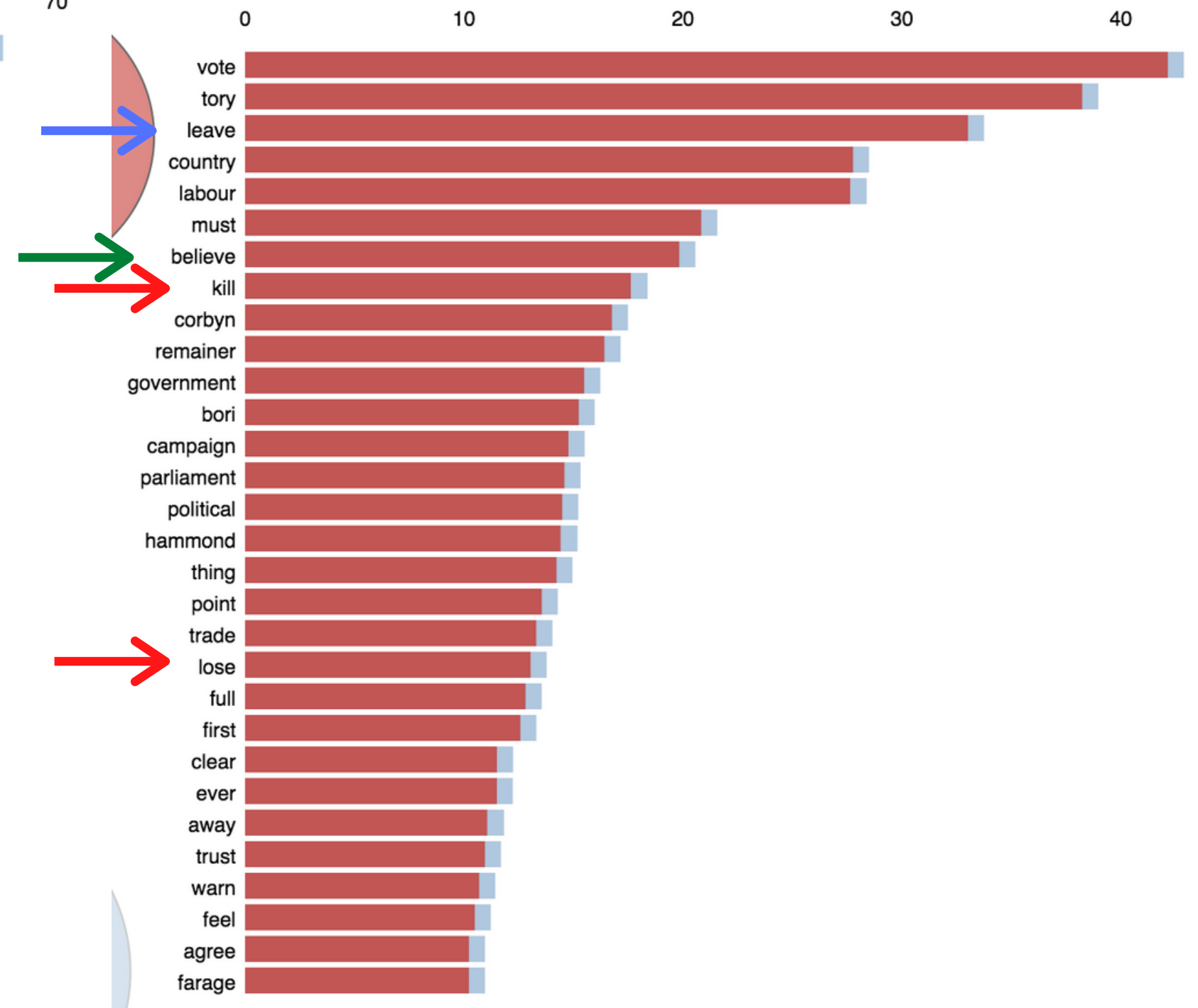
TOPIC ANALYSIS

MAY - AUGUST

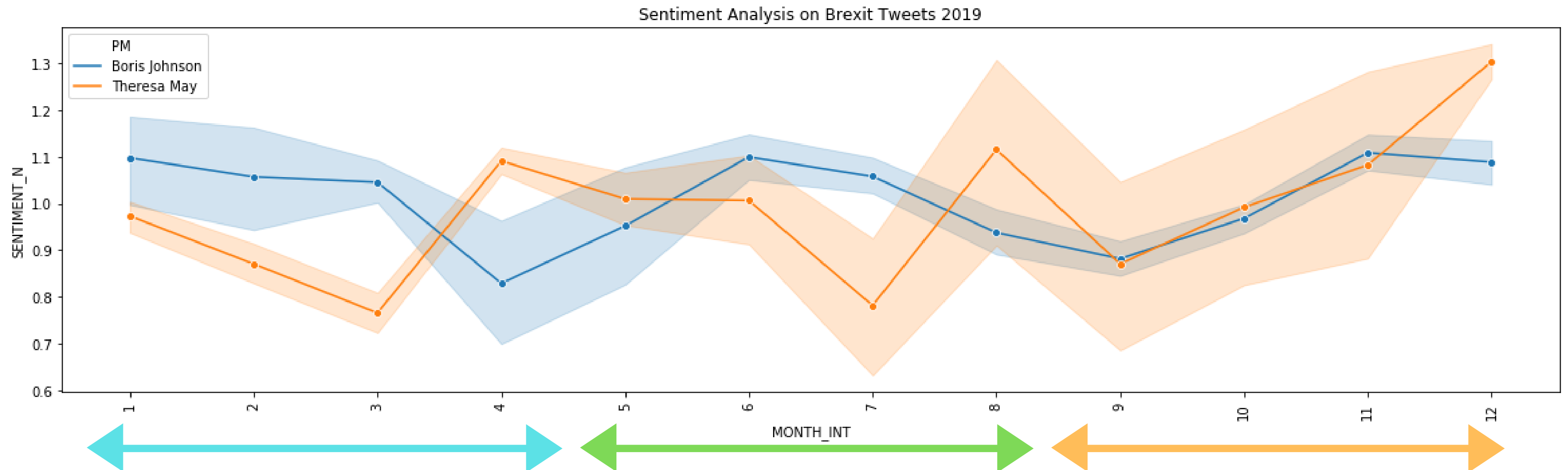
Top-30 Most Relevant Terms for Topic 1 (42.2% of tokens)



Top-30 Most Relevant Terms for Topic 2 (25.6% of tokens)



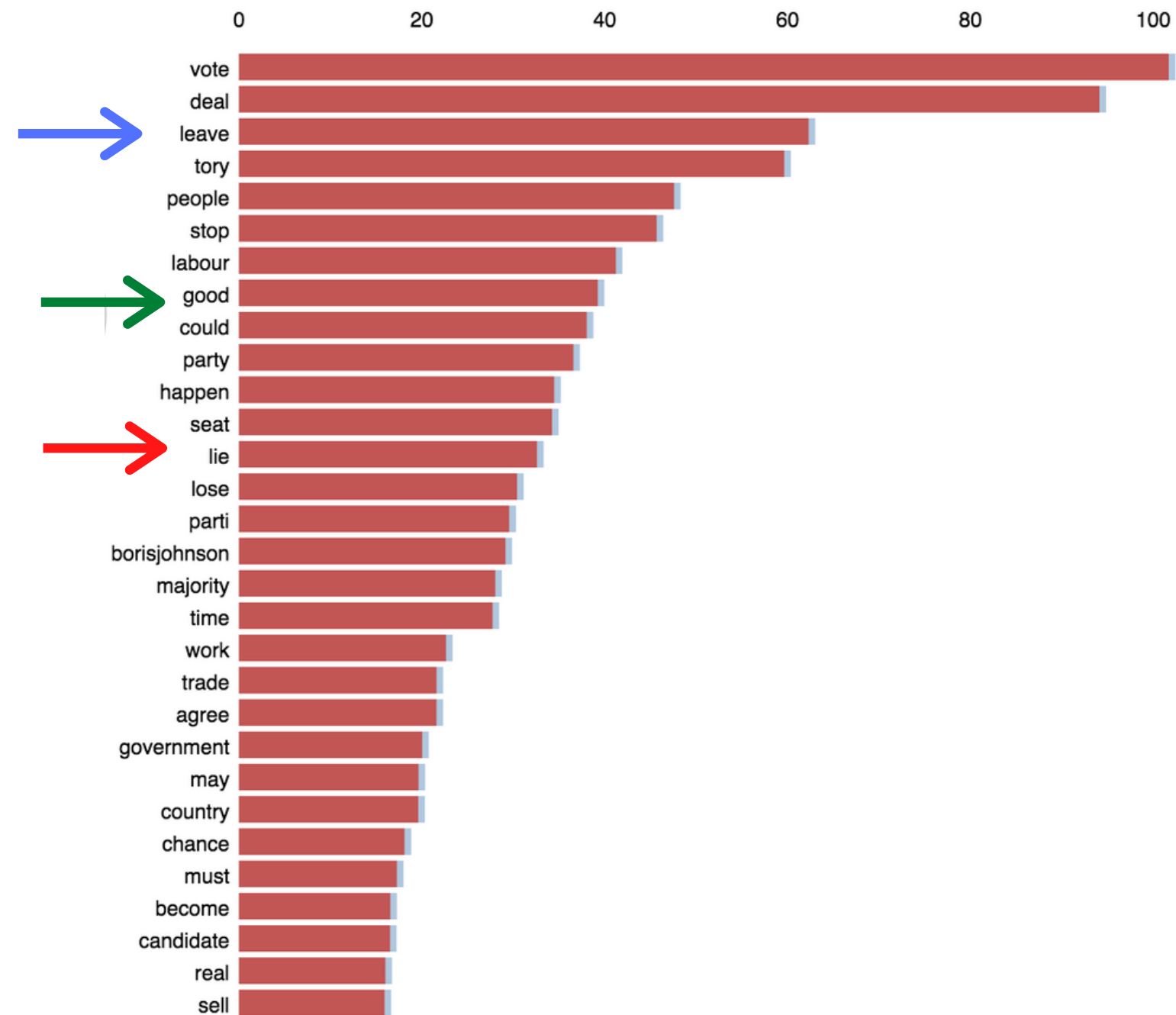
SENTIMENT ANALYSIS



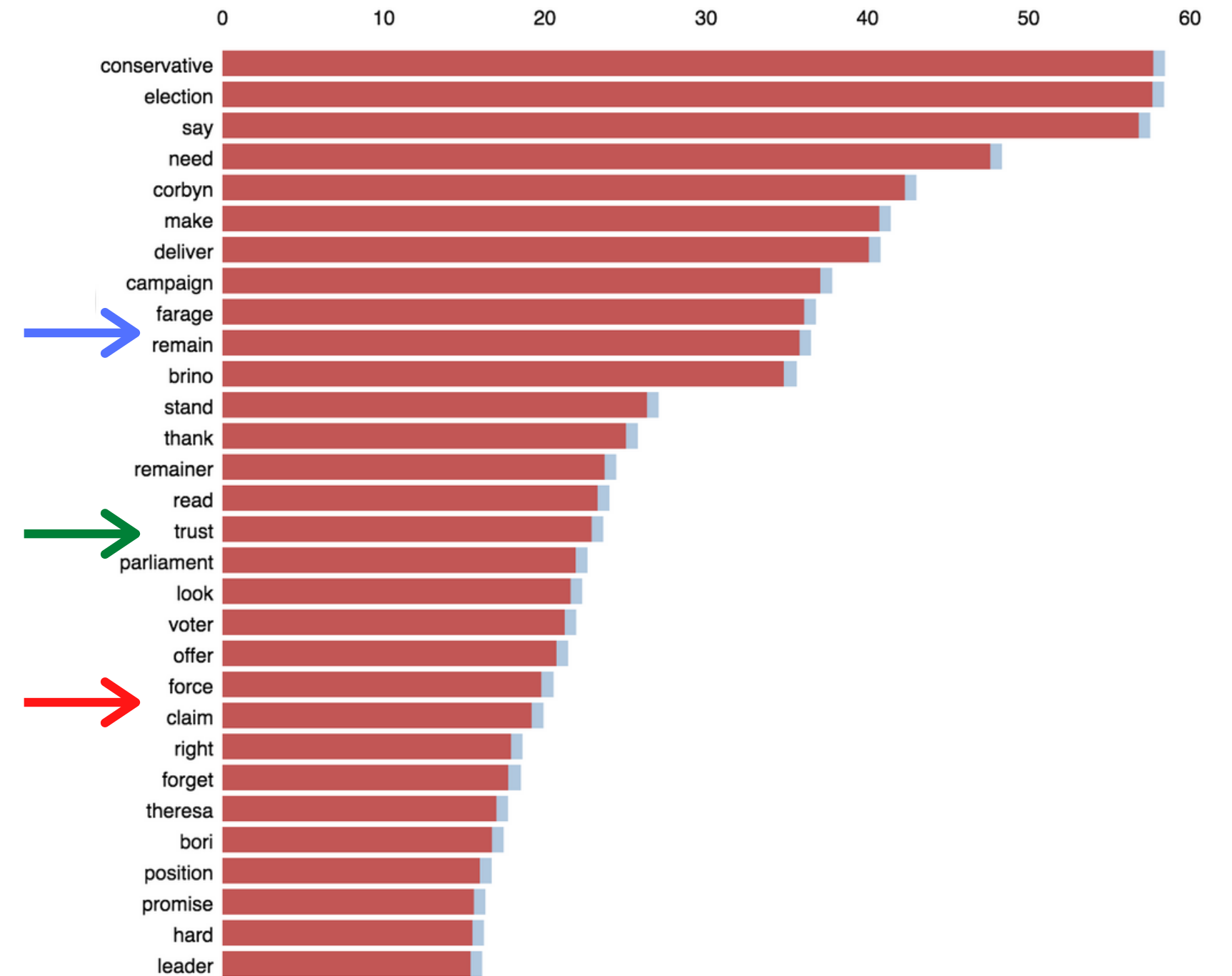
TOPIC ANALYSIS

SEPTEMBER - DECEMBER

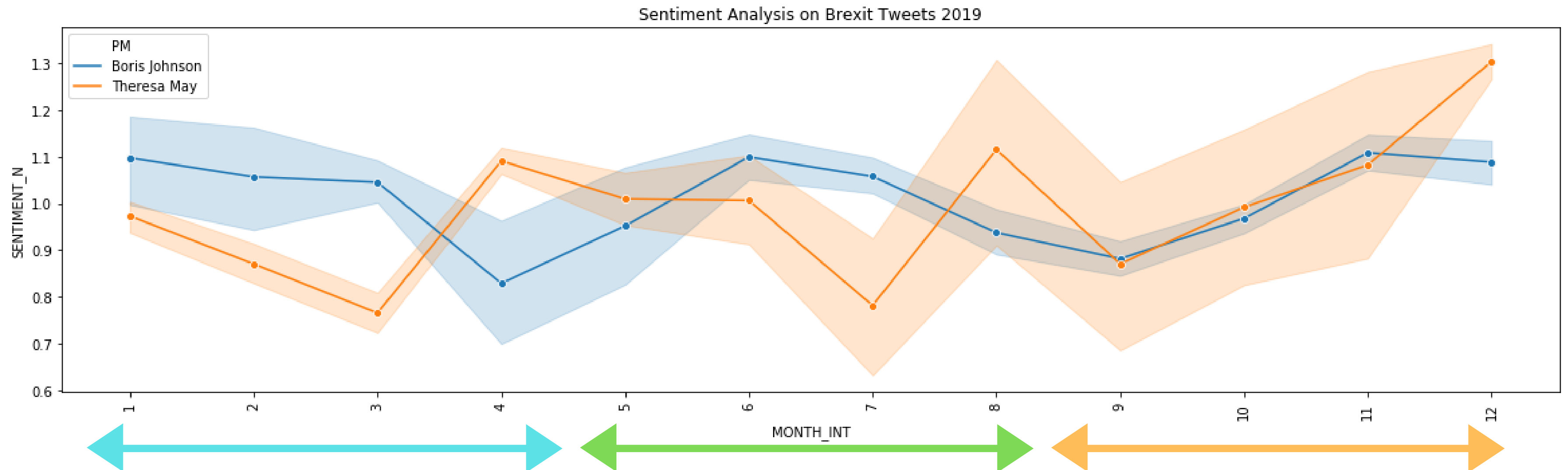
Top-30 Most Relevant Terms for Topic 1 (37.2% of tokens)



Top-30 Most Relevant Terms for Topic 2 (34.5% of tokens)



SENTIMENT ANALYSIS



RESULTS & CONCLUSIONS

● Sentiment Analysis

Overall, the results agree with that I was expecting based on the key events relating to Brexit during 2019.

Jan – April: Sentiments towards Theresa May go down drastically in comparison with Boris Johnson.

May – Aug: Negative and positive sentiments for both PMs.

Sept – Dec: Sentiments grow more positive for both PMs but mostly for Theresa May.

● Topic Analysis

Jan – Apr: Topic surrounding the word "Leave" more negative than "Remain".

May – Aug: Topic on "Leave" remains more negative than "Remain".

Sept – Dec: Topic on "Remain" and "Leave" now more positive than in previous months although there is a bigger rise in tweets that mention "Leave".

Thank you for listening...