

Emotions Running High?  
A Synopsis of the State of Turkish Politics through the  
ParlaMint Corpus

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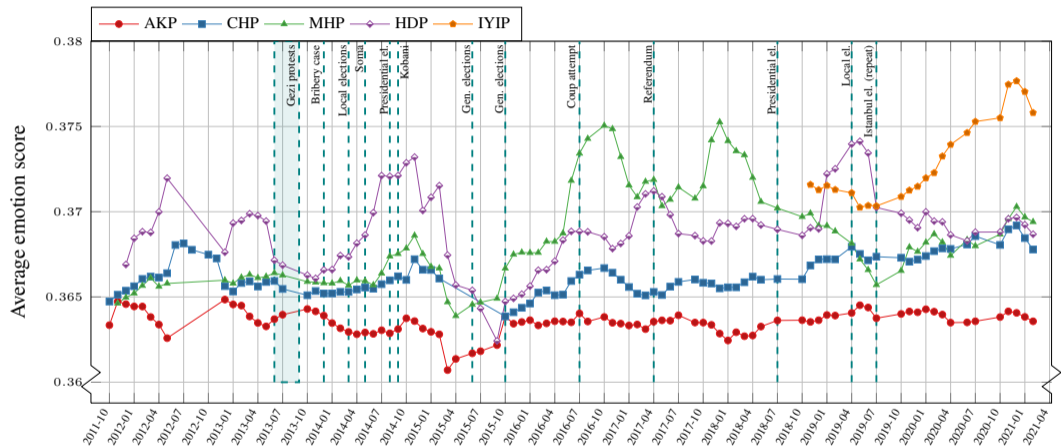
# Outline / Motivation

- In this study
  - An exploratory study of emotions in Turkish parliament between 2011–2021
  - Observations on change of emotions based on major sociopolitical events
  - Methodology: use of data-driven (machine learning) methods for analyzing political discourse
- (Long-term) motivation
  - More *objective* analyses of political discourse
  - Analyzing the effects of major changes in a country / parliament (e.g., 2018 constitutional change in Turkey)

# Methodology

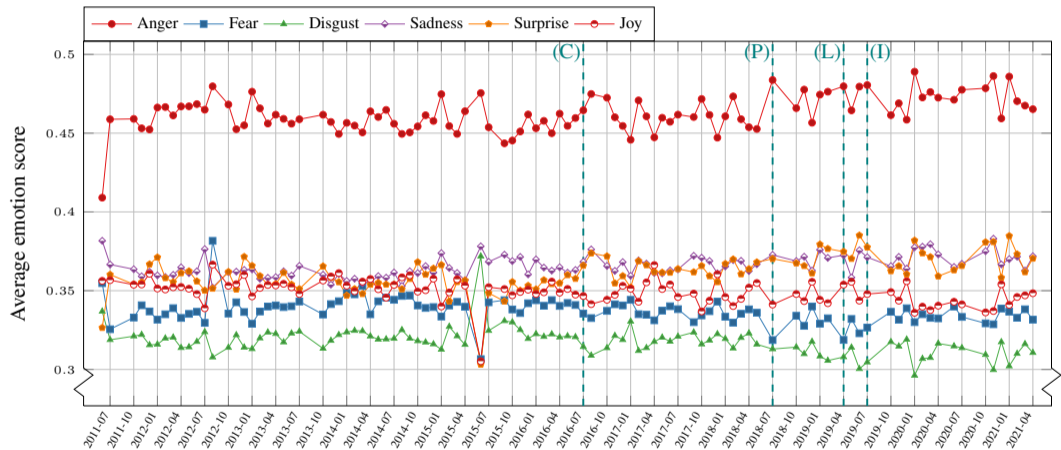
- We train one-vs-rest SVM emotion classifiers using TREMO (an ISEAR-like data set for Turkish)
- We assign emotion scores based on the classifiers to all speeches in the main proceedings of the parliament
- We visualize the emotions (per party) for all the data available from ParlaMint
- We look closely the changes in emotions in a few recent major social/political events
- Our focus is on Turkish parliament, but we also run similar experiments using the ISEAR data set and ParlaMint-UK as an additional check for the method

# An overview of the emotional changes

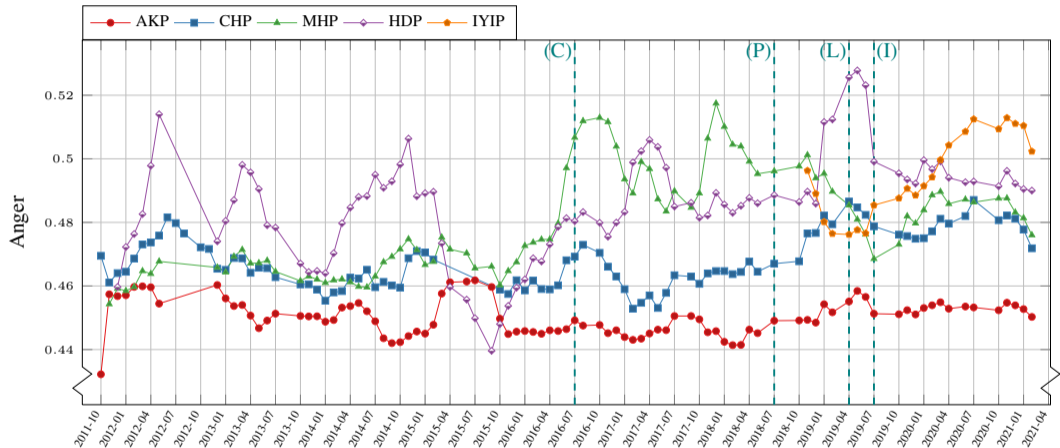


# Distribution of individual emotions

## Anger rules in parliamentary discourse



# A closer look at 'anger' around some events



## Concluding remarks

- An *objective* method for analyzing political discourse using large amount of data
- The method seems useful: emotions in parliament correlate with important events
- Many interesting observations, but they need verification (statistical tests, external checks)
- Comparison with other platforms (e.g., social media) is another interesting direction for future research
- The method needs more improvements/validation
  - Experiments on other parliamentary corpora
  - In-domain, specialized data set(s)
  - Further qualitative checks

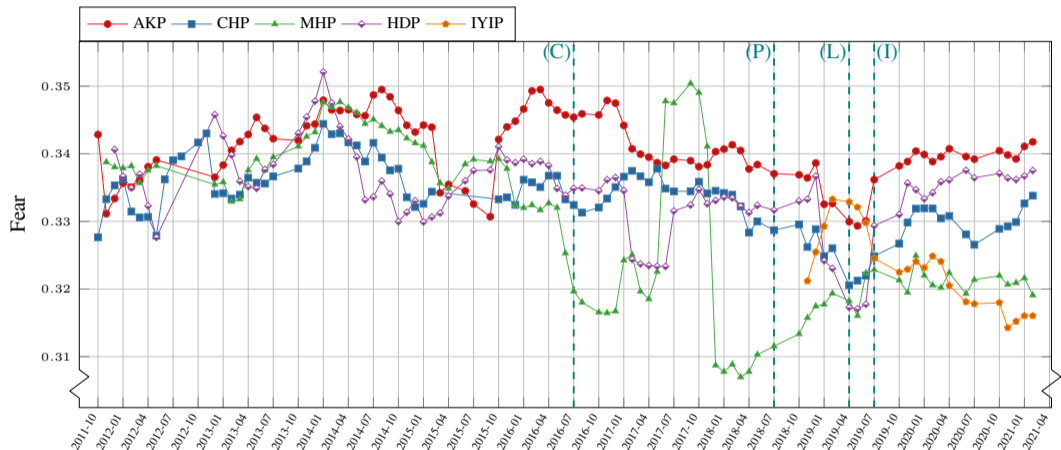
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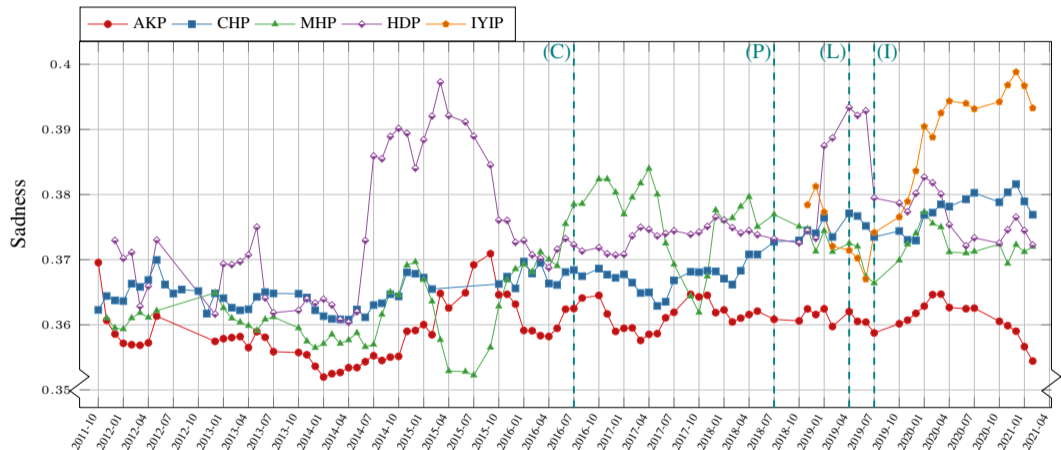
Thank you for listening!



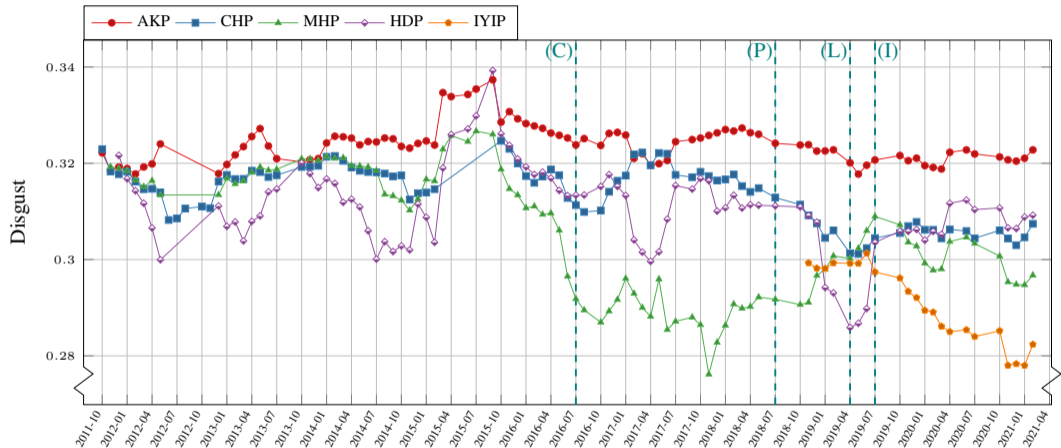
# A closer look at 'fear'



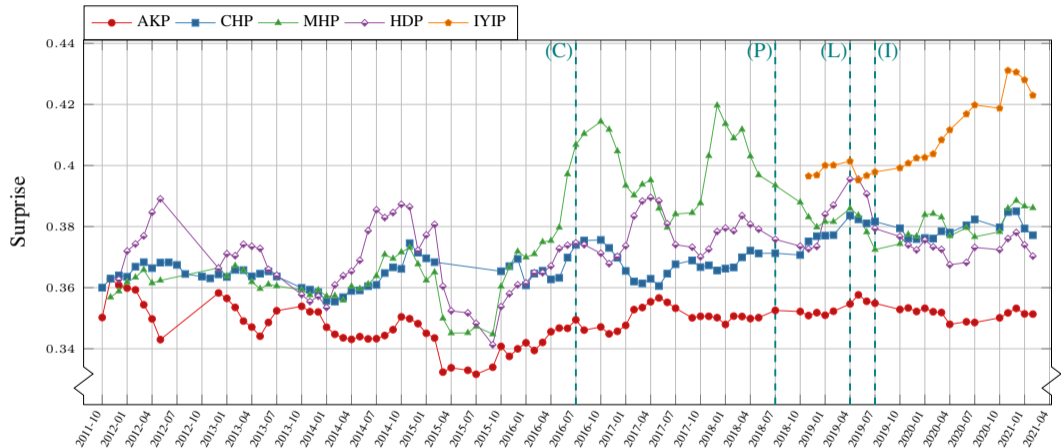
# A closer look at 'sadness'



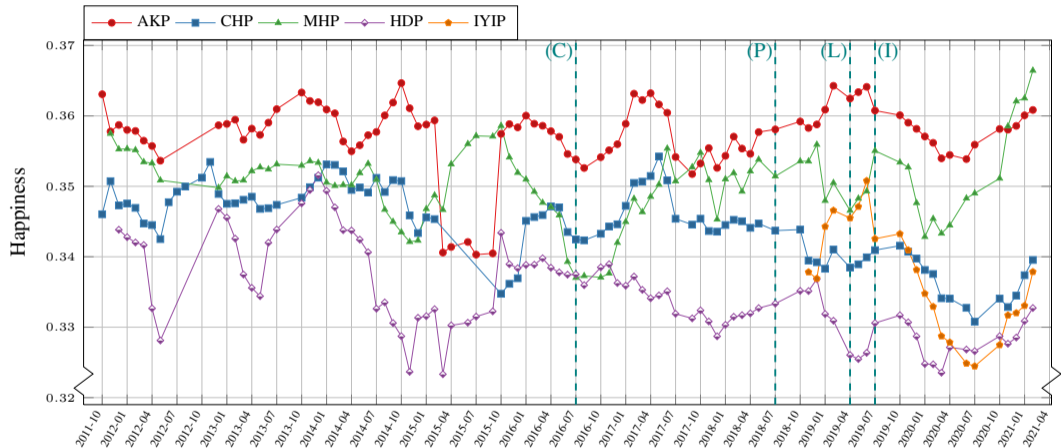
# A closer look at 'disgust'



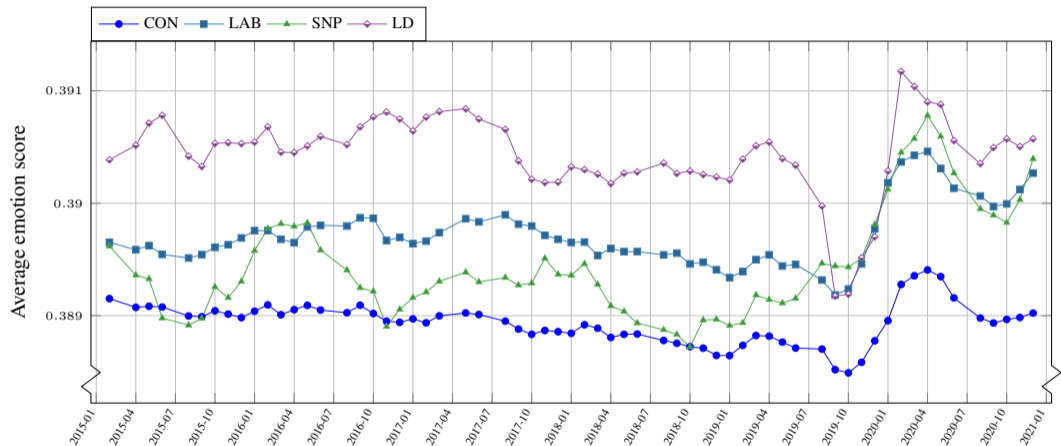
# A closer look at 'surprise'



# A closer look at 'joy'



# Emotions in UK parliament (per party)



# Emotions in UK parliament (per emotion)

