

## Background

Turkey has been hosting roughly 3.5 million Syrian refugees since the onset of Syrian Civil War in 2010. Hate against them increased as the economy slumped and the regime gradually morphed into an electoral autocracy.

31 March 2019 marked a flashpoint when Erdoğan's ruling AKP faced its first major electoral defeat in the local elections at the hands of the opposition. Instead of conceding defeat in the metropolis — Istanbul — the government called the elections rigged, and decided to reconvene them three months later on 23 June 2019.

We leverage this *natural experiment* to understand how such electoral dynamics affect attitudes towards refugees.

## Theoretical Framework

- Negative emotions arise when goal-directed behavior is obstructed.
- Electoral disruptions under autocratic regimes increase public frustration for this reason.
- Collective frustration must be vented for the healthy functioning of society.**
- Direct expression of dissent against the regime is highly costly in autocratic regimes.**
- Frustration emanating from adverse electoral dynamics is directed against refugees, the weakest group in society, incapable of fighting back.**
- Society reverts to homeostasis once excess frustration is vented and goal-directed behavior is achieved.

## Hypothesis

**H1:** Hate against refugees increases as the electoral process is disrupted (after March elections).

**H2:** Hate against refugees dissipates once electoral balance is restored (after July elections).

## Data

**321,741 Turkish language tweets** from 6 January to 15 September 2019 containing 'Suriyeli' (Syrian) and 'Suriyeliler' (Syrians) scraped using *snsrape* from Twitter.

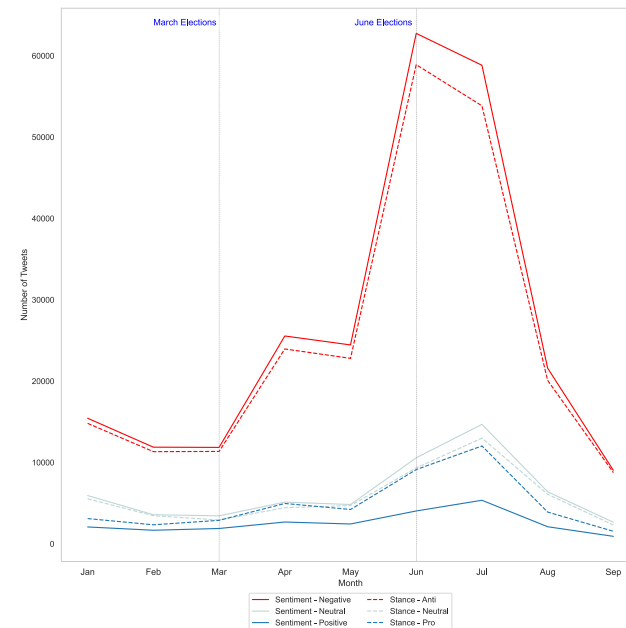
## Future Directions

- Testing our hypotheses on broader timeline (2010-2022, ~14 elections) using roughly 5 million tweets.
- Testing the influence of anti-refugee parties' rhetoric (tweets) on attitudes towards refugees.
- Refining the analysis by annotating more tweets.

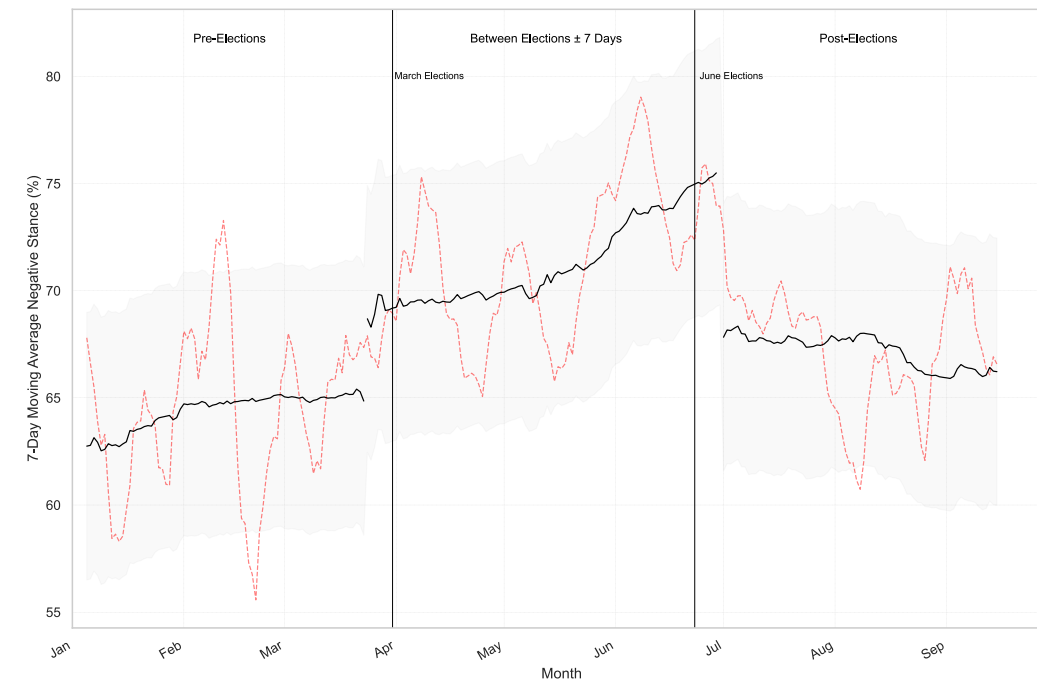
## Method

- Manually annotated 7,500 tweets** for *Sentiment* (Positive, Negative, Neutral), *Stance* towards refugees (Pro, Anti, Neutral), Ekman's basic *Emotions*, *Intergroup Threats*, and *Topics* (see Fig. 3).
- Fine-tuned** a Sentence Transformer-based Turkish **Large Language Model** for the classification task using the aforementioned annotated Tweets.
- Used **Piecewise Regression Design** to probe the effect of election postponement on *negative stance towards refugees* by comparing *between elections period* to *pre-elections* and *post-elections* periods ( $\pm 12$  weeks from election dates).

## Results



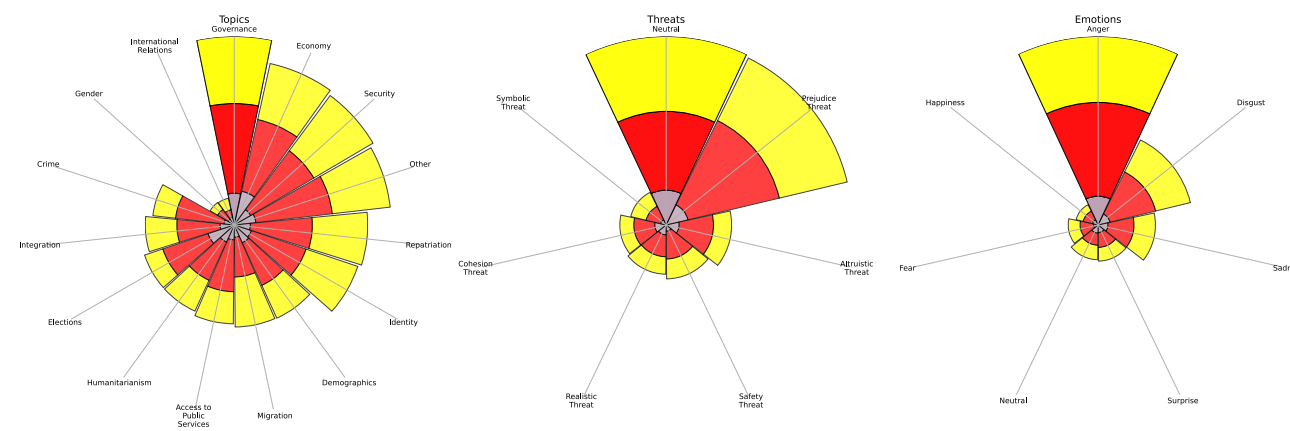
**Fig 1.** Percent Negative Stance towards the refugees before, between, and after March and June elections.



**Fig 2.** Piecewise Regression results for 7-day moving average of negative stance.

Variable	Coefficient
Intercept	86.61 ***
Time (Days)	0.03 **
Between Elections	0.57
Post-Elections	10.71 ***
Time x During Elections	0.04 **
Time x Post-Elections	-0.06 ***
Ex. Rate (TL to USD)	-4.42 ***
<b>Model Summary</b>	<b>R<sup>2</sup>: 0.53 – F-stat: 46.31***</b>

**Tab 1.** Piecewise Regression results with Pre-election period as reference category, and daily exchange rate variability as counter-factual.



**Fig 3.** Distribution of Topics, Emotions, and inter-group Threats over pre-, post-, and between-elections periods.

## Take Away

Electoral disruption in Turkey did increase negative attitudes towards refugees as the electorate decided to vent their frustration against them instead of the government where doing so could bear significant personal costs.

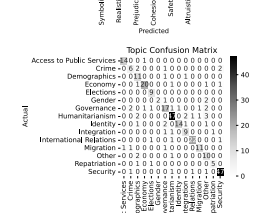
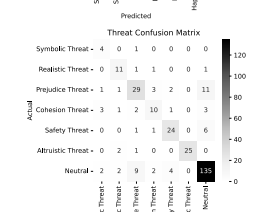
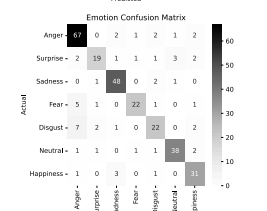
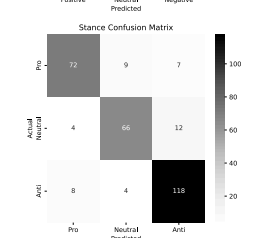
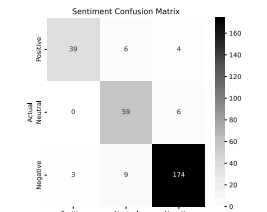
## Limitations (addressed in Future Directions)

- Single election (plan to extend the study to multiple elections; we have the data).
- Testing the influence of anti-refugee parties' rhetoric (tweets) on attitudes towards refugees (data required; in-process).

## Classification Metrics:

Task	Standard ML Algos		LLM Fine-Tuning	
	Test F1 Score	Test ROC AUC	Test F1 Score	Test ROC AUC
Sentiment	0.83 (LR)	0.90	0.90	0.95
Stance	0.77 (LR)	0.85	0.94	0.94
Emotions	0.56 (LR)	0.82	0.95	0.95
Topics	0.55 (LR)	0.83	0.96	0.96
Threats	0.46 (LR)	0.79	0.94	0.94

Based on test-set of 300 random sampled tweets.



## Scan for detailed analysis

