#Secim2023 Report: Analysis of Ekrem Imamoglu's Legal Case

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Introduction

Political shocks in the current electoral agenda of Turkey can boost public attention and change the political configuration on social media trends. Social media has become a useful laboratory of capturing such political tendencies[1, 2, 3, 4, 5]. The interplay between political behavior on social media and the dynamics of politician's follower networks during specific events is a crucial subject[6], particularly in the context of detecting coordinated inauthentic actions and political disinformation. Analyzing these dynamics involves examining follower trends, networks, tweet streams, and hashtag manipulation within such events. As democratic erosion becomes more prevalent in Turkey[7], social media platforms have taken on a heightened significance in reflecting people's online political behavior[8] However, these platforms are occasionally compromised by malicious social bot and troll activities[9, 10, 11, 12, 13, 14]. Therefore, we also underline the significance of concerted topic manipulation based on the Imamoğlu case.

The recent case of Ekrem İmamoğlu in Turkey illustrates this phenomenon, as it became a widely discussed topic that influenced conversations on social media. İmamoğlu faced legal challenges from the Supreme Electoral Council (YSK) in November 2019, with the indictment accepted in May 2021. The sentencing of 2 years, 7 months, and 14 days on December 14, 2022, further escalated the issue across mainstream and social media platforms. Our analysis of social media trends before and after the decision, including total tweet counts, follower number fluctuations, bot activity, and trending topics, provides insight into the public's engagement with this political event.

Analysis and Results

Dataset

This study uses data compiled as part of a social media project conducted by VRL Lab at Sabanci University. Specifically, in this study, we are preparing for the 2023 elections, and we plan to use the data collected from publicly available social networks and online sources in the context of combating disinformation during the election period. We are also regularly sharing the data set, called Secim2023 [15], as an open source.

How have user behavior and politicians' activities changed on social media?

The number of discussions on social media about the decision on Ekrem İmamoğlu significantly increased after the announcement of the decision. The contents related to İmamoğlu's Saraçhane call and the details of the case were extensively discussed. Therefore, the amount of social media content significantly increased compared to the discussions observed in Turkish politics the previous week, and the case remained on the agenda for 3 days as shown in Fig.1.

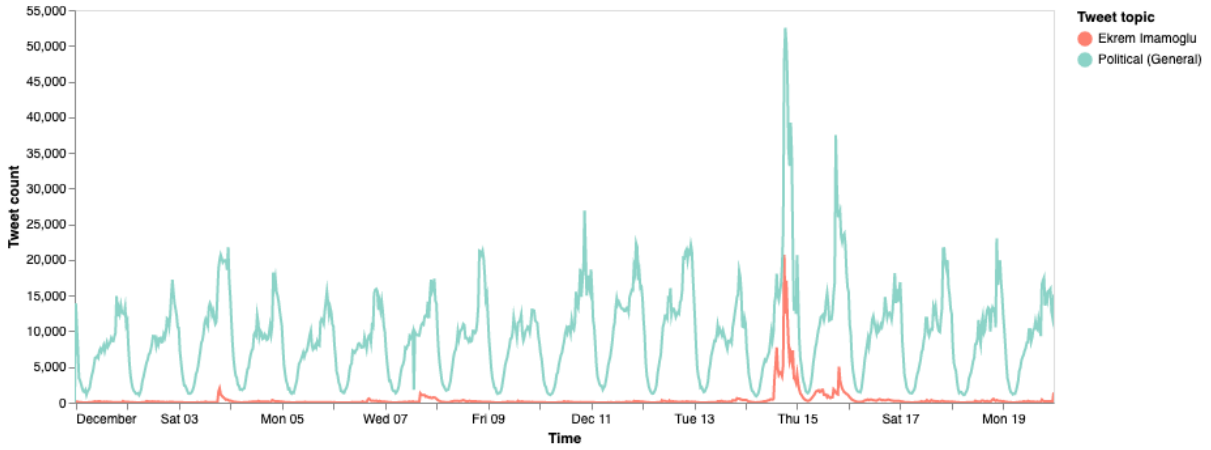

Figure 1: Hourly volume of activities compared for tweets about Ekrem Imamoglu and general political discussion. We observed increased activity on December 14th.

Users who wanted to support Ekrem İmamoğlu and be informed about his shares increased the number of followers by following his account. During this process, the number of followers of the account belonging to Ekrem İmamoğlu showed a change from around 7.5 million to around 63,000 net followers on December 15, but this increase did not continue in the following days and returned to the normal change trend afterward (see Fig.2).

Among the accounts we follow, the accounts that gained the most followers in the past week show that Ekrem Imamoglu has the account with the most observed net follower increase, while Sera Kadıgil, Meral Akşener, and Mansur Yavaş stand out as other political actors. As the dynamics of gaining and losing followers are particularly significant in the analysis of interactions with fake followers, we want to share follower change monitoring system.

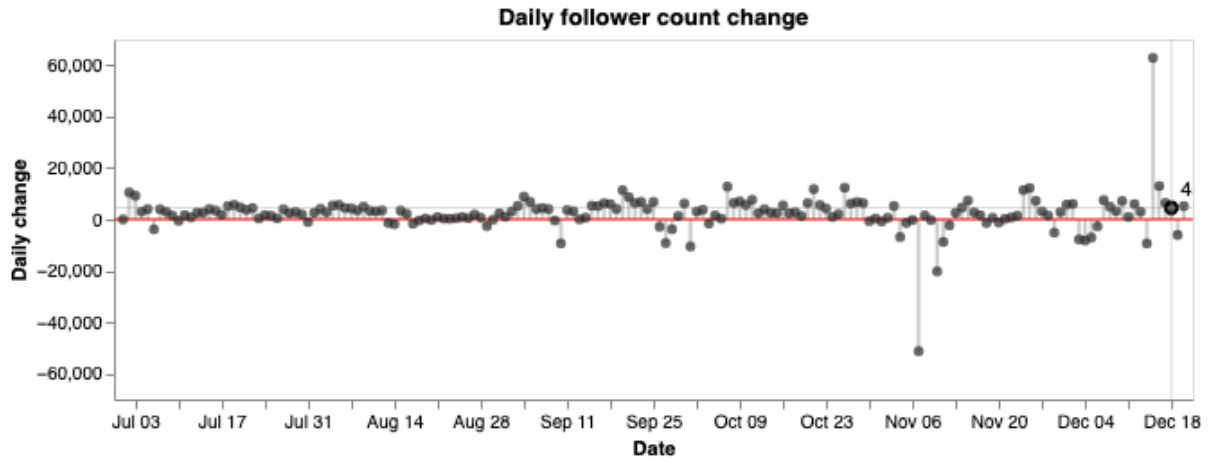

Figure 2: Daily changes of follower counts.

The relationship between the issues of political content with the agenda?

There are comments on content made visible by bots on social networks. To examine this, we also looked at the postings on December 15 and the profiles of the accounts that created

these contents. We carried out separate analyses of the distribution of these accounts according to the general Turkish politics and the most frequently used hashtags based on the scores of the bots calculated.

In the network analysis in Fig. 3 a relationship network of Turkish political tweets shared on December 15 was created based on the co-occurrence of hashtags in different tweets. The sizes of the nodes are proportional to the frequency of use of the hashtag, and the colors are related to the intensity of topics related to Ekrem İmamoğlu (blue for more tweets, red for fewer tweets). Here, we can see that a significant portion of the interactions are related to the case, with the general themes being the Saraçhane rally and content supporting the outcome of the case.

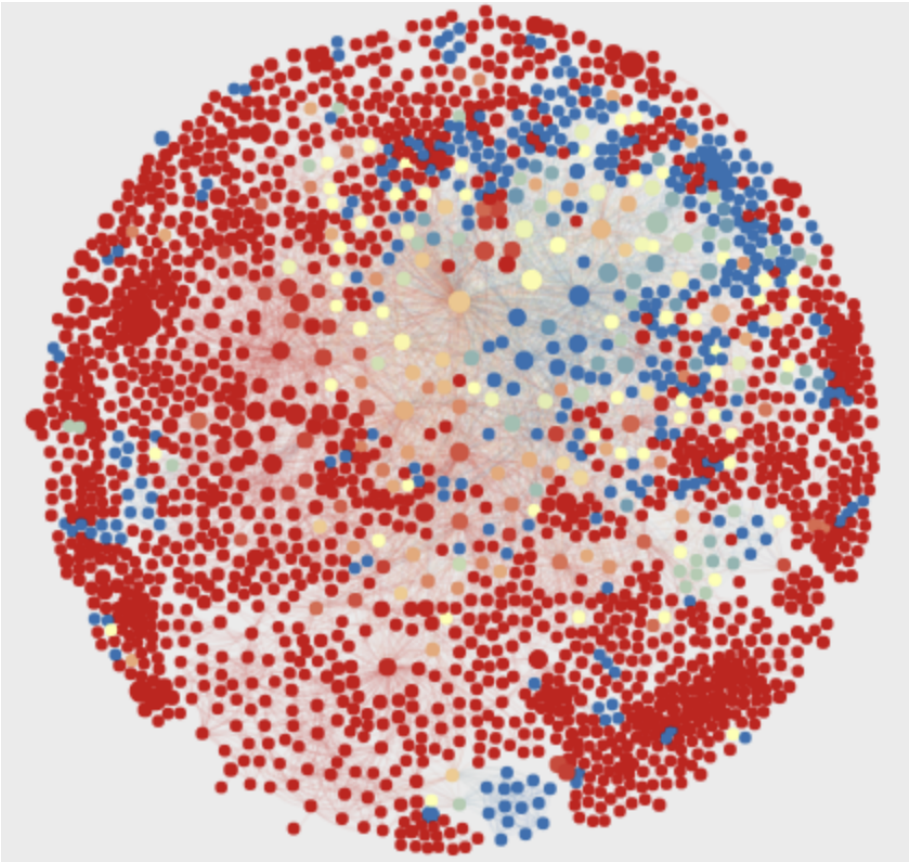

Figure 3: Hashtag co-occurrence network coloured by intensity of topical use with Ekrem Imamoglu tweets.

One thing to consider when analyzing hashtags at the bot level is the content with which these hashtags are shared. Some bot accounts use popular hashtags as a tool to make their content visible. In particular, the presence of seemingly unrelated hashtags in the same tweet can be revealing in this regard. Most of the pornographic content shared in Turkey (for example, *#buca* can be given as an example in the pictures below) follows this strategy. Seeing the names of different cities and neighborhoods among the hashtags most frequently observed in our data set can be explained by these factors. It is quite easy to say that these accounts are bots when looking at the accounts that produce this content, but making inferences without considering such mechanisms can be very misleading.

In the analyses we created for bot detection, two plots were used. The left plot shows the distribution of bot scores for accounts sharing certain content. High scores show that the machine learning system used is more certain that the accounts show bot behavior. The densities of the points in the distributions show which types of accounts are effective

in spreading the message. Of course, some accounts being more active than others also affects these distributions when viewed at the message level. The right plot shows the relationship between the number of shares made by each individual account and their bot scores.

When looking at the most used hashtags on December 15 according to the data we have obtained, it can be said that posts related to the amnesty law and teacher appointments are made visible by bots based on the abundance of shares made by accounts with high bot scores. There are over 73,000 tweets written for *#mhpücrtliögrtkadrohaktır*. The other two most used hashtags are *#genelaf* and *#buca*.

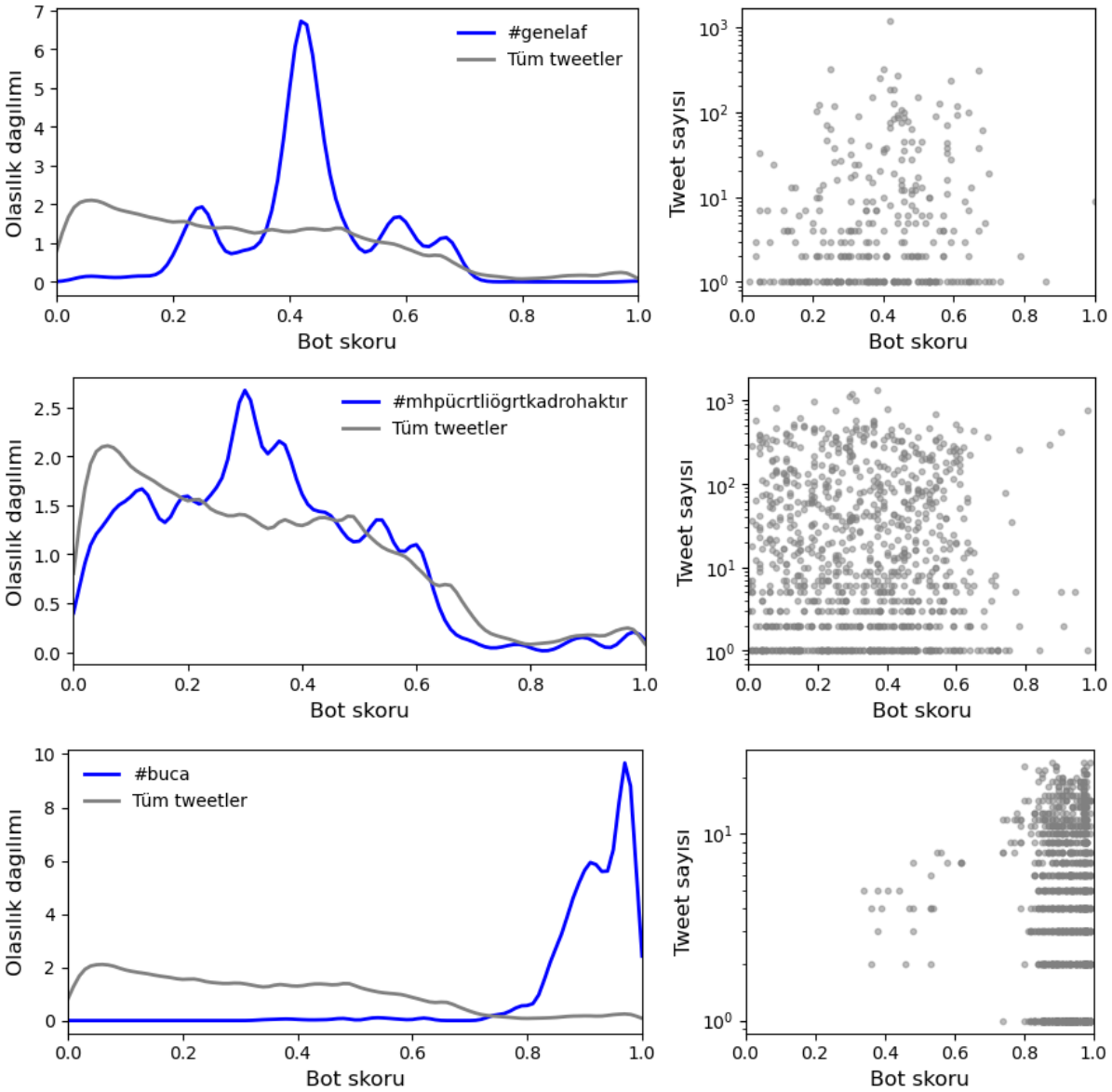

Figure 4: Analysis for suspicious hashtags compared to baseline political tweets. Bot score distributions presented on the left and number of tweets and corresponding bot scores of tweeting account shown in the right.

When looking at hashtags more related to the agenda, there is no different distribution than that of average political content. For example, *#ekremimamoğlu* has been shared over 5500 times. It is possible to examine the other contents used with this hashtag from the co-use network shared above. In addition, we repeated our analyses for *#istanbulyargılanıyor*, *#sarachane*, and variations of these hashtags using different letters (such as ı, i, and c, ç).

In these analyses, the number of accounts using the same hashtag more than 10 times is very limited.

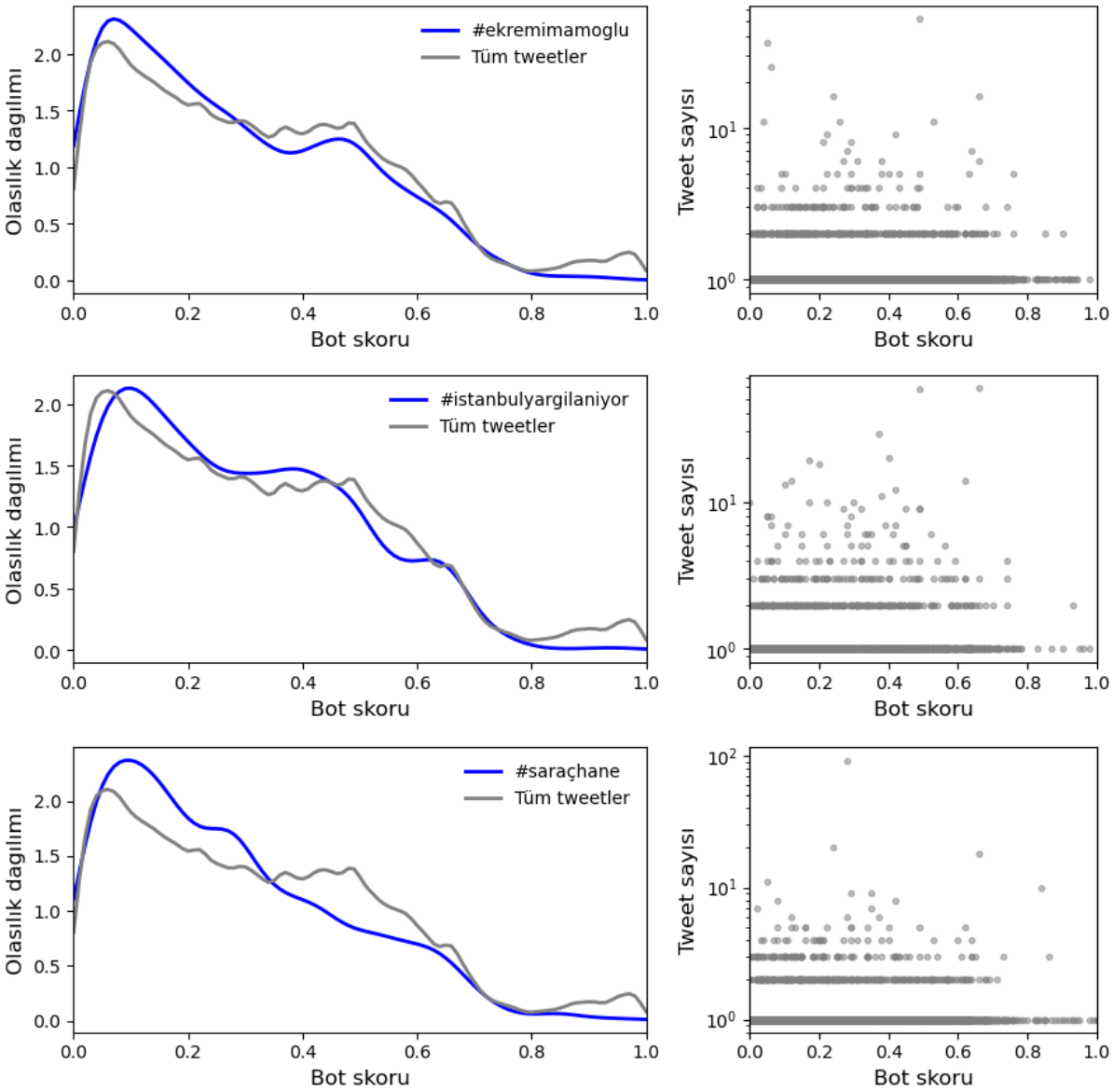

Figure 5: Analysis for hashtags about Ekrem Imamoglu compared to baseline political tweets. Bot score distributions presented on the left and number of tweets and corresponding bot scores of tweeting account shown in the right.

Discussion

The Ekrem İmamoğlu case in Turkey serves as a prime example of how political events can influence social media dynamics. Our comprehensive analysis of social media trends, encompassing tweet counts, follower numbers, bot activity, and trending topics, sheds light on both authentic and inauthentic public engagement during this event. Utilizing the VRL Lab at Sabanci University's dataset, Secim2023, we gain valuable insights into user behavior and politicians' activities on social media, as well as the intricate relationship between political content and the public agenda. It has been observed that after the recent case, İmamoğlu has gained more followers on social media, indicating that he is receiving

increased public attention in that domain. Additionally, the government's attempts to apply pressure on İmamoğlu seem to have backfired, as they have only served to bring more public scrutiny upon him. Furthermore, there is little evidence to suggest that there has been a coordinated effort to engage in inauthentic actions against İmamoğlu on social media platforms.

Although there were instances where bots manipulated certain hashtags and content related to the İmamoğlu case, our research indicates that the broader public discourse remained authentic, and that any inauthentic activity had a minimal impact. This study underscores the significance of ongoing examination and surveillance of social media interactions during political upheavals, whether they occur during electoral or non-electoral events. Through such scrutiny, we can gain a deeper comprehension of the underlying dynamics and uncover possible instances of online manipulation that users may not be aware of.

Furthermore, interactive user interfaces contribute to the public's awareness of potential online political activity and manipulation during significant political events. By understanding the strategies employed by malicious actors to distort public opinion, users can become more discerning in their engagement with social media content. In future research, it would be beneficial to extend the scope of this analysis to other political shocks and contexts, examining the similarities and differences in social media dynamics and user behavior. Additionally, exploring the effectiveness of countermeasures against online manipulation and the role of social media platforms in mitigating such threats will be crucial in preserving the integrity of political discourse. Ultimately, our research underscores the need for insistence on monitoring social media activity during significant political events, as well as the importance of raising public awareness about potential online manipulation. By doing so, users and researchers can help foster a more transparent and authentic political discourse on social media platforms.

Contributions

All VRL lab members contributed to the discussions. OV conceived and planned the research, contributed to data collection, analysis, and report writing. AN and YZ analyzed the data and prepared interactive visualizations. NM contributed data analysis, literature review and writing.

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