Devam vs. Tamam: 2018 Turkish Elections

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Abstract. On June 24, 2018, Turkey held a historical election, transforming its parliamentary system to a presidential one. One of the main questions for Turkish voters was whether to start this new political era with reelecting its long-time political leader Recep Tayyip Erdogan or not. In this paper, we analyzed 108M tweets posted in the two months leading to the election to understand the groups that supported or opposed Erdogan’s reelection. We examined the most distinguishing hashtags and retweeted accounts for both groups. Our findings indicate strong polarization between both groups as they differ in terms of ideology, news sources they follow, and preferred TV entertainment.

Keywords: Turkish Elections, Erdogan, Turkey, Political Polarization

1 Introduction

On April 18, 2018, the Turkish president Recep Tayyip Erdogan announced early elections for the presidency and the parliament that would bring into force the constitutional changes that were approved by referendum on April 16, 2017. The constitutional changes would transform Turkey from a parliamentary system to a presidential system. With the office of the president enjoying significantly increased powers, these elections are highly consequential for Turkey. There were several presidential candidates representing the different Turkish political blocks such as conservatives, seculars, nationalists, and Kurds. Given the front runner status of the incumbent candidate Recep Tayyip Erdogan, we focus in this paper on those who support him and those who oppose him in favor of other candidates.

Ten days after the announcement of the elections, we started to crawl tweets by tracking keywords relevant to the elections. As of June 23, 2018 (i.e., until the elections), we crawled 108M tweets. Using a semi-automatic labeling followed by a label propagation method, we labeled roughly 652.7K twitter users, of which 279.2K are pro-Erdogan and 373.5K are anti-Erdogan.

Next, we analyzed the most distinguishing hashtags and retweeted accounts for each group. In our analysis, we found that anti- and pro-Erdogan groups follow different news media, have different demands from the governments and even watch different TV series, suggesting strong polarization that goes beyond political preferences.
2 Background

Turkey has been enjoying democratic elections since 1950. While official results are announced by Supreme Election Council of Turkey\(^3\) votes are counted by the members of political parties collectively, with each of them obtaining a copy of election results for each ballot box. Furthermore, elections and the counting process are also observed by international institutions. Therefore, the election process is usually considered secure and the results are accepted peacefully by all political parties.

As a result of referendum on April 16, 2017, Turkey has made significant changes in its constitution, giving more power to the president. While the first election with the new constitution had been scheduled for 2019, the Turkish president Recep Tayyip Erdogan announced early elections to be held on June 24, 2018. In this election, Turkish citizens cast two different ballots, one for the presidency and the second for parliament. Voter participation rate in both ballots was 86.24%.

Eight political parties participated in parliamentary elections, namely:

1. The Justice and Development Party (AKP) which is Erdogan’s party
2. The Nationalist Movement Party (MHP)
3. The Republican People’s Party (CHP)
4. The People’s Democratic Party (HDP)
5. The Iyi (good) Party (IYI)
6. The Saadet (felicity) Party (SP)
7. The Free Cause Party (Huda-Par)
8. The Motherland Party (VP)

These parties offer a wide ideological spectrum for Turkish voters. For the first time in Turkish elections history, parties were also allowed to make alignments for parliamentary elections. AKP and MHP formed the “Public’s Alignment”, while CHP, IYI and SP formed the “Nation’s Alignment”, bringing parties with different ideological background together. Table 1 lists the political parties who participated in parliamentary elections and their election results.

In the presidential elections, there were 6 candidates, namely Recep Tayyip Erdogan (AKP), Muharrem Ince (CHP), Selahattin Demirtas (HDP), Meral Aksener (IYI), Temel Karamollaoglu (SP), and Dogu Perincek (VP). MHP and Huda-Par announced their support for Erdogan in the presidential election. Table 2 lists the results of the presidential election.

Other organizations with political influence include the Liberal Democratic Party, which is a liberal party, and the Hizmet Hareketi (service movement), which is a civil movement that the government refers to it as G"ulenist Terror Organization (FETÖ) and accuses it of orchestrating the failed coup attempt in 2016. Also, Kemalist ideology, referring to principals of Mustafa Kemal Ataturk, is prevalent in Turkey, with adherents belonging to varying secular and nationalist parties.

\(^3\) [http://www.ysk.gov.tr/](http://www.ysk.gov.tr/)
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| Party | Description | Alignment | Election Results |
|-------|-------------|-----------|------------------|
| AKP   | Erdogan’s party | Public | 42.56% |
| MHP   | Turkish nationalist party | Public | 11.1% |
| CHP   | Secular party founded by Ataturk | Nation | 22.65% |
| İYI   | Turkish nationalist party founded by mostly ex-members of MHP | Nation | 9.96% |
| SP    | Islamist party | Nation | 1.34% |
| HDP   | Secular Kurdish party that is mostly criticized for not distancing itself from the Kurdistan Workers Party (PKK), which is considered a terrorist group by Turkey, USA and many European countries. | None | 11.7% |
| Huda-Par | Kurdish Islamist party | None | 0.31% |
| VP    | Left-wing nationalist party | None | 0.23% |

Table 1. Political parties participated for parliamentary elections on June 24, 2018. Abbreviations are used based on their official Turkish name.

| Candidate Name       | Party | Election Results |
|----------------------|-------|------------------|
| Recep Tayyip Erdogan | AKP   | 52.59%           |
| Muharrem Ince        | CHP   | 30.64%           |
| Selahattin Demirtas  | HDP   | 8.40%            |
| Meral Aksener        | İYI   | 7.29%            |
| Temel Karamollaoglu  | SP    | 0.89%            |
| Dogu Perincek        | VP    | 0.20%            |

Table 2. Presidential candidates and election results.

3 Data Collection and Labeling

We collected tweets relating to Turkey and the elections starting on April 29, 2018 until June 23, 2018 – the day before the election. We tracked keywords related to the elections including political party names, candidate names, popular hashtags during this process (e.g., #tamam and #devam), famous political figures (e.g., Abdullah Gul, the former president of Turkey) and terms that may impact people’s vote (e.g., economy, terrorism and others). We wrote keywords in Turkish with Turkish alphabet, which contains some additional letters that do not exist in the English alphabet (e.g., ç, ı, ü). Next, we added versions of these keywords written strictly with English letters (e.g., “Erdoğan” instead of “Erdogan”) allowing us to catch non-Turkish tweets about elections.
In the process we collected 108 million tweets. Our first step was to label as many users by their stance as possible. The labeling process was done in two steps, namely:

– **Manual labeling based on user names.** We assigned labels to users who explicitly specify their party affiliation in their Twitter name and screen name. We made one simplifying assumption, namely that the supporter of a particular party would be supporting the candidate supported by their party. We extracted a list of users who use “AKParti” (official abbreviation of AKP), “CHP”, “HDP”, or “IYI” in their Twitter user or screen name. We labeled the people who used “AKParti” as “pro-Erdogan”, while the rest as “anti-Erdogan”. Though “MHP” officially supported Erdogan in the election, we feared that the MHP supporters might not be universally supporting Erdogan.

Further, the incumbent and front runner status of Erdogan caused his supporters to use the hashtag #devam (meaning “continue”) and his opponents regardless of their political affiliation to use the hashtag #tamam (“enough”). Thus, we labeled users who had the hashtags #devam or #tamam in their profile description as supporting or opposing Erdogan. Lastly, users who had the hashtag #RTE (Recep Tayyip Erdogan) in their profile description were labeled as pro-Erdogan.

While providing a political party name as a part of twitter user profile is a strong indication of supporting the respective party, we manually checked all extracted names to ensure the correctness of labels. For instance, we found that some users expressed that they are against a particular party in their user name instead of supporting it. Therefore, whenever we suspected that keywords we used for labeling were not indicative of their political view, we manually investigated the accounts and removed their labels if their political views were unclear. Table 3 shows the number of our manual labels.

– **Label propagation.** Label propagation automatically labels users based on their retweet behavior [4]. The intuition behind this method is that users that retweet the same tweets most likely share the same stances on the topics of the tweets. Given that many of the tweets in our collection were actually retweets or duplicates of other tweets, we labeled users who retweeted 10 or more tweets that were authored or retweeted by the pro- or anti- groups and no retweets from the other side as pro- or anti- respectively. We iteratively performed such label propagation 11 times, which is when label propagation stopped labeling new accounts. After the last iteration, we were able to label 652,729 users of which 279,181 were pro-Erdogan and authored 28,050,613 tweets and 373,548 were anti-Erdogan and authored 31,762,639 tweets. Figure 1 shows the histogram of the pro- and anti-Erdogan tweets for the period of study. As the figure shows, interest in the election has steadily increased on average as the election day approached. There was a large drop in tweet activity around June 15, which corresponds to the end of Ramadan holiday (Ramazan Bayrami) and is a public holiday. Also, the anti-Erdogan group
produced a greater number of tweets on most days, with the gap widening in the last few days of the campaign.

| Supporters                | No. of Labeled Users |
|---------------------------|----------------------|
| pro-Erdogan               | 1,777                |
| anti-Erdogan w/out party affiliation | 2,134                |
| pro-CHP                   | 833                  |
| pro-IYI Party             | 900                  |
| pro-HDP                   | 357                  |

Table 3. Number of Manually Labeled Users (3,866 Unique Users).

Fig. 1. Histogram of pro- and anti-Erdogan tweets

4 Analysis

Next we analyzed the data to ascertain the differences in interests and focus between both the pro- and anti-Erdogan groups as expressed by the hashtags that they use and the accounts that they retweet. Doing so can provide valuable insights into both groups [12]. To compute a relative importance score that accounts for the frequency of use by either group and the gap in use between both camps, we used the following formula:

\[
\text{score} = \text{tp} \times \text{tpr} \times (1 - \text{fpr})
\]  

(1)
where $tp$ and $fp$ are the number of times used by 1$^{st}$ and 2$^{nd}$ groups respectively, $tpr$ is the ratio within 1$^{st}$ group ($tp/total_A$), and $fpr$ is the ratio within 2$^{nd}$ group ($fp/total_B$). Thus, the greater the usage within a group and the disparity between usages in both groups, the greater the score. This formula is a variation on the Odds Ratio Numerator \[3\].

Tables 4 and 5 list the top 50 hashtags and top 50 retweeted accounts for both groups organized by category. Table 8 summarizes both tables and provides percentages for each category. As the Table 8 shows, more than 51% of hashtags used by the pro-Erdogan group were in positive praise of Erdogan and AKP, Erdogan’s party, compared to 10.8% of the hashtags dedicated to attacking other presidential candidates and their parties. This ratio is roughly 5 to 1. On the other side, roughly a third of the hashtags on the anti-Erdogan camp praised the other presidential candidates and their parties and roughly a fifth of the hashtags were attacking Erdogan and AKP. This ratio 1.7 to 1. The large difference in ratio could be explained by the front runner status of Erdogan, where his proponents did not need to attack his opponents and instead needed to maintain a positive message. Though both groups discussed different social issues such as retirement, compulsory military service, and animal rights, the Palestinian issue featured prominently for the pro-Erdogan group. We proceeded to compare both groups based on the Palestinian issue by considering the union of the top 20 hashtags that mention Jerusalem (Turkish: Kudüs, English: Quds), Palestine (Turkish: Filistin, English: Palestine), or Nakba (meaning: catastrophe in Arabic) for both groups. As the comparison in Table 10 shows, though both groups tweeted about the issue, the pro-Erdogan group were more than 6 times more likely to mention the Palestinian issue. Further, though some hashtags were common to both groups, some were dominated by one group. For future work, we plan to see if this discrepancy between both groups are an artifact of the climate surrounding the election or the difference more systematic.

One of the things that caught our eye is the appearance of the names TV series in the top 50 hashtags. Thus, we were curious if other TV series that users from both group refer to. We obtained a list of 320 Turkish TV series that aired since 2014 to the present from Wikipedia\[4\]. Table 11 lists the series that were mentioned as hashtags with their full names at least 500 times and the percentage and count of mentions for both pro- and anti-Erdogan groups. Two observations are quite apparent:

- TV series preferences follow directly from political positions and show a very high level of polarization. For example, the top 3 series in the table are mentioned more than 99% of the times by anti-Erdogan users.
- Anti-Erdogan users refer to TV series much more often than pro-Erdogan users suggesting that they are larger consumers of TV series.

We also examined the top retweeted accounts for anti- and pro-Erdogan accounts. We manually checked the accounts to identify their identity and political

\[4\] https://en.wikipedia.org/wiki/List_of_Turkish_television_series
view. In order to identify political view of users, we checked their profile descriptions, most recent tweets and also profile pictures. For instance, users who use a picture of Ataturk for their profile or background image are assumed to be "Kemalist/Ataturkist".

Concerning the top retweeted accounts (Tables 6, 7, and 9), there are a few interesting patterns, namely:

– Official party accounts and ranking party member accounts accounted from the majority of retweets for the anti-Erdogan group (51.8% – 3.04 M tweets), while such accounts constituted roughly a third of retweeted accounts for the pro-Erdogan group (33.5% – 1.52 M tweets).

– The most retweeted journalist by pro-Erdogan accounts are either freelance journalists or work for online news portals. Only two journalist work at regular newspapers (Gunes and Posta). On the other hand, all top retweeted journalists by anti-Erdogan accounts work (or have worked before) at popular TV channels or newspapers.

– Both groups retweet tweets from regular people who seems popular on social media. However, we often observed strong ideological or political positions in these accounts. For example, 4 (out of 9) of the top retweeted accounts by anti-Erdogan group use pictures of Ataturk in their profile suggesting that they are Kemalists. Conversely, 2 (out of 6) of the top retweeted accounts by pro-Erdogan group use the picture of Erdogan in their profile. None of the regular accounts retweeted by pro-Erdogan group is identified as Kemalist.

– Both groups retweeted accounts that don’t have a clear owner such as RTE-Canli (Erdogan Live), which is dedicated to spreading positive news about Erdogan, and siyasifenomen (political phenomena), which is a dedicated anti-AKP account. However, the percentage of such retweets for the pro-Erdogan group was 24% compared to 10.7% for anti-Erdogan group.

– Pro-Erdogan accounts were far more likely to retweet state media, while anti-Erdogan group rarely do so. For example, TRTHaber was retweeted 70,711 and 1,289 times by the pro-Erdogan and anti-Erdogan groups respectively. Also, AnadoluAjansi was retweeted 61,623 and 1,232 times for both groups respectively. This is not surprising given that we observed the hashtag #kapagitcin (Turn off (state media)) being used by the anti-Erdogan group. On the other hand, the anti-Erdogan group was far more likely to retweet foreign news sources. For example, sputnik_TR was retweeted 64,767 and 4,907 times by the anti- and pro-Erdogan groups, respectively. Similarly, the retweet counts for BBC Turkce were 47,314 and 2,376 for both groups, respectively.

– While Erdogan uses anti-FETO/PKK rhetoric in his political campaigns very frequently, only 2.7% of retweets belong to accounts dedicated to the opposition of these groups.

5 Conclusion

This paper presents an analysis of pro- and anti-Erdogan Twitter users using more than 108 million tweets related to the Turkish election that were collected
from the period between April 29 and June 23, 2018. We semi-automatically labeled a few thousands users based on their stance towards Erdogan and then we used label-propagation to tag more than 652 thousand users. We examined the most distinguishing hashtags and retweeted accounts for both groups. Our results show strong polarization that go beyond political preferences and extend to which channels people watch and which television series people follow.

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### Table 4. Top 50 pro-Erdogan hashtags

| Category | Hashtag | Freq. | Description |
|----------|---------|-------|-------------|
| pro-Erdogan/Establishment | #devam | 286,463 | continue |
| | #pro-Erdogan/Devam | 286,463 | continue |
| | #AKParti | 65,519 | AKP |
| | #TürkiyeSahilanyor | 52,875 | "Turkey is developing (AKP)" |
| | #WeAreErdogan | 46,201 | "We are Erdogan" |
| | #Erdogan | 45,625 | Erdogan |
| | #ErdoganDemek | 39,573 | "Erdogan means" |
| | #MilletinAdami-MilletinAdayi | 27,812 | "the man of the nation, the candidate of the nation" |
| | #IfitarVakti | 26,522 | "time to be proud" |
| | #VakitAnkaraVakti | 25,439 | "It is Ankara’s time" (AKP) |
| | #DurmakYokYolaDevam | 24,269 | "no stopping" |
| | #AKKadinlarSahada | 23,911 | "women of AK Party are on the field", tweets reporting their activities for elections |
| | #VakitErzurumVakti | 22,959 | "It is Erzurum’s time" (AKP) |
| | #SendeDestekOl | 22,611 | "you too support" pro-erdogan |
| | #ZumrutuAnka | 22,543 | "emerald mythical bird" (Erdogan poem) |
| | #OyunAKPartiye | 22,117 | "my vote to AKP" |
| | #Haziranz | 21,715 | "Turkey, we are ready" |
| | #BiyukLider-İstanbulda | 21,656 | "Great leader is in Istanbul" |
| | #VakitİstanbulVakti | 20,257 | "It is Istanbul’s time" (AKP) |
| | #VakitAdanaVakti | 20,245 | "It is Adana’s time" (AKP) |
| TV shows | #VoteBtsbbmas | 225,714 | Music Awards |
| | #premiosmtvmiaw | 81,629 | Music Awards |
| | #MTVLakpopbts | 71,465 | Music Awards |
| | #Survivor2018 | 23,838 | TV show |
| | #MTVBtkpopbts | 21,903 | Music Awards |
| Election related | #24Haziran | 94,884 | The election day |
| Historical Events | #27Mayis | 36,841 | "27 May", reminding the coup happened on 27 May, 1960. |
| Anti-Opposition | #KimlerKimlerleBeraberbasaramayacaksınız | 48,524 | "who is with who" (anti CHP and HDP) |
| | #CHP | 36,691 | "you will not win" pro-erdogan slogan against anti-erdogan slogan "we will win" |
| | #GeliBakalimMuharrem | 24,457 | "Come here Muharrem" (anti-İnce) |
| | #hatirla | 22,437 | "remember (how turkey has developed)" |
| | #Yksilittifak | 22,175 | "destruction agreement" (anti-opposition) |
| Issues | #ProPalestine | 38,203 | "We stand with Jerusalem" |
| | #WeStandForQuds | 31,340 | 70 years anniversary "Nakba" (Palestinian catastrophe) |
| | #Kudus | 26,483 | "Jerusalem" |
| | #KudusluçinYeniKapdayız | 23,339 | "We are at Yenikapi for Jerusalem", calling for a rally in Yenikapi neighborhood of Istanbul |
| Socio-economic | #uzmanÇavuşlarKimsesizMı | 33,530 | "are sergeants alone" demanding better pay |
| | #UzmanÇavuşlarHakBekliyor | 21,626 | "Sergeants are waiting for their rights" |
| | #4clilerKatebide4bli | 22,903 | Government officers are demanding better pay |
| | #gibi5sin | 25,745 | Demanding positions for agriculture engineers |
| Positions | #ProHüda-par | 23,278 | "Hüda-par is the right one" |
| | #HüdalarDiyorKi | 20,467 | "Hüda-par is saying that" |
| | #ProMHP | 33,876 | MHP |
| | #AntiFETÖ | 20,607 | anti FETO |

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| Category | Hashtag                        | Freq   | Description                                      |
|----------|-------------------------------|--------|--------------------------------------------------|
| Issues   | BedelliAskerlik               | 202,877| military service – pay not to go                |
|          | EmeklilikVeYaşaTakılanlar      | 146,780| demand for early retirement                      |
|          | EYT                           | 75,858 | demand for early retirement                      |
|          | HayvanaSıddetSuçturi           | 15,652 | “violence for animals is a crime” pro animal rights |
|          | Dolar                         | 47,010 | currency devaluation                              |
|          | Euro                          | 24,978 | currency devaluation                              |
| Anti-Erdogan/Establishment | Tamam                         | 242,829| enough (anti-Erdogan)                            |
|          | Erdoğan                       | 57,018 | Erdogan                                           |
|          | KapatGitsin                    | 17,515 | “Turn off” (anti state media)                    |
|          | Sıkıddık                      | 17,146 | “we are bored” (tamam – enough)                  |
|          | AKP                           | 27,287 | AKP                                               |
| Pro-party slogans/candidates | CHP                           | 81,140 | CHP candidate                                     |
|          | Muharremİnce                   | 77,139 | “We will achieve (CHP)                           |
|          | Hepimizin-Cumhurbaşkanı        | 53,640 | “President for All” (CHP)                        |
|          | Muharremİnce-HaberTürkde       | 36,009 | CHP candidate on Haber Turk                       |
|          | CHP                           | 29,060 | CHP                                               |
|          | KilicdarogrûNeSöyledi         | 28,823 | “what did Kılıçdaroğlu say” Quotes from the party leader |
|          | Muharremİnce-CNNTürkde         | 26,485 | CHP candidate on CNN Turk                        |
|          | Muharremİnce-21deNTVde         | 23,473 | CHP candidate on NTV at 9:00 pm                   |
|          | BuSeçiminYıldızıİnce            | 21,565 | “the star of this election is Ince” CHP candidate |
|          | MilletİcinGeliyoruz            | 19,230 | “Coming for the nation” (CHP)                     |
|          | MuharremİnceÇünkük            | 15,663 | “muharrem ince because” CHP candidate             |
| HDP      | demirtaş                      | 71,986 | HDP candidate                                     |
|          | hdp                           | 54,983 | HDP                                               |
|          | SenleDeğiştir                 | 35,878 | “it changes with you” (HDP)                       |
| IYI      | YüzüünüGinegeDönTürkiye        | 59,731 | “Turn your face to the sun” (IYI)                 |
| Saadet Party | değilştir                   | 30,288 | “change” (Saadet)                                |
| TV shows | Vatanım Sensin TV series      | 49,742 |                                                                 |
|          | VatanımSensin                  | 39,894 |                                                                 |
|          | VatanımSensinVeida             | 39,452 |                                                                 |
|          | MirayDaner                     | 15,696 |                                                                 |
|          | BoranKuzum                     | 15,314 |                                                                 |
|          | Survivor TV show              | 29,514 |                                                                 |
|          | survivor2018                   | 20,561 |                                                                 |
|          | Hilmur                        | 28,623 |                                                                 |
|          | Siyah & Beyaz Aşk              | 18,451 |                                                                 |
|          | Asfer                         | 15,041 |                                                                 |
| Election related | AdayıraSoruyorum            | 30,697 | ask the candidates (TV)                           |
|          | 24Haziran                     | 17,456 | election day                                      |
|          | seçim2018                      | 15,309 | 2018 elections                                    |
| Historical Events | 19Mayıs1919                  | 26,744 | anniversary of Ataturk Youth and Sport Festival   |
|          | Gezi5Yaşında                  | 33,718 | 5 year anniversary of Gezi protests              |
| News Media | GazetteSoscu                  | 26,744 | Sozcu Newspaper, Secular Kemalist newspaper      |

*Table 5. Top 50 anti-Erdogan hashtags*

*a the date assumed as Ataturk started the Independence War of Turkey*
| Category       | Account             | Identity                     | Freq.   | Description                                                                 |
|---------------|---------------------|------------------------------|---------|-----------------------------------------------------------------------------|
| AKP           | RT_Erdogan          | Erdogan                     | 388,555 | Official account                                                            |
|               | Akparti             | AKParti                      | 328,863 | Official account                                                            |
|               | 06melihgolkc        | Ibrahim Melih Gökçek         | 165,588 | ex-governor of Ankara                                                       |
|               | SavciSayan          | Savci Sayan                  | 75,689  | Old CHP member but currently an AKP member                                  |
|               | suleymansoylocak    | Suleyman Soylo               | 70,429  | minister of interior affairs                                                |
|               | bayramsenocak       | Hayram Şenocak               | 54,089  | Head of Istanbul branch of AKP                                              |
|               | drbetulsayan        | Dr. Betül Sayan              | 44,006  | ex-minister                                                                 |
|               | BurhanKuzu          | Prof. Dr. Burhan Kuzu        | 43,711  | co-founder of AKP                                                            |
|               | mahirunal           | Mahir ulâl                   | 39,541  | Spokesman of AKP                                                            |
| Gov accounts  | tcbestepe           | Erdogan                     | 222,061 | Official presidency account                                                 |
|               | TC_Basbakan         | Binali Yıldırım              | 101,918 | Prime minister                                                               |
|               | 06melihgolkc        | Ibrahim Melih Gökçek         | 45,013  | Erdogan’s advisor and spokesman of Presidency                                |
| Journalists/  | lathitsezan         | Fatih Tezcan                 | 162,739 | Journalist, analyst                                                          |
| analysts      | omerturantv         | Ömer Turan                   | 88,083  | Journalist, analyst                                                          |
|               | MalikEjder47        | Malik Ejder                   | 66,679  | Freelance journalist                                                         |
|               | turgayguiler        | Turgay Guler                 | 64,025  | Journalist at Gunes Newspaper                                                |
|               | HarunAlanoglu       | Harun Alanoğlu               | 49,986  | Analyst                                                                     |
|               | AsliAydIncer        | Aslı Ay Dinçer               | 47,638  | Journalist                                                                  |
|               | abdullahmahmut      | Abdullah Çıfti               | 47,220  | Political strategist                                                        |
|               | Uzun               | Uzun                         | 41,568  | Journalist                                                                  |
|               | AbdurrahmanUzun     | Abdurrahman Uzun             | 40,734  | Journalist at Posta Newspaper                                                |
|               | nedimsener2010      | Nedim token                  | 36,683  | Journalist                                                                  |
|               | dilmazwriter        | Murat Sarıca                 | 246,125 | Freelance journalist                                                        |
|               | medyaadami          | unknown                      | 222,614 | Pro-Erdogan                                                                |
|               | RTECanli            | unknown                      | 82,839  | Pro-Erdogan                                                                |
|               | HurAktivist         | unknown                      | 68,334  | Pro-Erdogan                                                                |
|               | Malazgirt_Ruho      | unknown                      | 59,125  | Pro-Erdogan                                                                |
|               | maskeli             | unknown                      | 51,779  | Pro-Erdogan                                                                |
|               | TheLaikYobaz        | unknown                      | 45,739  | Pro-Erdogan                                                                |
|               | BestepeCB           | unknown                      | 43,660  | Pro-Erdogan fan page                                                        |
|               | Rnesico             | Knes (no last name)          | 37,815  | Probably pro-Erdogan                                                        |
|               | UstAkilOyunlari     | unknown                      | 118,883 | Pro-Erdogan conspiracy theorist                                             |
|               | siyasetcanli        | unknown                      | 36,867  | Pro-Erdogan news media on twitter                                           |
|               | enveryan            | unknown                      | 72,158  | Defines himself as Armenian (Turkish citizen) academic though the identity is unclear |
|               | dbdevletbahcetli    | Devlet Bahçelt               | 212,735 | MHP leader                                                                  |
|               | MHP_Bilgi           | MHP                          | 94,213  | official account                                                            |
| MHP           | GokhanKahram        | Gokhan Kahram                | 191,614 | popular pro-Erdogan account                                                 |
|               | slmhkttn            | Selami Haktan                | 67,536  | popular pro-Erdogan account                                                 |
|               | gelinNcikAkz        | Cemile                       | 48,110  | Pro-erdogan                                                                |
|               | Trasemir            | unknown                      | 43,149  | Pro-erdogan                                                                |
|               | ugunoral            | Ugur Onal                    | 38,239  | Pro-erdogan                                                                |
|               | AK_suHandan         | Handan Aksu                  | 46,608  | Seems a pro-Palestine account                                               |
| Regular       | Akparti             | AKParti                      | 328,863 | Official account                                                            |
| Twitter users | Sabah            | Sabah                        | 37,261  | anti-FETO/ PKK                                                              |
|               | ntvhaber            | ntvhaber                     | 84,415  | anti-FETO/ PKK                                                              |
| Anti-FETO/PKK | GuliArsivTR         | unknown                      | 37,261  | anti-FETO                                                                  |
| accounts      | FetoGercekleri      | unknown                      | 70,711  | State media                                                                 |
|               | yenisafak           | Yeni Şafak                   | 69,829  | Yeni Safak news paper                                                       |
|               | star gazette        | Star Gazete                  | 68,440  | Star newspaper                                                              |
|               | anadoluajansi       | Anadolu Ajansi               | 61,623  | State news agency                                                           |
| Media         | TRT                 | TRT                          | 37,867  | A Haber news channel                                                        |
|               | yenisafak           | Yeni Şafak                   | 46,599  | AKP media                                                                   |

Table 6. Top 50 retweeted accounts for pro-Erdogan group
| Category               | Account               | Identity                  | Freq.   | Description                                      |
|----------------------|-----------------------|---------------------------|---------|-------------------------------------------------|
| CHP                  | evkilibence           | Muharrem İnce             | 947,866 | CHP candidate                                    |
|                      | erenerdemnet          | Eren Erdem                | 204,782 | ex-parliament member of CHP                     |
|                      | igmcelebi             | Mehmet Ali Celebi         | 156,808 | Leading CHP member                              |
|                      | barisayarkadas        | Barış Yarkadaş            | 78,639  | Leading CHP member                              |
|                      | ATuncayOzkan          | Tuncay Özkan              | 75,491  | CHP member                                       |
|                      | kilicdaroglu          | Kemal Kılıçdaroğlu        | 72,027  | Party Leader                                    |
|                      | aykuterdogdu          | Aykut Erdoğdu             | 66,769  | Leading CHP member                              |
|                      | herkesicinCHP         | CHP                       | 47,960  | official party account of CHP                    |
|                      | senerabdullatif       | Abdullahi Şener           | 44,567  | ex-AKP member but now in the parliament as a member of CHP |
|                      |                       |                           |         |                                                 |
| HDP                  | hdpdemirtas           | Selahattin Demirtaş        | 346,798 | HDP candidate                                    |
|                      | sahmetsahmet          | Ahmet Şık                 | 76,526  | parliament member of HDP                         |
|                      | barisatay             | Barış Atay                | 47,871  | parliament member of HDP                         |
|                      | ayhanbilgen           | Ayhan Bilgen              | 45,415  | Leading HDP member                               |
|                      |                       |                           |         |                                                 |
| TV Party             | meralaksener          | Meral Akşener             | 135,182 | YI candidate                                    |
|                      | jyiparti              |                           | 72,829  | official party account                          |
|                      | AytenCiray            | Ayten Çiray               | 57,962  | Leading YI member                                |
|                      |                       |                           |         |                                                 |
| Saadet Party         | T_Karamollaoğlu       | Temel Karamollaoğlu       | 116,953 | Saadet party candidate                          |
|                      | aliaktas7             | Ali Aktaş                 | 47,648  | lawyer, supporter of Saadet party               |
|                      |                       |                           |         |                                                 |
| Regular Twitter      | kacsatoldunet         | unknown                   | 382,711 | popular anti-Erdogan account                    |
|                      | siyasifenomen         | unknown                   | 138,302 | anti-Erdogan                                    |
|                      | politikaloji          | unknown                   | 54,339  | political view is unclear                       |
|                      | ayyazarozyaarrr       | unknown                   | 53,418  | Probably a kemalist account                     |
|                      |                       |                           |         |                                                 |
| Journalists          | ismailsaymaz          | İsmail Saymaz             | 113,835 | Journalist at Hurriyet newspaper                |
|                      | SedefKabas             | Sedef Kabaş                | 94,243  | Academic/journalist                             |
|                      | fatihportakal         | Fatih Portakal            | 79,317  | journalist at Fox TV channel                    |
|                      | ismaildukeI           | İsmail Dükel               | 75,873  | Journalist at Halk TV channel                   |
|                      | candundaradası        | Can Dündar                | 71,961  | journalist, ex-director of Cumhuriyet newspaper |
|                      | ugduduraroszu         | Uğur Dündar               | 60,593  | Journalist at Sozcu newspaper                   |
|                      | mustafaHoc            | Mustafa Hoş                | 46,368  | journalist, had worked at various news media    |
|                      |                       |                           |         |                                                 |
| Liberal Democratic   | tokcem                 | Cem Toker                 | 84,051  | ex-leader of Liberal Democratic Party          |
| party                |                       |                           |         |                                                 |
| Media                | t24comtr              | t24                       | 78,632  | Online news media                               |
|                      | halktvcomtr           | Halk TV                   | 77,770  | Halk TV channel                                 |
|                      | sputnik_TR            | Sputnik Türkiye            | 64,767  | Russian news media in Turkish                   |
|                      | DikenComTr             | Diken Gazete               | 52,046  | Online news media                               |
|                      | solhaberportali       | Sol Haber                 | 48,796  | Online leftist news media                       |
|                      | sbcturcete            | BBC Turkey                | 47,314  | BBC news media in Turkish                       |
|                      | odatv                 | Oda TV                    | 46,440  | Online news media                               |
|                      | gazetesozcu           | Sözcü Gazetesi            | 254,741 | Sozcu newspaper                                 |
|                      | cumhuriyetgazete      | Cumhuriyet Gazete          | 237,657 | Cumhuriyet newspaper                            |
|                      | BirGünGazetesi         | BirGün Gazetesi            | 113,153 | Birgün newspaper                                |

Table 7. Top 50 retweeted accounts for anti-Erdogan group
Table 8. Summary of 50 top pro- and anti- Erdogan hashtags

| Category                              | Hashtag Count | Percentage |
|---------------------------------------|---------------|------------|
| Pro-Erdogan                           |               |            |
| pro-Erdogan and Establishment         | 1,108,446     | 50.8       |
| TV shows                              | 423,649       | 19.4       |
| Issues                                | 223,169       | 10.2       |
| Anti-OpPosition                       | 197,742       | 9.1        |
| Positions towards others              | 98,228        | 4.5        |
| Election related                      | 93,854        | 4.3        |
| Historical Events                     | 36,851        | 1.7        |
| Anti-Erdogan                          |               |            |
| Pro-party slogans/mentions/candidate  | 665,093       | 34.3       |
| Issues                                | 513,155       | 26.5       |
| Anti-Erdogan or Establishment         | 351,795       | 18.2       |
| TV shows                              | 257,241       | 13.3       |
| Election related                      | 63,462        | 3.3        |
| Historical Events                     | 59,923        | 3.1        |
| News Media                            | 26,744        | 1.4        |

Table 9. Summary of 50 top pro- and anti-Erdogan retweeted accounts

| Category                              | RT Count | Percentage |
|---------------------------------------|----------|------------|
| Pro-Erdogan                           |          |            |
| – AKP                                 | 1,210,471| 26.7       |
| – MHP                                 | 306,948  | 6.8        |
| Both parties                          | 1,517,419| 33.5       |
| Government Accounts                   | 368,992  | 8.1        |
| Journalists/analysts                  | 645,355  | 14.2       |
| Media                                 | 355,069  | 7.8        |
| Regular Twitter accounts              | 435,287  | 9.6        |
| Accounts with nicknames               | 1,085,938| 24         |
| Anti-FETO/PKK accounts                | 121,674  | 2.7        |
| Anti-Erdogan                          |          |            |
| – CHP party                           | 1,694,318| 28.8       |
| – HDP Party                           | 634,341  | 10.8       |
| – IYI Party                           | 465,973  | 7.9        |
| – Saadet Party                        | 164,601  | 2.8        |
| – Liberal Democratic party            | 84,051   | 1.4        |
| All parties                           | 3,043,284| 51.8       |
| Journalists                           | 539,190  | 9.2        |
| Media                                 | 1,021,316| 17.4       |
| Regular Twitter accounts              | 642,137  | 10.9       |
| Accounts with nicknames               | 628,770  | 10.7       |
### Table 10. The union of top 20 Palestine related hashtags for both pro- and anti-groups

| Hashtag                              | Translation                          | Pro % | Pro Count | Anti % | Anti Count | Total |
|--------------------------------------|--------------------------------------|-------|-----------|--------|------------|-------|
| #WeStandForQuds                      |                                      |       |           |        |            |       |
| #Nakba70                             | Jerusalem                            | 38.203| 1,255     | 39.458 |            |       |
| #KudüsInYenikapodayız                  | We are in Yenikapi (rally area) for Jerusalem | 23.339| 1,670     | 25.009 |            |       |
| #Filistin                            | Palestine                            | 14.778| 3,721     | 18.499 |            |       |
| #KudüsInAyaktayız                      | We stand for Jerusalem               | 13.437| 1,670     | 20.000 |            |       |
| #KalbimFilistinde                     | Our hearts are in Palestine          | 7.551 | 3,313     | 10.864 |            |       |
| #ZulmeLandetKudüsDestek                | Cure the oppression, support Jerusalem| 5.716 | 1,331     | 7.047  |            |       |
| #KudüsInSesVer                        | Raise your voice for Jerusalem       | 5.315 | 1,470     | 6.785  |            |       |
| #FilistinInYenikapodayız               | We are in Yenikapi (rally area) for Palestine | 5.568 | 1,184     | 6.752  |            |       |
| #FilistinYaz4032yeGonder               | SMS 4032 to financially support Palestine | 6.144 | 2        | 6.146  |            |       |
| #FreePalestine                        |                                      | 1.475 | 774       | 2.253  |            |       |
| #We are in Yenikapi (rally area) for Palestine | 1.450 | 445       | 1.895  |            |       |
| #Palestine                            |                                      | 1.450 | 445       | 1.895  |            |       |
| #KudüsIslammdir                       | Jerusalem is Islamic                 | 1.702 | 30        | 1.732  |            |       |
| #KudüsümMiğeririRTE                    | RTE (Erdogan) is the helmet of Jerusalem | 395   | 1,096     | 1.491  |            |       |
| #BatmandaKudüsMitiniyi                 | Rally for Jerusalem in Batman (Turkish city) | 1.170 | 61        | 1.231  |            |       |
| #FilistinInBirlik                      | Unity for Palestine                  | 476   | 969       | 1.172  |            |       |
| #KudüseSelahaddinOl                    | Be Salahaddin for Jerusalem          | 874   | 3         | 877    |            |       |
| #FilistineUnutOl                       | Be the hope for Palestine           | 743   | 72        | 815    |            |       |
| #KudüsInGiyamVakti                     | Time to uprise for Jerusalem         | 803   | 1         | 804    |            |       |
| #FreeQuds                             |                                      | 728   | 15        | 743    |            |       |
| #KuduseSahipliÇık                      | Support Jerusalem                   | 520   | 121       | 641    |            |       |
| #Nakba                               |                                      | 328   | 176       | 504    |            |       |
| #QudsBelongsToIslam                    |                                      | 87    | 224       | 311    |            |       |
| #SultanGaziKudüsInAyakta              | Sultan Gazi stands for Jerusalem     | 38    | 177       | 215    |            |       |
| #QudsDay4Return                       |                                      | 46    | 128       | 174    |            |       |
| **Sum**                              |                                      | 190,698| 29,276  | 219,974|            |       |

### Table 11. Most mentioned TV series in the tweets. Types of series are mostly retrieved from IMDB website.

| Series                                      | Type                          | pro % | pro count | anti % | anti count | sum   |
|---------------------------------------------|-------------------------------|-------|-----------|--------|------------|-------|
| Vatansım Sensin                             | Drama, History, Romance      | 67    | 349       | 99.3   | 352        | 691   |
| Siyah Beyaz Aşk                             | Action, Drama, Romance       | 6.6   | 168       | 99.4   | 28,980     | 29,148|
| Adını Sen Koy                               | Drama, Romance               | 0.2   | 32        | 99.8   | 13,093     | 13,125|
| Soz                                         | Action, Drama, War           | 8.8   | 276       | 96.3   | 7,084      | 7,360 |
| Fazilet Hanım ve Kulan                       | Drama                        | 0.4   | 28        | 99.6   | 6,923      | 6,951 |
| Sen Anlat Karadeniz                          | Drama                        | 4.3   | 246       | 95.7   | 5,535      | 5,781 |
| Çukur                                       | Action, Crime, Thriller      | 12.5  | 376       | 87.5   | 2,629      | 2,905 |
| Erkenci Kuş                                  | Comedy, Drama                | 0.5   | 13        | 99.5   | 2,495      | 2,508 |
| Diriliş Ertuğrul                             | Action, Adventure, Drama, History | 79.7 | 1,695     | 20.3   | 4,322      | 4,327 |
| Ufak Tefek Cinayetler                        | Action, Drama, Mystery       | 34.2  | 638       | 65.8   | 1,225      | 1,863 |
| Payitaht Abdülhamid                          | Action, Drama, History       | 93.3  | 1,218     | 6.7    | 88         | 1,306 |
| Cesur Yürek                                 | Action, Drama, Romance       | 0.0   | 100.0     | 1,236  | 1,236      |       |
| Kendin                                      | Drama                        | 39.0  | 445       | 61.0   | 695        | 1,140 |
| Kirahk Aşk                                  | Comedy, Romance              | 2.8   | 26        | 97.2   | 905        | 931   |
| Avlu                                        | Crime, Drama                 | 27.0  | 235       | 73.0   | 634        | 869   |
| Kara Para Aşk                               | Action, Crime, Drama         | 0.9   | 8         | 99.1   | 840        | 848   |
| Yeter                                       | Drama                        | 18.9  | 145       | 81.1   | 622        | 767   |
| Anne                                        | Drama                        | 84.7  | 508       | 15.3   | 92         | 600   |

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**Note:** The percentage values suggest the relative popularity of the hashtags or TV series among the pro- and anti-Palestine groups.