Syrian Refugees, Public Attitudes, Policy Areas and Political Parties in Turkey: A Systematic Analysis of Twitter Data

Osman Zeki Gökçe and Emre Hatipoglu

SYRIAN REFUGEES, PUBLIC ATTITUDES, POLICY AREAS AND POLITICAL PARTIES IN TURKEY: A SYSTEMATIC ANALYSIS OF TWITTER DATA

Osman Zeki Gökçe[1] and Emre Hatipoğlu[2]

Working Paper No. 1469

April 2021

Send correspondence to:
Osman Zeki Gökçe
Istanbul Medipol University
ogokce@medipol.edu.tr

---

[1] Ph.D., Assistant Professor, Faculty of Humanities and Social Sciences, Istanbul Medipol University, Kavacık–Istanbul. ORCID: orcid.org/0000-0002-5819-7841. Twitter: @ogokceo

[2] Ph.D., Research Fellow, KAPSARC (King Abdullah Petroleum Studies and Research Center, Riyadh–Saudi Arabia. E-mail: emre.hatipoglu@kapsarc.org. ORCID: orcid.org/0000-0002-5927-4423. Twitter: @dr_emreh

Abstract

The Syrian refugee problem has become an important topic in Turkish politics. Although public opinion has played an important role in shaping policies towards Syrian refugees, our knowledge of how these attitudes are formed is scant. Taking a four-month snapshot of Turkish tweets on Syrian refugees and utilizing a novel clustering technique allowing hand-coding of their content feasible, this study assessed the relative salience of issues raised relating to refugees and tested users assign culpability to Turkish political parties regarding these issues. Findings confirm the salience of security issues and suggest that attitudes towards Syrian refugees are highly politicized.

1. Introduction

As a result of increasing occurrence of civil conflicts in recent decades, forced migration, and more notoriously refugee flows, has increasingly drawn scholarly attention in international relations. Having engendered myriad political ramifications, refugee flows bring a number of policy challenges, both domestically and internationally, for the host states. Domestically, such challenges have often arose in the areas of healthcare (Morris et al. 2009; Onyut et al. 2009; Iqbal 2006), housing (Carter and Osborne 2009; Murdie 2008; Phillips 2006), education (Waters and LeBlanc 2005), security (Loescher and Milner 2005), and economic integration (Facchini and Mayda 2008; Hanson 2005), among others. Committing resources to address such challenges often come at the expense of other public spending. In addition, increased economic competition with locals and disruption of ethnic balance as a result of hosting and integrating refugees can lead to domestic frictions, which often turn into violence. At a larger scale, such refugee flows also jeopardize domestic security in the host countries by exporting political violence (Gleditsch and Salehyan 2006; Salehyan 2008) and increase public's perceptions of risk associated with hosting refugees (Braithwaite 2018). Such domestic challenges are likely to create resentment among the public, thereby framing public opinion, which, in turn, shape domestic political agenda for host governments.

As to international challenges, refugee flows affect foreign policy of host states in a number of ways. For one thing, many refugee crises include a burden-sharing component among states, either through bilateral/multilateral agreements or through international institutions such as the UN Refugee Agency (UNHCR) or the European Refugee Fund, which might create cooperative and competitive bargaining spaces among states (Betts 2003; Thielemann 2005; Roper and Barria 2010). Of even greater importance for the foreign policy of host states is security concerns resulting from such flows (Gleditsch et al. 2008). The ethnic composition of refugees may pit the host state against other states where co-ethnics of the refugees are the majority (Davis and Moore 1997). Such refugee flows, therefore, may force the host state to take a proactive stance and militarily intervene in the country of the refugees.

Amidst these domestic and international challenges raised by refugee inflows, public attitudes play a key role in shaping the host government's response to such challenges, and Turkey is no exception. The vast amounts of Syrian refugees in Turkey, exceeding 3 million by 2016 official figures (AFAD 2014), have fueled salient debates in the country on a diverse set of issues. A 2015 poll, where a poll conducted amidst of refugee crisis found 84% of Turkish citizens were concerned with Syrian refugees in Turkey, 73% wanted Syrian refugees to go back to Syria, and 68% believed more restrictive policies should be adopted against Syrian refugees in Turkey (German Marshall Fund 2015). The numbers have not changed since then (Istanpol 2020). Given Turkey's tenacious economic slow-down and politically polarized environment, the ripple effect of Syrian refugees has become more profound in both domestic and international level. At the domestic level, these aspects range from employment and rising house rents in big cities to public health and epidemic

risks (Dinçer et al. 2013, 27-29; İçduygu 2015), from changing Sunni-Alevite demographic balance in Anatolian towns and villages due to the resettling of Syrian refugees in these towns (Çağaptay and Menekşe 2014, 16-22) to structural shifts in level of prices and informal employment in the Turkish economy (Tümen 2016; Balkan and Tümen 2016; Belanger and Saraçoğlu 2020). At the international level, Syrian refugees have constituted an important agenda item in Turkey's interactions with its neighbors in the Middle East, Russia and the European Union (Keyman 2016; Ruma and Çelikpala 2019; Saatçioğlu 2020). As a result, the issue of Syrian refugees has reflected on Turkish politics in amplifying ongoing polarization (Altındağ and Kaushal 2020), even though it barely influences voting behavior of constituents (Altındağ and Kaushal 2020; Fisunoğlu and Sert 2019).

Against the backdrop of its multidimensional nature, the refugee influx in Turkey is conflated into a single concept: "the Syrian issue." As is the case for other countries exposed to refugee influx, the Syrian refugee issue relates to a multitude of policy areas and is an amalgamation of various topics. Each of these topics can often be framed in varying contexts. For instance, the prospect of naturalization of Syrian refugees can be framed as a citizenship issue (e.g., did these refugees "earn" the right to become citizens?), a security issue (e.g., what if, once citizens, Syrian refugees pursue secession of Hatay province from Turkey?), or an economic issue (e.g., losing most low skilled-labor jobs to Syrian refugees registered in the system). Therefore, treating "the Syrian issue" as a monolithic concept risks conflating this otherwise multi-dimensional issue and results in sparse conclusions.

Despite the multifaceted nature of Syrian refugee inflows concerning policymaking in Turkey, few studies have so far attempted to distinguish it with respect to individual areas of policy. Available public opinion data on Syrian refugees are mostly confined to measuring general attitudes towards Syrian refugees and are unable to parse attitudes across different dimensions of the Syrian issue (e.g., EDAM 2014; The German Marshall Fund 2015; cf. Erdoğan 2015; Kınıklıoğlu 2020), or are problematic in terms of sampling (Topal, Özer, and Dokuzlu 2016).

This study presents a novel design to examine the multidimensional nature of the issue of Syrian refugees by utilizing Turkish public opinion online. By multidimensionality, we refer to the various policy areas the issue of Syrian refugees relates to. Further, we correlate these various dimensions of online public opinion towards Syrian refugees with attitudes towards main political parties in Turkey. For doing so, we took a four-month snapshot of Turkish tweets on Syrian refugees between May 2, 2016 and August 31, 2016. To facilitate the analysis of such large collection of tweets, we utilized novel code which allowed us to cluster similar tweets together (see Hatipoglu et al. 2019).

For the period for which we collected and analyzed data, two findings emerge in preparing the ground for further research on this topic. First, concerns over security dwarf others—issues relating

to social aid, education and other aspects of social policy receive comparable attention. The only exception is opposition to granting citizenship to Syrian refugees, which seems to garner support across various segments of Twitter users tweeting in Turkish. Second, the online debate is politicized where a significant portion of tweets associate a refugee-related issue with a political party. The nature of this online attention varies with respect to specific parties and issues as well. AKP, and, to a lesser extent, HDP seem to draw considerable criticism in the online space, while attitudes towards CHP emerge relatively positive. Correlating issues with party attitudes further complicate the picture. A tweet that associates an issue with AKP is more likely to carry a negative, critical tone for most policy issues. Turkish online community is as likely to be critical about granting citizenship to Syrian refugees across the political board. The relative level of criticism tweets drops for social-aid related tweets that also mention AKP.

The next section reviews mostly recent studies on Syrian Refugees in Turkey and cites salient empirical findings on social, economic, and political impacts of their influx. In doing so, the section lays the groundwork for our motivation for this study and its scholarly contribution to the relevant literature. Before sharing our findings in Section 4, Section 3 elaborates on the novel methodology we employed. The last section reiterates the valuable aspect of this study with acknowledgement of some limitations and poses some questions for researchers aiming to make inroads on this subject.

2. Syrian Refugees and Public Opinion in Turkey

The inflow of refugees to Turkey following the eruption of the Syrian civil war in 2011 has impacted Turkish politics in several ways. With a refugee inflow of more than three million people over a short time span, Turkey was challenged on several domestic and international fronts. In the first place, the immediate need for sheltering led Turkey to erect camps and dedicate unused government property for these refugees. Many of the refugees, however, opted to move bigger cities—nearly 98% of them reside in cities (Karasapan 2019). This demographic vicissitude in cities have had direct impact on "everyday" life of Turkish citizens and led to rampant social interaction between citizenry and refugees.

Such an influx of Syrian refugees led also to various policy challenges for the government. Considering protracting slowdown in recent years, the impact of Syrian refugees on Turkish economy has been paramount. Although adverse effects have been felt pervasively such as rise in rents (Tümen 2016, Balkan et al. 2018) and employment losses in low-skilled jobs for natives (Ceritoğlu et al. 2017), some positive spillovers, like decrease in consumer prices and increase in formal employment for natives (Balkan and Tümen 2016; Tanrıkulu 2020), have been observed. The Turkish government tried to build on such positive spillovers by expediting economic integration of refugees and reap the economic benefits of positive labor supply shock resulting from refugee influx to circumscribe potential backlash from public. For instance, at one point in

2016, President Erdogan felt the need to highlight the contribution "highly qualified" Syrian refugees can make to Turkish economy.

Besides the economy, domestic policy challenges resulting from refugee influx ranged from epidemiological risks in public health (such as resuscitation of otherwise eradicated childhood polio) to the securitization of non-camp Syrian refugees, especially of the more vulnerable such as women and children (Yalçın 2016, Koca 2016). Such a broad range of problems and deterioration of public services, in turn, has exacerbated already brittle public attitudes towards Syrian refugees. Indeed, 74% of Turkish public believes that public services will either deteriorate or diminish due to the refugees (Kınıklıoğlu 2020).

Major shapers of political attitudes in Turkey, such as ethnic and sectarian identities, and economic expectations also frame public debates on Turkey's response to Syrian refugees (Mardin 1989; Çarkoğlu and Toprak 2007; Çarkoğlu and Kalaycıoğlu 2007; Başlevent et al. 2005). Being cognizant of these motives, for instance, conservative Sunni groups in Turkey voiced the theme of "Muslim brotherhood," which effectively reverberates around government circles. Concomitantly, several Alevite groups voiced their sensitivity towards changing demographics in Anatolian towns and villages where Syrian refugees, who are predominantly Sunni, were placed by the government (International Crisis Group 2013). On another note, a sizeable part of Turkish population voiced their concerns that such refugee inflows could strengthen the separatist Kurdish movement in Turkey. Similarly, messages naming Syrian refugees "crypto-Armenians," descending from Armenians forced to migrate from today's Turkey to Syria in 1915, and claiming these refugees carried a hidden agenda of re-establishing Armenian presence in Anatolian towns and villages abound in social media outlets. In line with these conspicuous concerns in the public, many Turkish citizens voiced strong disapproval when the Turkish government floated the idea of placing Syrian refugees in government owned housing developments. The tone of disapproval was even stronger when the government hinted at the possibility of granting Turkish citizenship to Syrian refugees en masse. Despite government's effort to reframe public attitudes towards Syrian refugees through emphasizing the theme of brotherhood and common history by referring to the Ottoman Past, the results of recurrent surveys say otherwise. According to one of the recent studies, 82% of Turks feel no cultural affinity with Syrians. Moreover, 72% of Turks think that Syrian refugees will damage sociocultural structure in Turkey (Kınıklıoğlu 2020).

In addition to Turkish domestic politics, Syrian refugees have posed a series of challenges for Turkish foreign policy. A major challenge relates to the dimension of security. Turkey's active support of anti-Assad forces, primarily the Free Syrian Army, has pitted Turkey first against the Assad regime, later, against the Islamic State of Iraq and Syria (ISIS), and following the retreat of ISIS, again with the Assad regime. The challenge of controlling the flow of militants across a porous border with Syria coupled with the proximity of many Turkish towns to the Syrian border, have resulted in several attacks on Turkish soil with significant loss of life. Many of these attacks

were linked to individuals who crossed the Turkey-Syria border (Yalçınkaya 2017). Other attacks carried across the border were also linked to the policies Turkey pursued in the Syrian civil war. Similarly, the Syrian civil war witnessed to the rise of the Kurdish Democratic Union Party (PYD), its militant arm People's Protection Units (YPG), and PYD and YPG's eventual merge with the Kurdistan Workers' Party (PKK). Not surprisingly, a popular sentiment in Turkey, which our analysis below also confirms, was that the PKK was benefitting from the inflow of Syrian refugees.

The intervention of other countries, especially the coalitions these countries formed with warring factions, exacerbated the challenges towards Turkey's ability to manage its security policies relating to the Syrian civil war. Its direct opposition to the Assad regime put Turkey against Assad's main supporters, namely Iran and Russia. Conflictual episodes have occasionally escalated into the use of militarized force, such as the Turkey's downing of a Russian jet at the Turkish-Syrian border in November 2015, and the Russian-backed Assad forces aerial bombing of Turkish outposts in February 2020. The Syrian refugee issue also put a strain on relations of Turkey with the European Union and the United States and sparked recurrent political crises. Turkey's official declaration of YPG as a terrorist organization brought about a separate diplomatic impasse for Turkey with the European Union and the United States (Kösebalaban 2020). Since then, Turkey's relations with other interveners have oscillated between cordiality and conflict (Köstem 2020; Akbarzadeh and Barry 2017; Yücesoy 2020). Moreover, a protracted bargain between Turkey and Europe on shouldering the burden of Syrian refugees and the conditions under which some of these refugees could be returned to Turkey has dented the trajectory of the relationship (Saatçioğlu 2020).

Being cognizant of multidimensional nature of the Syrian issue in Turkey, the first wave of research endeavors focused on attitudes towards Syrian refugees and tried to explain them conditional on psychological (Topal et al. 2016; Erişen 2018; Çırakoğlu et al. 2020) and socioeconomic factors (Coninck et al. 2020). Conducting surveys or ethnographic fieldwork, some of these studies reframed these attitudes as a form of xenophobia and identified the political determinants of xenophobic attitudes (Belanger and Saraçoğlu 2019). What has been found is different messages about the possible impacts of hosting refugees (i.e., security-related, economic, and humanitarian) affect the direction and the strength of natives' perceptions towards refugees (Getmansky et al. 2018). Accentuating the importance of messages, news, and arguments in shaping public attitudes, scholars have demonstrated that ideological stance affects the way conventional news sources frame arguments: they are selective on topics published related to refugees, and thus, play on the ongoing political polarization in Turkey (Atasü-Topçuoğlu 2018). In a similar vein, the party affiliation of people appeared as a prominent factor in molding a threat perception towards refugees (Getmansky et al. 2018; Bandur 2020). Albeit rarely employed on the topic of Syrian refugees, the social media messages are found to carry different sentiments based on the topic discussed (Tessmer 2019) and the language used (Öztürk and Ayvaz 2017).

Despite the extent to which public attitudes towards Syrian refugees have been examined and a slew of systematic studies investigating how issues related to the possible impacts of hosting refugees shape these attitudes, we know little about (i) the relative importance of these issues vis-a-vis each other (e.g. are security concerns or economic burdens associated with Syrian refugees voiced more by Turkish public?), and (2) whether the ideological stance or party affiliation of people makes them tilt toward certain issues among others (e.g. does expressing sympathy for a certain political party in Turkey make an individual more likely to highlight issues relating to humanitarian aids or economics?). To prove an initial set of answers to these questions and bring a new perspective for further studies on this topic—both substantively and methodologically—we adopt a novel approach and look at public opinion on Twitter.

3. Methodology

In Turkey, and elsewhere, quick and far-reaching dissemination of information on social media have been redefining popular politics. In regimes based on popular support, politicians and policy makers increasingly have increasingly become sensitive and responsive to online perceptions and attitudes of the public. For instance, recent studies have shown that the contours of the Turkish online debate on the battle for Kobane very much followed the conventional fault lines in Turkish politics (Hatipoğlu et al. 2016). While not necessarily depicting an unbiased picture of social preferences (Barbera and Rivero 2015), sentiment on Twitter has had tangible consequences on policy and politics around the world (e.g., see Tumasjan et al. 2010; Ifukor 2010).

To gauge how these sentiments are formed, configured, and diffused have been of great interest to quantitative methodologists from diverse scholarly branches—thanks to enhanced computational capabilities for the big data. Techniques for the analysis of Twitter data has so far concentrated on two camps. One group of scholars have utilized recent advances in computer-based techniques such as automated sentiment analysis and machine learning has allowed the processing of very large amounts of data (Schrodt 2012; Ünver 2019). These approaches "train" a computer program on how to allocate various versions of units of text into predetermined categories. While culture, complexities of context (such as sarcasm or slang) or simple errors in spelling lead to inaccuracies in such computer coding, the use of big data minimizes the biases such miscoding brings about (Çakır and Güldamlasıoğlu 2016). The other group, noting the difficulties of automated coding of Twitter data, especially in non-English settings, instead opt for manually coding specially purposed samples (e.g., Bulut and Yörük 2017; Karkın et al. 2015). These scholars noted that "ontology" of Turkish, i.e., a basic corpus upon which computer programs can be developed, are still relatively weak. Existing, commercially available off-the-shelf programs are not suited for Twitter analysis either, as their code is too rigid to address intricacies of Twitter text data. The major shortcoming of this approach is limitations on data that can be coded comes at the cost of temporal and/or spatial variance the sample can exhibit for better inference.

The technique we use in this study features a viable compromise between these two approaches. This technique evades problems regarding automated content coding of Turkish, such as ontology and dirty language, altogether, while offering a scalable solution, which can analyze entries from low hundreds to hundreds of thousands. This mechanism allows the computer to automatically cluster similar tweets under one leading tweet, i.e., the cluster header, based on a similarity threshold set by the researchers. The level of similarity for clustering is scalable: depending on the threshold deemed sufficient by the researchers, this clustering technique allows researchers to collapse the number of tweets that need to be coded for content by a factor of three to fifty.

In this study, our novel clustering technique allowed 52845 of the 60146 tweets to be grouped into 3553 clusters, while 7321 of these tweets turned out as stand-alone tweets. These 10874 (3553 cluster headers + 7321 remaining stand-alone tweets) individual entries were, then, coded for content by the authors. Further statistical analyses were conducted on these groups to gauge the relationship between various aspects of the content of the tweets. Clustering led to a decrease of the number of entries that needed to be hand-coded dataset by a factor of 5.5. The subsections below elaborate on the processes of data collection, clustering and statistical analysis.

Data Collection
We collected Turkish tweets real time between May 2 and August 31, 2016 through Twitter Stream API. The keywords to collect these tweets were: *mülteci* [refugee] and/or the word *Suriye*, as well as all the inflections in Turkish (such as *Suriyeli*, *Suriyeliler* etc.) and spellings with English letters (e.g. *multeci*).[3] Then, tweets in languages other than Turkish were winnowed out. This process rendered 60146 tweets, which were posted between May 2nd 2016 and August 25th 2016. The actual number of tweets that contained the word *mülteci and Suriye* were considerably higher during this period. However, Twitter's guidelines significantly limited the number of tweets that could be legally retrieved by our query (Twitter, 2006). Twitter does not publicly disclose how it creates the sample to respond to a query. Still, it has officially declared that a response to a query "provides a statistically relevant sample of 1% of the full firehose."[4] Therefore, we have no a priori reason to believe that Twitter censors results from query in a non-random way. As a result, our sample is sufficiently large for the inferences made below.

Clustering of Tweets
Standard document clustering methods in data mining do not work well on Twitter data due to several reasons. The first reason is that tweets are very short documents that contain 140/280 characters at most.[5] The second point is that users tend to use less formal language on Twitter; misspelled words, emoticons, and abbreviations make it hard to obtain good, clean clusters for standard document clustering methods. To address this challenge, we utilized an algorithm that

---

[3] One significant omission in these keywords was "muhacir" and its derivatives. The authors would like to thank Lisel Hintz and Aykan Erdemir for pointing this out in two separate panels.
[4] See https://twittercommunity.com/t/is-the-sample-streaming-api-truly-random/14942/3
[5] In late 2017, Twitter doubled the maximum number of characters in a tweet to 280.

utilizes an adaptive clustering approach for Twitter which is based a form lexical similarity, namely Longest Common Subsequence (LCS). Hatipoglu et al. (2019) documented this technique and its application to Twitter data in detail.

LCS is defined as the set of characters from two sequence of characters (in our case, tweets) that are common between these two sequences following the same order. For example, if the first tweet is "an apple a day is good" and the second tweet is "eating apples daily is good for teeth," then the LCS between these two sequences is "appledaisgood." This LCS acts as a proxy for how similar two tweets are in terms of content. Also note that spaces and punctuation marks are not taken into account. The following example illustrates how the LCS is derived from two sets of texts:

an **apple** a **da**y **is good**!
eating **apple**s **da**ily **is good** for teeth.
LCS: **appledaisgood**

Our algorithm first randomly chooses a tweet, called a cluster header, and assigns other tweets under this cluster if these other tweets pass a similarity threshold. The same process is then repeated until no tweets can be grouped. The level of similarity is defined by the authors. For this study, we chose 0.7, a relatively high threshold. This threshold rendered 3553 groups with at least two tweets in each of them and 7321 stand-alone tweets, hence an 81.9% ((3553+7321)/60146) reduction in the number of tweets we had to hand-code.[6] The resulting 10874 (3553+7321) tweet headers were then manually coded for content by two separate researchers.[7]

Content Coding, Categories and Statistical Analyses
Having clustered tweets under cluster headers, our next task was to hand-code each of these cluster-header tweets for content. These cluster-headers were coded with respect to the following content: (1) the specific issue (if any) raised related to migrants, (2) whether any political party(ies) were referred to in the tweet, (3) attitudes towards any of these political parties; and, finally, (4) whether any terrorist group(s) were mentioned in the tweet.

Issues: Drawing from the current debate on Syrian refugees, we have identified the following issues: *security of Turkey and its citizens inside Turkey*, *security of Turkey and its citizens outside of Turkey*, *physical security and well-being of the refugees*, *economics*, *social services* (such as education, health, social support), *ethnicity / identity*, *citizenship*, and *demographic balance*. If an issue mentioned does not subscribe to any of the categories above, we coded it as *other*. If no

---

[6] We took this conservative stance due to the lack of similar studies on Twitter, especially focusing on the Turkish language. Other studies that operate on formal text may use significantly lower thresholds, hence considerably reducing the time required for manual coding. Reducing the similarity threshold to 0.5 for our data rendered 2748 groups and 3609 stand-alone tweets, hence leading to a workload reduction of 89.4% (1-(2748+3609)/60146).

[7] Intercoder reliability was assessed by the random assignment of 500 tweets to both coders. The level of agreement was 0.97 across all attributes that were coded for all tweets.

specific issue was mentioned, the tweet was coded under the general category. These categories are not mutually exclusive; a tweet may mention more than one issue. The most popular cluster headers (and their translations in English) with respect to issue topics are listed in the Appendix.

Political Party Mentions and Attitudes: This paper assumes that the topic of Syrian refugees is intertwined with Turkish politics. To confirm this assumption, we coded whether or not tweets mentioned at least one political party in Turkey. The word "government" or any derivatives thereof was also coded under AKP. We also took note of other party-related indicators, such as references to political figures having publicly known connection with a party (e.g., party leaders, party spokespeople), or implied decision- and/or policymakers found responsible for the situation (e.g., state, government, MP from a refugee dense area). Finally, we also coded whether the tweet projected a positive, negative or neutral attitude to any of the political parties referred to.

Rebel / Terrorist Group: Several rebel/terrorist groups play a shaping role in the Syrian civil war, and the consequent refugee movements (Parlar Dal 2016, Pusane 2018). Among these groups, PKK/YPG/PYD and ISIS/DAESH played the leading roles in both international and Turkish domestic politics. Accordingly, we coded whether the related tweet mentioned any of the following groups: PKK, YPG/PYD or ISIS. PKK was coded separately for more granular analysis. Other groups (such as Al-Nusra) were collapsed under the "other" category.

Our study presents findings from two substantive inquiries. The relevant frequencies of domestic and international issues raised in tweets are displayed as frequency tables. The correlations between issues relating to Syrian refugees and attitudes towards political parties are manifested in a tweet are assessed via Pearson's Chi-squared tests. Since collecting information for control variables, such as age, sex, and socioeconomic status is not practically feasible, we are unable to conduct multiple linear regression models. Therefore, we underline that our findings suggest patterns of covariation among various sentiments. Our study does not gauge the determinants regarding the formation of such attitudes.

4. Findings

We coded each of 10874 cluster headers under the 10 pre-determined topics. These topics, in fact, help us identify different policy areas on which Turkish online public had debated: Security within the borders of Turkey (Domestic Security), security outside of Turkey (External Security), refugees' safety and wellbeing, economy, social aid, identity/ethnicity, Turkish citizenship (Citizenship), demography, and general (for headers without specific topic or connection concerning Syrian-refugee issues). We also coded the cluster headers with respect to attitudes stated towards the government party (AKP), opposition parties at the time (CHP, MHP, HDP), and

terrorist organizations (PKK, PYD/YPG, ISIS/DAESH) quoted or referred to, if any.[8] Since one tweet can mention more than one issue, party or organization, the column sums can exceed 100%.[9] After coding content, we normalized tweet counts by multiplying each cluster header with the number of tweets that was allocated to it by our program.

Table 1 shows weighted frequencies and corresponding percentage figures for topics (or policy areas) coded. Not surprisingly, TR Security emerges as by far the most enunciated topic related to Syrian refugees. Tweets regarding refugees' safety and well-being constitute the second most popular topic, among others. Public policy related issues, such as social aid, education or economy did not occupy as much space on Twitter during our period of sampling.

Table 1: Frequencies based on topics[*]

Topics	Weighted Frequency	Percentage
Domestic Security	22,113	34.93
Immigrants' Safety	13,131	20.74
General	10,534	16.64
Citizenship	9,812	15.50
Economy	8,582	13.56
Identity/Ethnicity	5,521	8.72
Social Aid	4,614	7.29
External Security	2,935	4.64
Demography	1,021	1.61
	Total Number of Tweets: 63, 312	

[*]Any given cluster header might be coded under multiple topics according to its content. Counts were multiplied by the number of tweets included in each cluster in calculating frequencies.

Besides finding out the relative importance of topics debated in social media, another important contribution of this paper is to associate these topics with online attitude towards political parties in Turkey, if any. To that end, we coded the cluster headers with respect to attitudes stated towards mainstream political parties represented in Turkish Grand Assembly at the time. Notably, about half of tweets in our sample explicitly refer to at least one political party in Turkey. Table 2 shows that AKP crowds other parties out in the online political debate on Syrian refugees, for the better or for the worse (86.8%). This high ratio may indicate Twitter users attach a certain degree of culpability to the AKP government regarding Syrian refugees, which is discussed in detail below. The remaining ratios do not reflect the vote shares of the parties, either. While Turkey's security seems to be the most salient issue in our sample of tweets, MHP, a party that often claims to prioritize Turkey's security in domestic and foreign policy (Hatipoğlu and Luetgert 2013), is mentioned only in less than 1% of our tweets. CHP is mentioned in 14% of the tweets, receiving

---

[8] After coding each cluster, the findings were multiplied by the number of tweets included therein. These weighted figures were then tallied to reach the figures presented in Table 1.

[9] See Hatipoğlu et al. (2019) for a frequency cross-tabulation of our sample of tweets that fall under multiple issues.

about twice the mentions of HDP. In short, parties and their policies seem to be strongly linked to Syrian refugees as a policy issue for Twitter users tweeting in Turkish. However, the exact underlying mechanism that associates parties to policy areas relating to Syrian refugees may not be as straightforward. We delve more on to this linkage in subsequent analyses.

Table 2: Frequencies of political party mentions[*]

Party	Weighted Frequency	Percentage
AKP/Government	25,625	86.83
CHP	4,101	13.90
HDP	2,012	6.82
MHP	258	0.87
Total Tweets with a Party Mention: 29,511		

[*]Any given cluster header might be coded under multiple party categories according to its content.

Table 3: Breakdown of attitudes towards parties

Party	Positive		Negative		Neutral		Total
	Weighted Frequency	%	Weighted Frequency	%	Weighted Frequency	%	
AKP	1,821	7.10	21,241	82.89	2,562	10.00	25,624
CHP	1,975	48.16	1,406	34.28	679	16.56	4,101
HDP	596	29.62	1,219	60.59	197	9.79	2,012
MHP	69	26.74	111	43.02	78	30.23	258

The next question to be asked in order for we can unpack this linkage is: "Do users mention these political parties with a positive or negative tone in the context of Syrian refugees?" Table 3 gives us a snapshot on attitudes towards political parties when at least one of them is cited in a tweet. AKP, as a government party and a decision-making body, seems to be heavily accused by consequences of Syrian refugee crisis. When referred to, AKP is mentioned in a negative manner in more than 80% of these instances. Results also suggest that CHP's opposition against selected government policies had a relatively favorable response from Twitter users between May and August 2016. Not surprisingly, a detailed reading of the data show that the negative tweets about HDP mostly stemmed from its perceived association with a terrorist organization, PKK.[10]

---

[10] A systematic analysis of the content of positive and negative tweets for all four parties is beyond the scope of this paper.

Table 4: Frequencies based on cited active insurgent organizations in the region[*]

Terror Groups	Weighted Frequency	Percentage
PKK	6,048	67.60
PYD/YPG	1,638	18.31
DAESH	3,163	35.35
Others[**]	785	8.77

Number of Tweets mentioning a Terror Group: 8,947

[*]Any given cluster header might be coded under multiple insurgent organizations according to its content.
[**]This category includes FETO, Hamas, Hizbullah, PJAK, DHKP-C, Ibda-C, Al-Nusra and Al-Qaeda.

Indeed, Table 4 indicates that PKK is the terror organization most commonly associated with the issue of Syrian refugees, even when PYD/YPG is treated as a separate category. Nearly 15% of the tweets in our sample mention at least one terrorist organization. A large majority (67.6%) of these mentions include PKK. When its Syrian offshoots PYD and YPG are taken into account, this percentage rises to 72.9%.[11] This is an interesting finding as almost all of the violent events, both in Turkey and near its borders that cost human lives, civilian and otherwise, were perpetrated by DAESH. Still, DAESH emerges as the second most mentioned insurgent organization with 35.3% of our subsample referring to this organization. That PKK and its offshoots occupied a much larger place than DAESH on Turkish Twitter agenda is an interesting finding. Civilian and military casualties in Turkey, as a consequence of the Syrian civil war, were mostly related to DAESH during the previous two years to our data collection. Our finding that the attention for PKK is heavier than for DAESH on Twitter, therefore, merits further inquiry. Government-led online framing is one possible explanation. However, the predominant anti-AKP sentiment in our sample of tweets suggests the presence of other explanations. One such explanation could be that the public tends to care about prospective risk (i.e., PKK gaining more ground because of conflict in Syria) than retrospective cost (i.e. the civilian and military cost of DAESH terror). Elaborating on this idea would bring an interesting angle from Turkey to the current debate on the role of prospective versus retrospective foreign policy evaluations in national politics (e.g., Gelpi et al 2007; Miller and Barber IV 2016).

---

[11] Note that the double counts are omitted in this figure.

Table 5a: Policy mentions and attitudes towards political parties

Attitudes toward AKP	Any Topic Mentioned?			Attitudes toward CHP	Any Topic Mentioned?		
	Yes	No	Total		Yes	No	Total
+	1,374	447	1,821	+	1,333	642	1,975
-	18,055	3,186	21,241	-	768	638	1,406
Total	19,429	3,633	23,062	Total	2,101	1,280	3,381
	Pearson chi2(1) = 115.201				Pearson chi2(1) = 57.831		
	Pr = 0.000				Pr = 0.000		

Attitudes toward MHP	Any Topic Mentioned?			Attitudes toward HDP	Any Topic Mentioned?		
	Yes	No	Total		Yes	No	Total
+	44	25	69	+	573	23	596
-	83	28	111	-	712	507	1,219
Total	127	53	180	Total	1,285	530	1,815
	Pearson chi2(1) = 2.481				Pearson chi2(1) = 276.661		
	Pr = 0.115				Pr = 0.000		

Our final set of analyses tests for correlations between issues related to refugees and attitudes towards political parties. Previous findings showed that AKP, as expected, was far more central than any other party in the online debate on Syrian refugees in Turkey. Online attitudes towards AKP in the context of refugees was, however, predominantly negative, in stark contrast with attitudes towards other political parties in Turkey. This variance in attitudes suggests the online community is not generally apathetic to the Turkish politics in the context of refugees; rather it reacts rather selectively to various players. Table 5a takes this inquiry between political parties in Turkey and Syrian refugees a step further: do online attitudes towards political parties change if associated with any specific issue relating to Syrian refugees? In doing so, it presents contingency tables for each of the political parties that shows whether attitudes towards a political party in a message (positive or negative) exhibit a systematic difference if that message also refers to a specific policy issue.[12] Analytically, we compare the likelihoods of no topic mentioning given attitudes casted in either tones (positive or negative) through tweets—i.e., Pr(Topic Mentioned=No | Attitude=Positive (or Negative)). The results at Table 5a reveal interesting trends, especially concerning Twitter discourse on AKP. AKP-related messages that mention a specific policy area are more likely to carry a negative tone than those that do not mention a specific policy area. A qualitative reading of these tweets indeed confirms that most of these tweets carrying a negative tone assign direct culpability to AKP, both as a party and the incumbent government, for the perceived negative consequences of Syrian refugee inflows in the Turkish public sphere. Our findings also indicate that Turkish Twitter users showing positive attitude toward AKP are less likely to point out a specific topic. While the ratio of the tweets that do not mention a specific topic is 15% for those adopting a negative attitude towards AKP, this ratio increases to 24.5% for those having positive attitudes towards AKP.

---

[12] Neutral messages have been omitted from the following analyses for brevity. The results remain substantively the same when these neutral messages are added as a separate row in the contingency tables in Tables 5a and 5b.

Our findings depict a somewhat different picture for the main opposition party, CHP. Compared to AKP, a lower portion, but still majority, of the tweets mention CHP within the context of a policy area (2101/3381=62%). The tone of these tweets, however, carry a considerably more positive tone. Of 1,975 tweets having positive tone and mentioning CHP, 1,333 (67.5%) are related to a specific policy issue. Similar, but a starker pattern appears in results for HDP: 96.1% of positive tweets towards HDP do mention a specific policy; the ratio falls to 58.4% when a tweet has a negative tone towards HDP. A closer reading of tweets suggests that CHP's active stance in highlighting the need to ensure the security and HDP's pointed criticisms towards government related to the plight of refugees in camps, while both parties' resistance to granting citizenship collected considerable number of positive responses from Twitter users posting tweets in Turkish. More interesting aspect regarding tweets mentioning HDP is the tendency of positive-to-HDP tweets to cite topics more on refugees' safety so as to overshadow the surging security concerns on possible collusion between HDP and Kurdish insurgent organizations.

A follow-up question naturally emerges from our first set of analyses: whether attitudes towards the incumbent AKP demonstrate a systematic change with respect to the specific refugee issue at hand? Table 5b helps us answer this question. Each box in the table tests whether the ratio of tweets with negative attitudes towards AKP (and/or the government) is significantly higher when a specific policy issue mentioned. The results point to a consistent finding: tweets associated with a specific issue are significantly more likely to carry a negative attitude towards AKP for most policy issues. This finding should be evaluated in light of the fact that the percentages of negative tweets are already considerably high for AKP for non-policy related tweets, which hover around 90.5%–93.1%.[13] The ratio of negative tweets associated with a policy increase to a range of 94.3% (economy) to 98% (demographic change). Two policy areas differ from this trend, namely social aid and citizenship. Social aid emerges as the only issue area where being associated with AKP increases the likelihood that the tweet will carry a positive tone, from 6.9% to 15.6%. Most of these positive tweets point to solid policy outputs AKP produced for Syrian migrants, especially with respect to health, education and population registration services. The topic of granting citizenship to Syrians is the other issue where mentioning AKP does not the systematically change the tone of tweets; the ratio of negative tweets is 92% for both tweets that mention AKP and those that do not.

---

[13] While generating these tabulations, we ignore tweets without specific topic (or policy) mentions To make our estimates more conservative, in each tabulation the "No" column includes tweets that mention policies other than the one at stake. Comparing policy-related tweets against tweets that do not relate to any policy area make our findings stronger.

Table 5b: Specific policy mentions and attitudes toward AKP[*]

Attitudes toward AKP	Domestic Security			Attitudes toward AKP	External Security		
	Yes	No	Total		Yes	No	Total
+	210	1,164	1,374	+	22	1,352	1,374
-	5,910	12,145	18,055	-	501	17,554	18,055
Total	6,120	13,309	19,429	Total	523	18,906	19,429
	Pearson chi2(1) = 180.178 Pr = 0.000				Pearson chi2(1) = 6.714 Pr = 0.009		

Attitudes toward AKP	Refugees' Safety			Attitudes toward AKP	Economy		
	Yes	No	Total		Yes	No	Total
+	90	1,284	1,374	+	301	1,073	1,374
-	3,514	14,541	18,055	-	4,984	13,071	18,055
Total	3,604	15,825	19,429	Total	5,285	14,144	19,429
	Pearson chi2(1) = 140.905 Pr = 0.000				Pearson chi2(1) = 20.932 Pr = 0.000		

Attitudes toward AKP	Social Aid			Attitudes toward AKP	Identity/Ethnicity		
	Yes	No	Total		Yes	No	Total
+	417	957	1,374	+	83	12,91	1,374
-	2,258	15,797	18,055	-	1,680	16,375	18,055
Total	2,675	16,754	19,429	Total	1,763	17,666	19,429
	Pearson chi2(1) = 342.399 Pr = 0.000				Pearson chi2(1) = 16.488 Pr = 0.000		

Attitudes toward AKP	Citizenship			Attitudes toward AKP	Demography		
	Yes	No	Total		Yes	No	Total
+	401	973	1,374	+	11	1,363	1,374
-	5,047	13,008	18,055	-	551	17,504	18,055
Total	5,448	13,981	19,429	Total	562	18,867	19,429
	Pearson chi2(1) = 0.959 Pr = 0.327				Pearson chi2(1) = 23.036 Pr = 0.000		

[*]Tweets that mention neutral attitudes towards political parties are omitted from analysis for brevity. Results remain substantially the same when neutral attitudes are added as respective rows to each contingency table.

5. Conclusion

This study explores trends in the attitudes towards issues relating to Syrian refugees expressed by Twitter users that posed messages in Turkish. To that end, we used a fourth-month snapshot of Turkish tweets on Syrian refugees between May 2016 and August 2016 and analyzed the picture they depict regarding the refugees in online social media and made some inferences in the light of current literature. To take this snapshot, we employed a novel computer algorithm, which allowed us to hand code a large number of (more than sixty thousand) tweets by grouping tweets with similar content. Our findings strongly suggest that the Syrian refugee crisis is a highly politicized

one, whereby about half of the tweets are associated with at least one political party in Turkey. Twitter users indicate security concerns for Turkey is the most important issue surrounding the Syrian refugee crisis. Despite the fact that DAEASH actions led to most civilian and military casualties in Turkey to date for our data collection, PKK emerge as the most mentioned terrorist organization. PKK's predominance in these tweets suggest the concern for future is voiced louder than reactions to realized events. Data shows another interesting finding: possible rendering of citizenship to Syrian refugees is criticized by both critics and supporters of AKP. For all other issues, those who express concern also tend to be critical of the AKP government.

Our findings show that tweets that praise AKP tend to delve less into specific policy implications of Syrian refugee inflows. These findings imply communicating a positive message for AKP's refugee policy via issue-specific content may emerge as a challenge for the incumbent party, especially as the redistributive effects of Syrian refugees (perceived or real) are increasingly felt in Turkey due to deteriorating economic conditions. The figures related to social aid policy also offer a potential solution: the concrete humanitarian policy outputs seem to ameliorate criticism against AKP.

Undoubtedly, our study is subject to various limitations. That the Twitter platform will systematically voice a more anti-government discourse would be a reasonable expectation. While Twitter users tend to be young and more educated, AKP voters tend to be older and less educated (Kayaoğlu 2017). Further, critical voices may prefer Twitter as a major outlet of opposition in an increasingly authoritarian climate in Turkey. Despite such biases in our sample of tweets, we find important variation amongst policy issues and support for various political parties. These findings strongly motivate further studies that associate policy issues and political parties using alternative techniques such as surveys, in-depth case studies and netnographic inquiries.

Incidentally, the July 15, 2016 coup attempt occurred as we were collecting data real time. This coincidence allows for interesting extensions to this study as the coup attempt gives us a natural pre- (2.5 months) and post- (1.5 months) treatment. The change in agenda space regarding Syrian refugees or in the ordering of issues in terms of salience for Twitter users in the aftermath of such civil violence could be another interesting avenue for research.

References

AFAD – Disaster and Emergency Management Presidency of Turkey. *Population Influx from Syria to Turkey: Life in Turkey as a Syrian Guest,* Ankara: AFAD, 2014.

Akbarzadeh, Shahram, and James Barry. "Iran and Turkey: not quite enemies but less than friends." *Third World Quarterly* 38, no. 4 (2017): 980-995.

Altındağ, Onur, and Neeraj Kaushal. "Do refugees impact voting behavior in the host country? Evidence from Syrian refugee inflows to Turkey." *Public Choice* (2020): 1-30.

Atasü-Topçuoğlu, Reyhan. "Media discussion on the naturalization policy for Syrians in Turkey." *International Migration* 57, no. 2 (2019): 283-297.

Balkan, Binnur, and Semih Tümen. "Immigration and prices: quasi-experimental evidence from Syrian refugees in Turkey." *Journal of Population Economics* 29, no. 3 (2016): 657-686.

Balkan, Binnur, Elif Ozcan Tok, Huzeyfe Torun, and Semih Tümen. "Immigration, Housing Rents, and Residential Segregation: Evidence from Syrian Refugees in Turkey." *IZA Discussion Papers*, No. 11611, Institute of Labor Economics (IZA), Bonn, 2018.

Belanger, Daniele, and Cenk Saraçoglu. "The governance of Syrian refugees in Turkey: The state-capital nexus and its discontents." *Mediterranean Politics* 25, no. 4 (2020): 413-432.

Bandúr, Patrik. "Perceptions on Syrian Refugees in Turkey, Short analysis of a survey identifying differences and similarities between two groups of Turkish voters." *Antakiyat* 3, no. 1 (2020): 67-91.

Barberá, Pablo, and Gonzalo Rivero. "Understanding the political representativeness of Twitter users." *Social Science Computer Review* 33, no. 6 (2015): 712-729.

Başlevent, Cem, Hasan Kirmanoğlu, and Burhan Şenatalar. "Empirical investigation of party preferences and economic voting in Turkey." *European Journal of Political Research* 44, no. 4 (2005): 547-562.

Betts, Alexander. "Public goods theory and the provision of refugee protection: The role of the joint-product model in burden-sharing theory." *Journal of Refugee Studies* 16 (2003): 274-96.

Braithwaite, Alex, Tiffany S. Chu, Justin Curtis, and Faten Ghosn. "Violence and the perception of risk associated with hosting refugees." *Public Choice* 178, no. 3 (2019): 473-492.

Bulut, Ergin, and Erdem Yörük. "Mediatized populisms| Digital populism: Trolls and political polarization of Twitter in Turkey." *International Journal of Communication* 11 (2017): 25.

Cağaptay, Soner, and Bilge Menekşe. *The impact of Syrias's refugees on Southern Turkey*. Washington Institute for Near East Policy, 2014

Carter, Thomas S., and John Osborne. "Housing and neighbourhood challenges of refugee resettlement in declining inner city neighbourhoods: A Winnipeg case study." *Journal of Immigrant & Refugee Studies* 7.3 (2009): 308-327.

Ceritoglu, Evren, H. Burcu Gurcihan Yunculer, Huzeyfe Torun, and Semih Tumen. "The impact of Syrian refugees on natives' labor market outcomes in Turkey: evidence from a quasi-experimental design." *IZA Journal of Labor Policy* 6, no. 1 (2017): 1-28.

Çakir, Mehmet Ulaş, and Seren Güldamlasioğlu. "Text mining analysis in Turkish language using big data tools." In *2016 IEEE 40th Annual Computer Software and Applications Conference (COMPSAC)*, vol. 1, pp. 614-618. IEEE, 2016.

Çarkoğlu, Ali, and Binnaz Toprak. *Religion, society and politics in a changing Turkey*. TESEV, 2007.

Çarkoğlu, Ali, and Ersin Kalaycıoğlu. *Turkish democracy today: Elections, protest and stability in an Islamic society*. IB Tauris, London, 2007.

Çırakoğlu, Okan Cem, Kürşad Demirutku, and Oğuzcan Karakaya. "The Mediating Role of Perceived Threat in the Relationship between Casual Contact and Attitudes towards Syrian Refugees in Turkey." *Journal of Refugee Studies, fez118* (2020).

Davis, David R., and Will H. Moore. "Ethnicity matters: Transnational ethnic alliances and foreign policy behavior." *International Studies Quarterly* 41, no. 1 (1997): 171-184.

Dinçer, Osman Bahadır, Vittoria Federici, Elizabeth Ferris, Sema Karaca, Kemal Kirişci, and Elif Özmenek Çarmıklı. *Turkey and Syrian refugees: The limits of hospitality*. International Strategic Research Organization (USAK) and Brookings Institute, 2013.

EDAM. "Reaction Mounting against Syrian Refugees in Turkey." *Public Opinion Surveys of Turkish Foreign Policy*, no. 1, 2014.

Erdoğan, Emre. "Dış Politikada Siyasallaşma: Türk Kamuoyunun "Davos Krizi" ve Etkileri Hakkındaki Değerlendirmeleri." *Uluslararası İlişkiler Dergisi* 10, no. 37 (2013): 37-67.

Erdoğan, Murat. *Türkiye'deki Suriyeliler: Toplumsal Kabul ve Uyum*, İstanbul: Bilgi Üniversitesi Yayınları, 2015.

Erişen, Cengiz. "Causes and consequences of public attitudes toward Syrian refugees in Turkey." *İktisat ve Sosyal Bilimlerde Güncel Araştırmalar* 2, no. 1 (2018): 111-139.

Facchini, Giovanni, and Anna Maria Mayda. "From individual attitudes towards migrants to migration policy outcomes: Theory and evidence." *Economic Policy* 23, no. 56 (2008): 652-713.

Fisunoğlu, Ali, and Deniz Ş. Sert. "Refugees and elections: the effects of Syrians on voting behavior in Turkey." *International Migration* 57, no. 2 (2019): 298-312.

Gelpi, Christopher, Jason Reifler, and Peter Feaver. "Iraq the vote: Retrospective and prospective foreign policy judgments on candidate choice and casualty tolerance." *Political Behavior* 29, no. 2 (2007): 151-174.

Getmansky, Anna, Tolga Sınmazdemir, and Thomas Zeitzoff. "Refugees, xenophobia, and domestic conflict: Evidence from a survey experiment in Turkey." *Journal of Peace Research* 55, no. 4 (2018): 491-507.

Gleditsch, Kristian, and Idean Salehyan. "Refugees and the spread of civil war." *International Organization* 60, no. 2 (2006): 335-366.

Hanson, Gordon H. *Why does Immigration Divide America?*. No. 129. Peterson Institute, 2005.

Hatipoğlu, Emre, and Brooke Luetgert. "Türk Siyasi Partileri, Seçim Bildirgeleri ve Ortadoğu." *Middle Eastern Analysis/Ortadogu Analiz* 5, no. 50 (2013).

Hatipoglu, Emre, Osman Zeki Gökçe, Berkay Dinçer, and Yücel Saygin. "Sosyal Medya ve Türk Dış Politikası: Kobani Tweetleri Üzerinden Türk Dış Politikası Algısı." *International Relations/Uluslararasi Iliskiler* 13, no. 52 (2016).

Hatipoğlu, Emre, Osman Zeki Gökçe, İnanç Arın, and Yücel SAYGIN. "Automated text analysis and international relations: The introduction and application of a novel technique for Twitter." *All Azimuth: A Journal of Foreign Policy and Peace* 8, no. 2 (2019): 183-204.

Ifukor, Presley. "'Elections' or 'Selections'? Blogging and Twittering the Nigerian 2007 General Elections." Bulletin of Science, Technology & Society 30, no. 6 (2010): 398–414.

International Crisis Group. *"Blurring the Borders: Syrian Spill Over Risks for Turkey," Europe Report* 225, Brussels: International Crisis Group, 2013.

Iqbal, Zaryab. "Health and Human Security: The Public Health Impact of Violent Conflict." *International Studies Quarterly*, 50 (2006): 631–649.

İçduygu, Ahmet. "Syrian refugees in Turkey: The long road ahead." *Washington, DC: Migration Policy Institute*, 2015.

Karasapan, Ömer. "Turkey's Syrian refugees—the welcome fades." Brookings: Future Development, 2019. https://www.brookings.edu/blog/future-development/2019/11/25/turkeys-syrian-refugees-the-welcome-fades/

Karkın, Naci, Nilay Yavuz, İsmet Parlak, and Özlem Özdeşim İkiz. "Twitter use by politicians during social uprisings: an analysis of Gezi park protests in Turkey." In *Proceedings of the 16th Annual International Conference on Digital Government Research*, pp. 20-28. 2015.

Kayaoğlu, Ayşegül. "Voting Behavior of the Youth in Turkey: What Drives Involvement in or Causes Alienation from Conventional Political Participation?" *Turkish Studies* 18, no. 1 (2017): 32-55.

Kınıklıoğlu, Suat. "Syrian Refugees in Turkey: Changing Attitudes and Fortunes." SWP Comment, No. 5. Stiftung Wissenschaft und Politik, Berlin, 2020.

Köstem, Seçkin. "Russian-Turkish Cooperation in Syria: Geopolitical Alignment with Limits," *Cambridge Review of International Affairs* (2020): 1-23.

Keyman, E. Fuat. "Turkish foreign policy in the post-Arab Spring era: from proactive to buffer state." *Third World Quarterly* 37, no. 12 (2016): 2274-2287.

Koca, Burcu Toğral. "Syrian refugees in Turkey: from "guests" to "enemies"?." *New Perspectives on Turkey* 54 (2016): 55-75.

Kösebalaban, Hasan. "Transformation of Turkish Foreign Policy Toward Syria: The Return of Securitization." *Middle East Critique* (2020): 1-10.

Loescher, Gil, and James Milner. "The significance of protracted refugee situations." *The Adelphi Papers* 45, no. 375 (2005): 7-12.

Mardin, Şerif. *Religion and social change in modern Turkey: The case of Bediuzzaman Said Nursi*. SUNY Press, 1989.

Miller, Charles, and Benjamin S. Barber IV. "It's only money: Do voters treat human and financial sunk costs the same?." *Journal of Peace Research* 53, no. 1 (2016): 116-129.

Morris, Meghan D., Steve T. Popper, Timothy C. Rodwell, Stephanie K. Brodine, and Kimberly C. Brouwer. "Healthcare barriers of refugees post-resettlement." *Journal of Community Health* 34, no. 6 (2009): 529-538.

Murdie, Robert A. "Pathways to housing: The experiences of sponsored refugees and refugee claimants in accessing permanent housing in Toronto." *Journal of International Migration and Integration/Revue de l'integration et de la migration internationale* 9, no. 1 (2008): 81-101.

Onyut, Lamaro P., Frank Neuner, Verena Ertl, Elisabeth Schauer, Michael Odenwald, and Thomas Elbert. "Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement–an epidemiological study." *Conflict and Health* 3, no. 1 (2009): 6-22

Parlar Dal, Emel. "Impact of the transnationalization of the Syrian civil war on Turkey: conflict spillover cases of ISIS and PYD-YPG/PKK." *Cambridge Review of International Affairs* 29, no. 4 (2016): 1396-1420.

Phillips, Deborah. "Moving towards integration: the housing of asylum seekers and refugees in Britain." *Housing Studies* 21, no. 4 (2006): 539-553.

Pusane, Özlem Kayhan. "How to profile PYD/YPG as an actor in the Syrian civil war: Policy implications for the region and beyond." In *Violent Non-state Actors and the Syrian Civil War*, pp. 73-90. Springer, Cham, 2018.

Roper, Steven D., and Lilian A. Barria. "Burden sharing in the funding of the UNHCR: Refugee protection as an impure public good." *Journal of Conflict Resolution* 54, no. 4 (2010): 616-637.

Ruma, İnan, and Mitat Celikpala. "Russian and Turkish Foreign Policy Activism in the Syrian Theater." *Uluslararası İlişkiler/International Relations* 16, no. 62 (2019): 65-84.

Saatçioğlu, Beken. "The European Union's refugee crisis and rising functionalism in EU-Turkey relations." *Turkish Studies* 21, no. 2 (2020): 169-187.

Salehyan, Idean. "The externalities of civil strife: Refugees as a source of international conflict." *American Journal of Political Science* 52, no. 4 (2008): 787-801.

Schrodt, Philip A. "Precedents, progress, and prospects in political event data." *International Interactions* 38, no. 4 (2012): 546-569.

Sevunts, Levon. "Bringing 25,000 Syrian refugees to Canada cost $385M." *Radio Canada International*, 29 November, 2016. Accessed at

http://www.rcinet.ca/en/2016/11/22/bringing-25000-syrian-refugees-to-canada-cost-385m/ on 14 August 2017.

IstanPol (Istanbul Political Political Research Institute). "The Attitudes Towards Syrian Refugees in Istanbul." Research Report 19, 2020.

Öztürk, Nazan, and Serkan Ayvaz. "Sentiment analysis on Twitter: A text mining approach to the Syrian refugee crisis." *Telematics and Informatics* 35, no. 1 (2018): 136-147.

Tanrıkulu, Faik. "The Political Economy of Migration and Integration: Effects of Immigrants on the Economy in Turkey." *Journal of Immigrant & Refugee Studies* (2020): 1-14.

Tessmer, Michael Lane. "Securitization and Refugee Resettlement Policy: Using Social Media to Understand Public Attitudes." PhD diss., Virginia Tech, 2019.

The German Marshall Fund of the United States. "Turkish Perceptions Survey." Washington DC: GMF, 2015.

Thielemann, Eiko R. "Symbolic Politics or Effective Burden-sharing? Redistribution, Side-payments and the European Refugee Fund." *JCMS: Journal of Common Market Studies* 43, no. 4 (2005): 807-824.

Topal, Mehmet Hanefi, Ufuk Özer, and Emrah Dokuzlu. "Public attitudes towards Syrian refugees in Turkey: Shedding light on Turkish people opinions." In *3rd International Conference ESPAnet-Poland, Social Investment and Development, Warsaw, Poland, September*, pp. 22-24. 2016.

Tumasjan, Andranik, Timm Sprenger, Philipp Sandner, and Isabell Welpe. "Predicting elections with twitter: What 140 characters reveal about political sentiment." In *Proceedings of the International AAAI Conference on Web and Social Media*, vol. 4, no. 1. 2010.

Tümen, Semih. "The economic impact of Syrian refugees on host countries: Quasi-experimental evidence from Turkey." *American Economic Review* 106, no. 5 (2016): 456-60.

Twitter. *API Rate Limits*. 2016. Retrieved May 12, 2016, from Twitter Developers: https://dev.twitter.com/rest/public/rate-limiting

Ünver, H. Akın. "Computational International Relations What Can Programming, Coding and Internet Research Do for the Discipline?." *All Azimuth: A Journal of Foreign Policy and Peace* 8, no. 2 (2019): 157-182.

Waters, Tony, and Kim LeBlanc. "Refugees and education: Mass public schooling without a nation-state." *Comparative Education Review* 49, no. 2 (2005): 129-147.

Yalçın, Sezen. "Syrian child workers in Turkey." *Turkish Policy Quarterly* 15, no. 3 (2016): 89-98.

Yalçınkaya, Haldun. "IŞİD'in Yabancı Savaşçıları ve Yarattığı Tehdit: Türkiye'nin Tecrübesi (2014-2016)." *Uluslararası İlişkiler/International Relations* 14, no. 53 (2017): 23-43.

Yücesoy, Vahid. "The recent rapprochement between Iran and Turkey: is it durable or is it a relationship of convenience?." *Turkish Studies* 21, no. 2 (2020): 274-296.

Appendix

Table A1: Most popular cluster headers with respect to issue topics

Topic	Most popular cluster headers
TR Security	A Syrian guy said: Bombs had rarely been exploding in our country and we had not cared at all, until planes bombed our houses. @LastTutelage: I swear they said: 2 Syrian guys designating a bomb become a story. Turks never designate a bomb. What did Einstein do? https://t.co/kcyGCfz5Sd RT @KorayaydinMHP: Welcome and support of our Syrian Turkmen brothers during operations was also important. We all thank our cognates. RT @metafizik1907: 2 Syrian refugees whom you want to confer citizenship exploded while designating a bomb in a house in Hatay Reyhanlı. 2 votes go to waste! RT @Murat_ide: pkk set up bombs everywhere. PARDON ME! 3.5 million Syrians are everywhere. PARDON ME! Gülen's community acted flagitiously.. PARDON ME again but who will pay the bill?
Security Abroad	Hırbit Coz region is an irrelevant place PKK-PYD or DAESH. While sufferings of oppressed Syrians cause to tremble the ninth heaven, may God destroy who does not object to this situation. RT @topraktozu: Our foreign policy! Syria>>Al Nusra Russia>>Esad Iran>>Sarraf the EU>>Refugee the US>>PYD Germany>>Armenian#LeaveArmenianLookatSolingen#EitherDiplomaOrRe signation RT @solhaberportali: Robert Fisk wrote about Syrian soldiers withstanding DAESH's siege for all three-year long. https://t.co/OwaHihIPZk RT @HalkinPortali: 13 million Syrian refugees… Russian planes are bombing #Halep. Russian artists are producing a work of art at #Palmira. https://t.co/ODBXouu6Pd RT @AJTurk: Syrian opposition groups to prepare operation towards Cerablus https://t.co/lCDsV3ML5D https://t.co/9RsWyy7tin
Refugees' Safety and Wellbeing	30 children — ages change between 8 and 12 — had been raped in Nizip refugee camp where AKP stated as perfect. https://t.co/TYokrDTtpn

English fans in France for EURO 2016 are witlessly mocking Syrian children refugees. https://t.co/f7DAPlvm9S

RT @orhanaydin6: I say, Taksim Square at nights, is a place for Syrian women and children to be sold for prostitution. Hey! Did you hear me humanity?

RT @mustafahos: Afad, which is infamous for rapes against refugee children, is a project of AKP/Erdoğan. It is not inspected, seems to be privileged, and does not have a transparent financial statement.

RT @Malikejder47: Complaints on incidents occurring at Hatay-Syria border have been legitimized: Hatay Gendarme commander is under custody because of oppressing and opening fire on Syrian refugees.

Economy	RT @acikcenk: There are almost 1.2 million refugees paid approximately 700 Euros monthly in Germany. Germans do not object as much as we do. RT @zek_i_nesli: Saudi Arabia has $60K per capita income and do not accept any refugee. Turkey has $9K per capita income and accept 3 million refugees. Economy is super, right? RT @aozturk70: Here is Erdoğan's and AKP's treachery. Veteran salary: 350TL Refugee salary: 800TL. On the top of it they will give apartments from TOKİ. https://t.co/i7Zf7nCQb8 Erdoğan said that Turkey have spent 20 billion dollars in total so far. That means 3000TL per household. RT @hic_ender_hicim AKP supporters should welcome a Syrian family as a brother in their houses so that we can learn how to be "ENSAR-MUHACIR" #TokiHousesforMartyrsFamilies https://t.co/5kDDYcnPz1
Social Aid	110 Turkish and Syrian orphan children have received clothing aid. https://t.co/9IZVuLeOTw RT @aozturk70: Here is Erdoğan's and AKP's treachery. Veteran salary: 350TL Refugee salary: 800TL. On the top of it they will give apartments from TOKİ. https://t.co/i7Zf7nCQb8 RT @mecertas: We get together with Syrian young brothers at heart table at Hacı Bayram Veli, thanks to our Ankara organization https://t.co/3vVoXrzzrH RT @beyonceturkeyy: Do you still vote for AKP conferring citizenship and giving apartments to Syrians only for presidency?

RT @hic_ender_hicim: AKP supporters should welcome a Syrian family as a brother in their houses so that we can learn how to be "ENSAR-MUHACIR" #TokiHousesforMartyrsFamilies https://t.co/5kDDYcnPz1

Identity/Ethnicity	RT @teroretavizyok: Assad's regime bombing terrorist organizations Pkk/Ypg but Ntv reports this as "Assad bombs Syrian Kurds." Is this also a kind of perception operation? https://t.co/KnbzLQr2Fh
	@Tivitistiniz Don't let akp buy 3 million Syrian votes and make our country an Arab country. Don't be silent, speak up! https://t.co/IgtyQvu8MY
	RT @erkan_karaarsln: Iraqi Turkmens having to live in the streets of Ankara. They do not have a chance to get a house from TOKİ because they are not Syrian. https://t.co/znx5O6GVhK
	RT @sahinkilicTR: That was a war environment. Hatay is a province densely populated by our Syrian Arabic brothers. First, they declared Turkish as their official language.
	https://t.co/ifTmb4edbc: AKP's continuing enmity against Alawis. Preparations going on for a refugee camp in Dersim. https://t.co/MwwHnWawzu
TR Citizenship	RT @metropoll: 78% of AKP supporters, 97% of CHP supporters, 94% of MHP supporters, and 69% of HDP supporters are against conferring Turkish citizenship to Syrian refugees.
	RT @mytepe: Do you think that Syrian refugees should be bestowed with enfranchisement? Please vote and retweet. #suriye #akp #chp #mhp
	RT @metafizik1907: Two of Syrian refugees whom you plan to confer citizenship have exploded while designating a bomb in their house. Two votes go to waste!
	RT @bekiservet: Muslim Syrians are not wanted in Turkey where there are Armenian Jewish Greek Assyrian Nestorian Chaldean Polish Molokan citizens. https://t.co/NErPjDytpa
	@Tivitistiniz Don't let akp buy 3 million Syrian votes and make our country an Arab country. Don't be silent, speak up! https://t.co/IgtyQvu8MY
Demography	@Tivitistiniz Don't let akp buy 3 million Syrian votes and make our country an Arab country. Don't be silent, speak up! https://t.co/IgtyQvu8MY

RT @IlkerEraydin: TODAY'S FLASH NEWS: 10 SYRIAN FAMILIES WILL BE RESIDED IN EACH VILLAGE AND ENDOWED WITH LAND https://t.co/mlSw4c0bG5

RT @aknbasaran1: Congratulations! AKP will place one Syrian family per village and endow with pasture lands. Good luck with it our Syrian brothers.

RT @MucadeleTeror: Zarathustra and terrorist pkk proponents residing in eastern provinces should be replaced by Syrian Muslims. (Circulate this #SURVEY RT)

RT @OlumculHasret: Lots of our Syrian brothers have come to Sultan Ahmet Mosque for Fajr Prayer.

General	RT @KorayaydinMHP: Bankrupt and downfallen Syrian policies of AKP government have already led to severe refugee problems in our country.
	RT @markaresayan: There is no Armenian diaspora in Germany. Last year, this proposal was postponed lest refugee agreement goes to pot. Hypocrisy at its finest.
	RT @USEmbassyTurkey: Due to recent incidents, all non-immigrant visa applications dated on July 18th in İstanbul and Ankara are cancelled. https://t.co/ckc0yW9ve6
	RT @_aliyalcin_: Syrian activist and teacher Mulhem El Said, biking all the way from Mardin to Ankara, visited us today with his family. https://t.co/TcMCraZvoA
	RT @Gizli_Golge: Our director has come to Turkey. On January 12th, we get started with visits to orphan children at Urfa, Antep, Hatay refugee camps.