SMaPP DATA REPORT

A Breakout Role for Twitter? The Role of Social Media in the Turkish Protests

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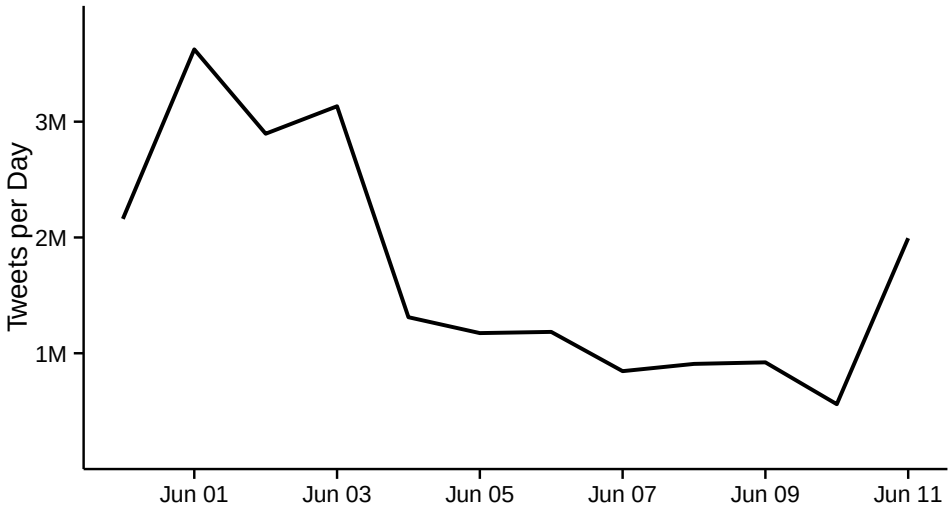
As part of our broad aim of understanding the role that social media can play in initiating, promoting, and spreading political participation, we have been collecting and analyzing tweets related to the Turkish protests since they started on May 31st. Our dataset now comprises more than 22 million tweets (see Figure 1), with #direngeziparkı and #occupygezi, the two main hashtags associated to the demonstrators, having been mentioned more than 4 million times and 1.9 million times, respectively. Below we offer the three blog posts with preliminary findings from our study that we have published at The Monkey Cage.

Figure 1: Number of tweets related to protest, by day



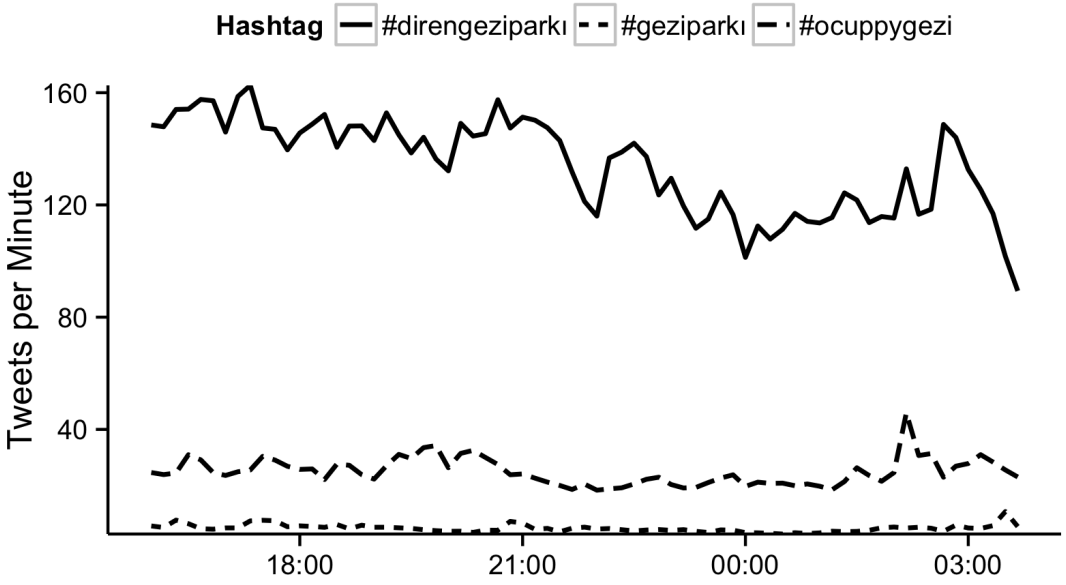
June 1st, 2013. Extensive Use of Social Media in the Absence of Traditional Media by Turks in Turkish in Taksim Square Protests

Over the past several years the role of social media in promoting, organizing, and responding to protest and revolution has been a hot topic of conversation. From Occupy Wall Street to the Arab Spring Revolutions, social media has been at the center of many of the largest, most popular demonstrations of political involvement. The protests taking place in Turkey add to this growing trend, and are already beginning to add new layers to our understanding of how social media can contribute to public participation.

Protests have been ongoing since early this week in Istanbuls Taksim Square. Organized in response to government plans to tear down the green space in the center of the square and replace it with a shopping center, the protests have morphed into a more visceral expression of the general discontent with the governments policies over the last several years. In response, the police fired massive amounts of tear gas and pepper spray into the crowd and set fire to tents set up for protesters to sleep in, leaving several people injured. Protesters have begun wearing homemade

gas masks while continuing to protest on the street. As of 2 AM Turkish time on Saturday, the protests are still in progress and some protestors have reportedly breached the barrier and entered the park.

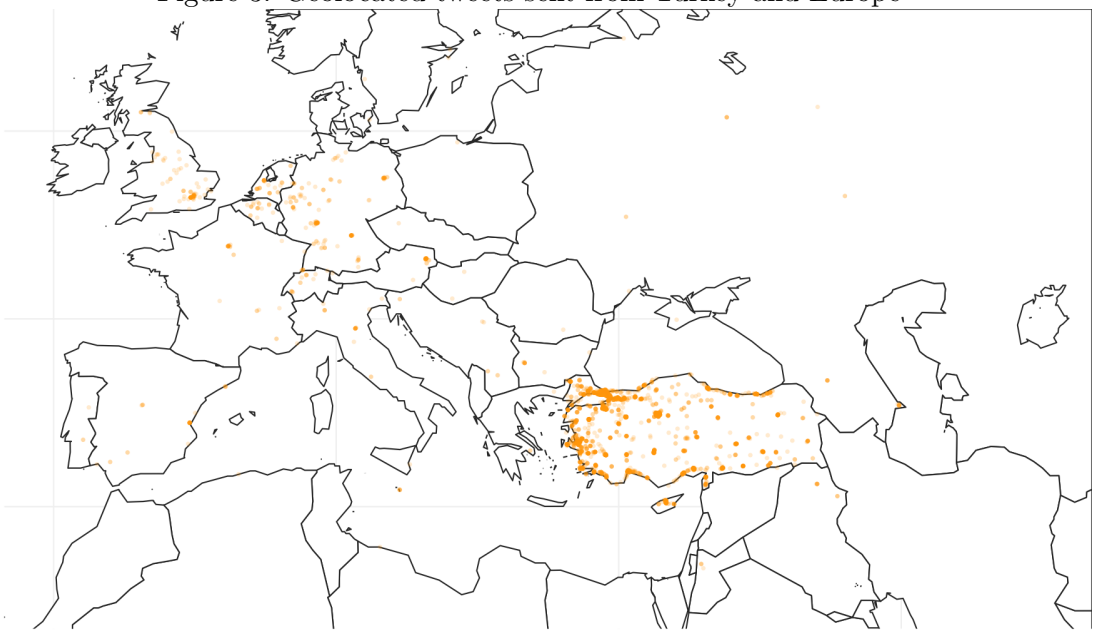
Figure 2: Number of mentions of the top 3 hashtags in the first 18 hours



The social media response to and the role of social media in the protests has been phenomenal. Since 4pm local time yesterday, at least 2 million tweets mentioning hashtags related to the protest, such as #direngeziparkı (950,000 tweets), #occupygezi (170,000 tweets) or #geziparki (50,000 tweets) have been sent. As we show in the plot below, the activity on Twitter was constant throughout the day. Even after midnight local time last night more than 3,000 tweets about the protest were published every minute.

What is unique about this particular case is how Twitter is being used to spread information about the demonstrations from the ground. Unlike some other recent uprisings, around 90% of all geolocated tweets are coming from within Turkey, and 50% from within Istanbul (see map below). In comparison, Starbird (2012) estimated that only 30% of those tweeting during the Egyptian revolution were actually in the country. Additionally, approximately 88% of the tweets are in Turkish, which suggests the audience of the tweets is other Turkish citizens and not so much the international community. These numbers are in spite of the fact that there are reports that the 3G network is down in much of the area that is affected. Some local shops have removed security from their WiFi networks to allow internet access, but almost certainly the reduced signal will have impacted the tweeting behavior of those on the ground.

Figure 3: Geolocated tweets sent from Turkey and Europe



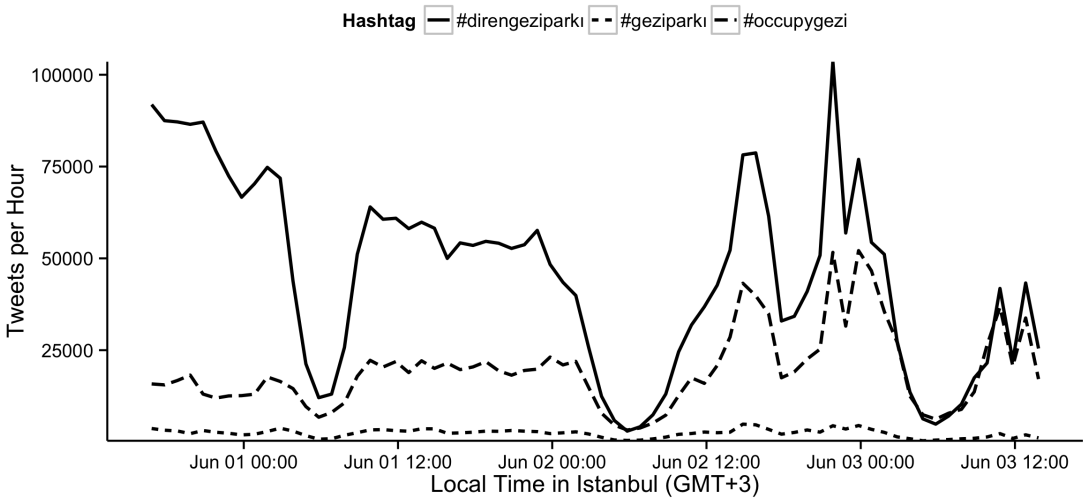
Part of the reason for the extraordinary number of tweets is related to a phenomenon that is emerging in response to a perceived lack of media coverage in the Turkish media. Dissatisfied with the mainstream medias coverage of the event, which has been almost non-existent within Turkey, Turkish protestors have begun live-tweeting the protests as well as using smart-phones to live stream video of the protests. This, along with recent articles in the Western news media, has become a major source of information about this weeks events. Protesters have encouraged Turks to turn off their televisions today in protest over the lack of coverage of the mainstream media by promoting the hashtag #BugünTelevizyonlarıKapat (literally, "turn off the TVs today"), which has been used in more than 50,000 tweets so far.

What this trend suggests is that Turkish protesters are replacing the traditional reporting with crowd-sourced accounts of the protest expressed through social media. Where traditional forms of news have failed to fully capture the intensity of the protests, or to elucidate the grievances that protesters are expressing, social media has provided those participating with a mechanism through which not only to communicate and exchange information with each other, but essentially to take the place of more traditional forms of media. Further, this documentation through multiple sources in public forums serves to provide a more accurate description of events as they unfold. The coming days in Turkey will give us more insight into the processes by which this takes place, but it is certainly an impressive utilization of social media in overcoming the barriers created by semi-authoritarian regimes.

June 3rd, 2013. Extensive Use of Social Media Continues Over First Weekend.

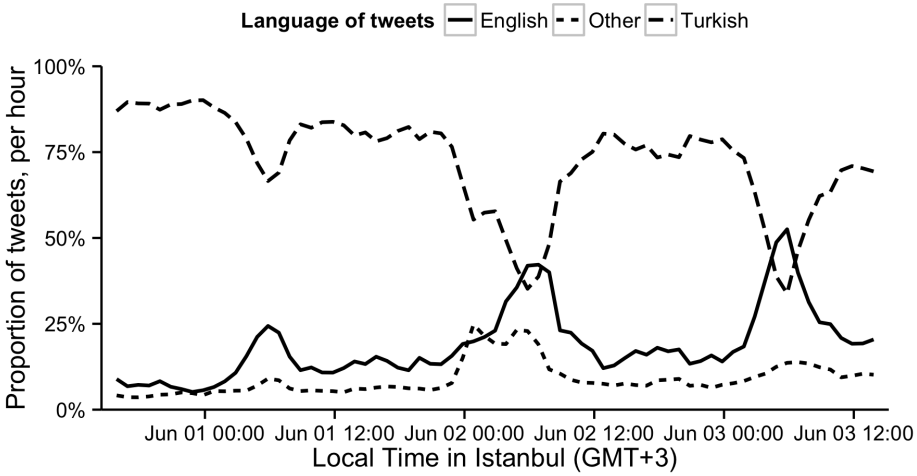
Protests have continued over the weekend in Turkey, both in Istanbul and in other cities, and social media continues to play an important role. Our preliminary findings from the post still hold, as shown in the plots below. The hashtag #direngezipark is still the most popular and has been used in more than 1.8 million tweets as of this morning. In comparison, the hashtag #jan25 was used in less than one million tweets during the entire Egyptian revolution.

Figure 4: Number of mentions of the top 3 hashtags in the first 3 days



Furthermore, the volume of tweets related to the protest does not seem to have decreased significantly, even after three days of protest (click here for a visualization of tweets sent from Istanbul). However, we have also observed that the proportion of tweets in English has increased, as well as the number of tweets mentioning the hashtag #occupygezi. This could suggest both that protesters are attempting to increase international awareness, and that the international community itself is taking a greater interest in the protests. Given that around 85% of geocoded tweets are still being sent from within Turkey, it seems likely that the former is a more important factor in this change. Although these shifts mirror those seen in previous episodes of collective action where Twitter played an important role, the intensity in the use of social media in this particular protest makes it a unique case from a comparative perspective.

Figure 5: Language of tweets in first 3 days



June 9th, 2013. The Dynamics of Information Diffusion in the Turkish Protests. (co-authored with Sandra González-Bailón, from the Oxford Internet Institute)

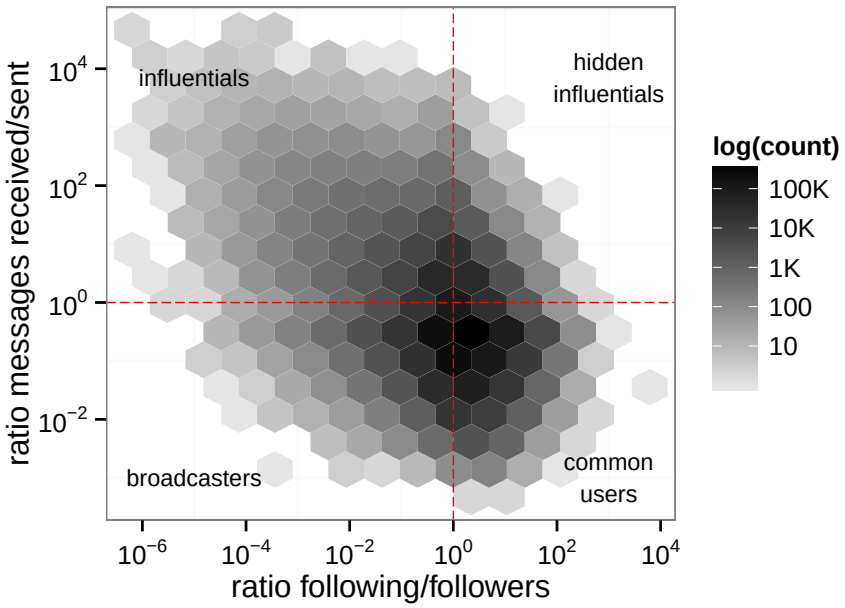
Social networking sites, such as Twitter, Facebook or Tumblr, appear to be playing a prominent role in the coordination of the still ongoing protests in Turkey. There is abundant evidence suggesting that social media have been pivotal in the spread of information, especially in the absence of coverage by traditional media; to recruit and mobilize protesters; to coordinate the movement without the infrastructure of formal organizations; and to draw the attention and support of the international community. That social media is at the heart of these protests was defiantly acknowledged by the Turkish Prime Minister himself when he described them as "the worst menace to society". There are also reports that 25 people were arrested because of their use of Twitter to spread information about the protest.

The protests in Turkey add up to a long list of popular uprisings and massive demonstrations around the globe that took shape and gained momentum with the help of social media. However, there are still many open questions about how social networks facilitate the diffusion of information and whether some users play special roles in increasing the visibility of the protests. Results from a preliminary analysis of data collected at the SMaPP lab tracking protest activity in Twitter reveal patterns that are consistent with previous findings about protests in Spain and the US (e.g., see 1, 2, 3, 4).

First, the distribution of centrality is very hierarchical: 1% of users concentrate about 80% of all retweets received; three quarters of users active in the protests do not receive any retweets at all. The implication of this asymmetry is that a minority of users act as the main sources of information: they are the authorities, the authors of the messages that resonate through a higher number of users. It also suggests that communication in online networks relies on a division of labor: those who generate valuable content (authorities), and those who facilitate its dissemination (the rest).

Second, these authorities tend to have large audiences or a larger number of followers but many of them are not particularly central in the Twitter network. Figure 6, which plots activity data for the first five days of the protests, illustrates this. Users that act as the authorities in this stream of protest information are located above the dashed red line. Most of them have a large number of followers, as celebrities or public figures tend to have; but many of these authorities (37%) have networks that are quite symmetrical and average in size, or who follow more users than follow them back. We call these users "hidden influentials" because they are not globally visible in the Twitter network, but they are very visible in this stream of protest-related information. They are at the heart of protest communication even though they are not at the heart of the followers network.

Figure 6: Distribution of users according to network position and message activity (Replication of Figure 4 in Gonzlez-Bailn et al, 2012)



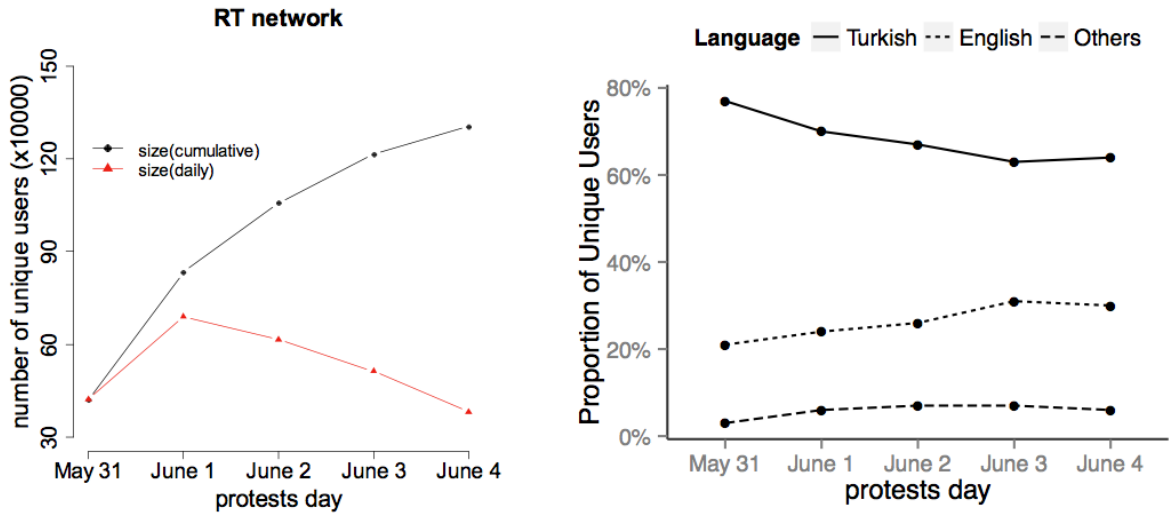
At the same time, there are also a few differences that make the Taksim Square protests unique:

First, compared to the indignados protests in Spain, this network is more hierarchical, with more extreme outliers falling in the category of influentials (they have significantly larger audiences, that is, the potential to directly reach many more people); in particular, the network has many more broadcasters (31% versus the 7% in the Spanish case). Although the majority of people sending messages are still common users, that is, not particularly visible or central (59% fall in this category vs 66% in the Spanish protests), their relative weight is lower, which suggests that the influence of prominent people and public figures, like journalists or celebrities, is greater in the Turkish protests.

[Note: this figure only takes into account activity generated during the first five days of the protests, whereas the analysis of the Spanish case tracked activity for the period of one month; this might affect the number of hidden influentials, the visibility of which accumulates over time some users currently classified as common might upgrade as protests unfold].

Second, the size and composition of the network of retweets shows certain volatility. In this network, a user (A) is connected to another user (B) if A reposts a message previously published by B. There is a lot of variation on who is more central in this authority network over the first few days of the protest. While the protests started as a local, grass-roots mobilization opposing plans to remove Gezi Park, they soon escalated into anti-government demonstrations, and were quickly internationalized, with the occupy movement being particularly active after the third day of the protest: by the fourth day, more than 30% of unique users employing protest hashtags were English speakers; Twitter accounts like “YourAnonNews”, “AnonOpsLegion” or “AnonOpsMob”, part of Anonymous, a network of hacktivists, also started to appear among the most retweeted.

Figure 7: Network Size, Daily and Cumulative, and Distribution by Language



To conclude, the study of social media can shed interesting light into the dynamics of information diffusion in the organization of collective action. This is particularly the case when social media, as in the Turkish protests, supplies information that is suppressed by traditional media. Evidence suggests that 15K users sent at least one tweet from Gezi Park [10] which points at the spillover effects of online activity into offline action. More research, however, is needed to identify the mechanisms that drive the self-organization of tens of thousands of people in the form of massive protests, and the features that are generalizable and unique to each particular case.