

SOCIAL MEDIA, NEWS, POLARIZATION, AND DISINFORMATION IN TIMES OF CRISIS: A CASE STUDY ON TURKEY¹

IDEAS CENTER VIRTUAL CONFERENCE

“SOCIAL-CYBERSECURITY IN TIMES OF CRISIS AND CHANGE”

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This study explores the intersecting phenomena of disinformation, hostile influence, political polarization, hyperpartisanship, and online news consumption trends in Turkish information environment. Also, we collect and process data in other languages when the context is more international than domestic. In particular, the analysis focuses on significant events such as geopolitical crises, armed conflicts, military escalations, and the COVID-19 pandemic. In this case study, we apply a series of well-established, basic computational methods to shed light on the dynamics, enablers, and force multipliers of modern social cybersecurity threats.

The presentation will consist of 3 components.

1. Digital News Landscape, Crisis Events, and Political Polarization

Polarization in Turkey is longstanding and structural. Previous studies indicate that its persistence and impact on Turkish society have become even more evident in recent years. According to a survey, which was conducted in November-December 2017, only 29 percent of the participants “*said they would like to be neighbors*” with the supporters of the political party they dislike. “*About half of the respondents*

¹ This contribution will collate material from 4 different projects, of which 2 are published and 2 are ongoing. For publications: please see, [1] Baris Kirdemir, Turkey’s Digital News Landscape: Polarization, Social Media, and Emerging Trends, EDAM, 2020. <https://edam.org.tr/wp-content/uploads/2020/06/Turkeys-Digital-News-Landscape-Baris-Kirdemir-with-discussion-paper.pdf>. [2] Baris Kirdemir, Exploring Turkey’s Disinformation Ecosystem An Overview, EDAM, 2020, <https://edam.org.tr/wp-content/uploads/2020/07/Exploring-Turkeys-Disinformation-Ecosystem-by-Baris-Kirdemir.pdf>

supported wiretapping the phones of supporters of the ‘other party’, and 37 percent said they are against participation of the members of this group in elections.”²

Partisanship and polarization across the Turkish digital news ecosystem are also intertwined with disinformation, fake news, and other categories of falsehoods. Disinformation most often fits into the partisan context, in which the overall reality is either framed as a fight of a prevailing and rising country against internal and external actors who intend to destroy it, or a complete disaster in which an incompetent government conspires against its citizens. Thus, across online social networks, polarization, toxic comments, personal attacks, and coordinated campaigns target the opposing individuals and political groups.

Engagement rates for Turkish digital news pieces peak at certain times. A closer look at metrics reveals that high significance political events and crises affect the engagement rates significantly. In addition, data clearly shows the impact of the COVID-19 pandemic on the Turkish digital news environment, as the online news consumption and engagement peak starting from March 2020. Other important events with higher article and engagement numbers include Turkey’s involvement in the Syrian conflict, military escalations, natural disasters, and election campaigns.

This section presents the analysis of online political conversations and digital news outlets during two recent events that led to high levels of news production and social media engagement. The first case is Turkey’s military incursion in Idlib, Syria, and the events that followed a Russian/Syrian airstrike on February 27, 2020, that caused 36 Turkish casualties. The airstrike ignited a major military escalation and geopolitical crisis that lasted for at least two weeks. The second case study is the COVID-19 pandemic and the political conversation around the actions taken by the Turkish government. For both cases, we have collected a large amount of data from Twitter, news outlets, and a commercial data provider. The primary questions include whether polarization and echo-chambers are evident during such crisis events on social media and whether Turkish digital news outlets can achieve high centrality scores, attracting engagement from different sides of major political debates. In addition, we also apply topic modeling to extract the overlaps and distinctions between agendas belonging to different clusters.

² Dimensions of Polarization in Turkey, Istanbul Bilgi University, 2018, https://goc.bilgi.edu.tr/media/uploads/2018/02/06/dimensions-of-polarizationshortfindings_DNzdZml.pdf, Accessed on March 10, 2020.

Network metrics include the eigenvector Centrality, betweenness centrality, and modularity, leading to key actors analysis. A co-retweeted network consists of Twitter accounts that are tweeted by common users. In our case, for example, if both BBC Turkish and Hurriyet are retweeted by the same account, we may assume a relationship between those, as they are endorsed by a common audience. For clarity, we assume that if two accounts are co-retweeted by at least 50 different users, they are connected. The co-retweeted network analysis provides a clearer picture of overall relationships, as the commonality and connections of audience-led endorsements are key to visualize polarization and to locate digital news outlets within the overall environment.³

2. Geopolitical Disinformation on YouTube

In the following section, we present the primary findings of our study on disinformation and false narratives about Turkey's foreign policy, geopolitical identity, defense partnerships, and roles in the NATO alliance on Turkish-speaking social media. Specifically, we focus on the content and interactions on YouTube. Although YouTube is one of the top online sources for news and information in Turkey, studies on false information in the country often focus on other platforms such as Twitter and conventional news media.

For this study, we examined the network structures and content features around a set of relevant videos. First, we used YouTube's search engine and other intermediary services to identify content that contained some form of false information and received relatively high social media engagement, views, likes, and comments between 2018 and 2020. Later, we used the YouTube API to collect the data, including comments, video statistics, and the related videos. After manual data cleaning to ensure the most relevant dataset within criteria (Turkish, geopolitical), our final list included around 1,500 videos and 700,000 comments with upload dates that span from late 2018 to April 2020.

Broadly, the most frequent topics in the final dataset included Turkey-US bilateral relations, NATO, Turkey-Russia relations, the S-400 air and missile defense system, war in Syria, geopolitical competition in Eastern Mediterranean, and Turkey's involvement in Libya, the COVID-19 pandemic through geopolitical lenses. To extract network relationships between YouTube videos and channels, we used "co-commented" network analysis. Briefly, we assume that if a user comments on two different videos, and if the number of co-commenting users exceeds 10 for that pair, those two videos are related and connected.

³ Samantha Finn, Eni Mustafaraj, and Panagiotis T. Metaxas, *The Co-Retweeted Network and its Applications for Measuring the Perceived Political Polarization*, 2014.

To identify topics and narratives in more accurate ways, we applied text analytics to the titles and descriptions, and we manually checked videos and channels with the highest engagement rates. This section of the presentation includes a few prominent narratives and exemplar videos, with a special emphasis on how they originate from or spread towards other domains and platforms.

3. Confrontation and Cooperation: Trails of Russian or Pro-Russian Influence on Social Media

Relations between Turkey and Russia are complicated, significant, and increasingly confrontational. Nevertheless, Russian influence in Turkish information environment, or Russian-led information maneuvers against Turkey in international contexts are yet to be studied in depth. They often intersect with geopolitical crises, such as conflicts in Syria, Libya, Ukraine, and Nagorno-Karabakh. This section ties previous sections to this subject and presents early findings of an ongoing study. As we also mention in other sections, disinformation in geopolitical context often receives significant engagement. This partly emanates from high centrality scores and influence enjoyed by actors disseminating such content. (eg Sputnik Turkish). In addition, our earlier observations indicate that during times of crisis, existing false narratives spread further and deeper, or they become emboldened.

Thus, the analysis focuses on the evolution of relevant topics, narratives, and networks both internally and externally. Domestically, we focus on multilateral security and defense related events involving Turkey, Russia, and NATO. In the regional context, we aim to detect campaigns relating to given conflicts. For example, recently, several Russian and Ukrainian networks disseminated a narrative, claiming that Ankara thinks Crimea belongs to Turkey, so its secret ambitions are not friendly to Ukraine. This particular campaign coincided with increased defense cooperation between Turkey and Ukraine, and also the war in Nagorno-Karabakh.

For this section, we collect data from multiple platforms and focus on multiple languages. Since our scope includes regional conflicts involving Turkey and Russia, our language and data platform preferences reflect that context. Broadly, we used news outlets, Twitter, VK, Telegram, and YouTube as primary data sources, while also exploring sets of the most engaged content via a commercial data aggregator. The most frequent languages in our data include Turkish, Russian, and English, while Ukrainian, Azerbaijani, Armenian, and a few other languages also appear in small numbers. We use keywords related to mentioned conflicts, NATO, and important events in Turkish-Russian context. For YouTube data, we also utilize related video ids provided by the API before manual relevancy checks.

To sum, our current findings include, but not limited to, the following:

- Extreme polarization and hyperpartisanship increase at times of crisis on Turkish-speaking social media.
- Turkey's digital news outlets mostly behave as enablers and force multipliers of the political polarization and disinformation.
- As Turkish news outlets increasingly lack the reach to opposing audiences (low betweenness), a few foreign news outlets enjoy increased reach to both sides of the political spectrum.
- Sputnik Turkish service is one of the influential outlets enjoying high engagement rates, even during military confrontations between Turkey and Russia. In our analysis on digital news outlets, Sputnik is one of the very few actors that performed well in terms of engagement, size of the ego-network, and centrality measures.
- During geopolitical crises and the COVID-19 pandemic we focused on, anti-US and anti-NATO narratives persisted, adapting to different contexts.
- False narratives move cross platform. In addition, we observed high transitivity between conventional news outlets and online social networks.
- Channels on YouTube play key roles in terms of cross-platform dissemination of misleading narratives. Due to high polarization, normally, a newspaper column is limited to a specific cluster in terms of its maximum reach. However, recurated YouTube versions are endorsed by almost entire political spectrum. This is evident in the variance of Facebook groups that share YouTube content.
- Repeated, prolonged, or newly emerged geopolitical crises may be correlated with strengthened disinformation, polarization, and hysteria.

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