EXPLORING TURKEY’S DISINFORMATION ECOSYSTEM
An Overview

Baris Kirdemir | EDAM Non Resident Fellow
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INTRODUCTION

The rise of disinformation and hostile influence threatens individuals, societies, economies, and political systems across the world. Although most of the public attention concentrates on the term of fake news, the range of false information, its ecosystems, and consequences extend beyond the news. Also, actors, strategies, methods, and the overall environment of false information evolves over time.

Turkey’s information environment, including the news media and social media platforms, remains plagued with all types of false information and coordinated manipulation campaigns. The country is among the most vulnerable to the weaponized use of information, bots, trolls, and algorithmic cognitive threats at scale. However, it still suffers from the lack of any strategic initiative and ‘whole-of-society’ efforts to understand and mitigate the associated risks to this date.

This study explores the typologies and instances of false information in Turkey. The first section will briefly outline the characterizations, types, trends, and the evolution of the informational threats at the international level. The following chapters will present an overview of misinformation, disinformation, and social manipulation. In particular, the paper will present the findings of a misinformation monitoring effort during the COVID-19 pandemic in Turkey. The diversity and volume of false information associated with the pandemic provide a test case to compare Turkey with cases elsewhere and reveals Turkey’s characteristic vulnerabilities in the midst of information disorder. The final analytical section will include a short brief on false information revolving around Turkey’s foreign policy, defense partnerships, and important geopolitical events. It will also include a description of methods and data sources.

This research has been made possible by funding obtained from the US-based Chrest Foundation for the project “Digital Media Ecosystem in Turkey: Actors, Interests and Politics”
Disinformation and Hostile Influence

Digitalization, social media, and hyper-connectivity are the terms often associated with the ongoing sociopolitical and economic transformation at the global scale. The new information ecosystem, in which humans, machines, and algorithms interact in complex ways, is at the epicenter of this transformation. As a result, the new security landscape is increasingly defined by false, misleading, and targeted information, ranging from misinformation to disinformation, cognitive threats, social manipulation, and hostile influence campaigns. False information alters human behavior, beliefs, attitudes, emotions, and psychology at multiple levels, often with implications for individuals, social groups, political systems, financial systems, economies, public health, or armed conflicts.

Challenges associated with false information extend well beyond the concept of fake news. First Draft, “an international partner network of newsrooms, universities, platforms, and civil society organizations,”1 named the collective set of such challenges as the “information disorder.”2 Often, false information includes the use of misleading, or weaponized information that contains true, fake, out of context, reframed, and manipulated content in different combinations. Among many examples of false information are “lies, conspiracies, rumors, hoaxes, hyperpartisan content, falsehoods, or manipulated media.”

Broadly, three main and intertwined categories of false information are misinformation, disinformation, and mal-information. Briefly, disinformation consists of intentionally altered, faked, or generated content that aims to cause harm or alter behavior, beliefs, or attitudes. Political influence and financial gains are the most frequent motives of disinformation. Misinformation, on the other hand, is shared when an individual or group is not aware of the potential harm, does not realize that the information is false or misleading, or believes it is helpful. As the third category mentioned above, mal-information is the use of true information for causing harm. Examples of this category include unauthorized use of hacked documents, images, videos, or sounds for political gains or simply harming individuals.\(^4\)

The rise of disinformation intersects with other global trends in how information is generated, processed, and exchanged. Namely, one of the distinctive characteristics of the modern era is the widespread rejection of objective facts and social fragmentation in terms of how scientific facts and knowledge should be interpreted. This fragmentation is beyond the conventional knowledge creation processes that have existed for centuries and it has overarching sociopolitical implications. Anti-vaccine movements, denial of climate change, the flat earth movements, and false beliefs associated with racist, xenophobic, or misogynist political behavior are only a few prominent examples of the phenomena in connection with social fault lines. Besides, overall trust in “sources of factual information” declines, and opinions as well as “personal experience” overwhelms the use of factual knowledge creation or sharing. Collectively, such factors constitute the modern “truth decay”.\(^5\) Truth decay both drives and is driven by disinformation, and the new information disorder.

Drivers of the truth decay and rise of disinformation are many. Modern education systems lack the capability and mechanisms to prioritize “critical thinking” and “media literacy”, especially at early stages. Such skills are increasingly required to process the high volumes of

\(^3\) Ibid.

\(^4\) Ibid.

information, or news, that is shared at greater speeds due to the characteristics of modern information technology and systems. In the new environment, social media is a major source of information that is often hard to verify. News media often amplifies partisanship and polarization while adapting to the new standards of competition and characteristics of the information market.\(^6\) Polarization and hyperpartisanship are often “perpetuated” by political actors who also lack the intent to eliminate the major causes of disinformation and accompanying threats. In contrast, domestic political actors often compete or collaborate with other entities, ranging from individuals to media outlets, or foreign governments, in a disinformation ecosystem that is enabled by all the given factors above.

Adding to the systemic factors mentioned above, the nature and characteristics of human cognition are other major drivers of effective disinformation. Cognition refers to the ways individuals or groups process any given piece of information. An overwhelming majority of studies show that cognitive biases, emotions, preexisting beliefs, mental shortcuts, and psychological factors are linked with the spread of false information. The most impactful cases of misinformation and disinformation often spread “negative and threat-related information”, “inspire fear, disgust, and surprise”, or address conformity, biases, and cognitive dependencies. Besides, such factors also relate to how much an individual remains open to interpersonal or intergroup communication and influence. Therefore, misinformation and disinformation should be seen “not as low-quality information that spreads because of the inefficiency of online communication, but as high-quality information that spreads because of its efficiency. The difference is that ‘quality’ is not equated to truthfulness but psychological appeal”.\(^7\)

False information has multiple types in terms of their content, creators, spreaders, and receivers. A large number of tactics, techniques, and procedures are used in combination when a hostile campaign is led by an actor that intends to target a population for strategic objectives. As the inventory and mediums for targeted information campaigns have proliferated in recent decades, so are the number of state and non-state actors that use them to harm other states, political systems, financial structures, social groups, or individuals.

Several concepts and models have been put together in recent years to grasp the evolving realm of influence campaigns. For instance, hostile social manipulation, as described in a report by RAND Corporation, “is the purposeful, systematic generation and dissemination of information to produce harmful social, political, and economic outcomes in a target area by affecting beliefs, attitudes, and behavior.”\(^8\) Although such campaigns often use cyber mediums together with conventional channels, they are different from other types of cyber attacks that target physical systems. Hostile social manipulation toolkit includes a wide variety of “techniques and mechanisms” ranging from disinformation to computational propaganda (e.g. using botnets) to microtargeting, trolling, imposter accounts, or fake content generation.\(^9\)

The emerging field of social cybersecurity offers another high-level framework for understanding modern influence campaigns. Similar to traditional cybersecurity, social cybersecurity connects science with emerging national security requirements. By definition, “social cybersecurity is an emerging scientific area focused on the science to characterize, understand, and forecast cyber-mediated changes in human behavior, social, cultural, and political outcomes, and to build the cyber-infrastructure needed for society to persist in its essential character in a cyber-mediated information environment under changing conditions, actual or imminent social cyber-threats”.\(^10\) Broadly, the field operates as a “multidisciplinary computational social science”, combining a wide variety of disciplines related to natural, social, computer, and information sciences.

\(^6\) Ibid.
\(^7\) Alberto Acerbi, Cognitive Attraction and Online Misinformation.” Palgrave Communications 5 (1), 15, 2019.
\(^8\) Michael J. Mazarr et al., Hostile Social Manipulation: Present Realities and Emerging Trends, RAND Corporation, 2019.
\(^9\) Ibid.
Recently, one of the most comprehensive high-level models for characterizing social manipulation was provided by the practitioners in the social cybersecurity field. Accordingly, “the social cyber domain offers multiple forms of maneuver”. Information maneuvers and network maneuvers constitute the two broad categories of social manipulation in the cyber domain. The BEND Model, as depicted in the table above, covers the diversity of hostile social manipulation methods. This section outlined the overall typologies, trends, and models of false information ranging from misinformation to large-scale hostile social manipulation and social cyber-attacks. In Turkey, the truth decay manifests itself in many forms. Across online and offline platforms, misinformation, disinformation, and social manipulation overwhelm the

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11 Ibid.

**Table. The BEND Model of Describing Social Cybersecurity Forms of Maneuver**

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<tr>
<th>Information Maneuver</th>
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<td><strong>Positive</strong></td>
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**Figure 3:** THE BEND Model of Information and Network Maneuvers in Social Cybersecurity, Retrieved from Beskow and Carley (2019).
factual information and knowledge on a regular basis. Media literacy issues, hyperpartisanship, extreme political polarization, state of the news media, and continual domestic and foreign policy crises are also associated with the pollution of the Turkish information and news ecosystems. As a result, large segments of the Turkish population seem to be susceptible to forms of false information and social manipulation. The following sections will explore how forms of social manipulation, conspiracy theories, and misinformation affected political conversations, the flow of information about the COVID-19 pandemic, and conversations around Turkey’s foreign policy amid fluctuating relations with its NATO allies and Russia.

**Turkey’s Homegrown Problems and The Vicious Circle of False Information**

The frequency, reach, and prominence of false information makes Turkey an interesting but difficult case for the study of the phenomenon. As A. Unver suggested in a previous EDAM report, “the overall poor state of the information environment in the country renders disinformation a norm, not an exception, which makes it harder to isolate the researched anomaly.”\(^ {12}\) Turkey’s news media, online and offline, is far from becoming the gatekeeper of factual information. In contrast, media outlets are among the primary producers and amplifiers of falsehoods. Besides, inauthentic activities, fake accounts, trolls, and bots usually overwhelm the political conversations taking place in Turkish online social networks, to a degree even limiting the effectiveness of the campaigns by capable foreign actors. Turkish-speaking social media contains a large number of bots and trolls, and many political influencers amplify the false narratives for domestic gains, regardless of the possibility that it might end up harming the very core of the Turkish social fabric or serving the strategic objectives of hostile foreign entities.

Turkey’s susceptibility and vulnerabilities to false information emanate from a self-reinforcing system of longstanding domestic problems. Broadly, the abovementioned computational propaganda issues are blended with extreme political polarization and a toxic/uncivil political discourse across online and offline platforms. This vicious circle is the primary challenge for any potential attempt to mitigate misinformation and disinformation in Turkey.

In the last two decades, scientific studies documented the reciprocal relationships between polarization, false information, and toxic (uncivil, negative, offensive, harassing, or hate-related) conversation.\(^ {13}\) For example, political polarization and hyperpartisanship boost the spread and longevity of false information, while disinformation often aims to strengthen the polarization and social fault lines. Similarly, toxic discourse and related issues that affect political conversations have a two-way relationship with both polarization and false information.\(^ {14}\) Anger and anxiety\(^ {15}\) affect the spread of false, partisan, toxic, and polarizing content, while politicians and troll armies regularly boost such emotional and psychological factors. Most importantly, as the figure below shows, the mentioned self-reinforcing system may enable several other threats and further vulnerabilities, ranging from hostile influence campaigns to radicalization, violent extremism, election meddling, and widespread distrust in the political system and institutions.

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14. Ibid.
The impact of political and social polarization on Turkish society has become more substantial in recent years. According to a survey conducted in 2017, only 29 of respondents “said they would like to be neighbors” with the supporters of the political party they dislike. “About half of the respondents 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.”\textsuperscript{16-17}

\textbf{Figure 4:} The self-reinforcing system of false information, polarization, and toxic discourse in Turkey.

\textbf{Figure 5:} The visualization of a Turkish-language Twitter conversation during recent events around the Syrian civil war. The Turkish information environment remains extremely polarized. For the detailed analysis, see EDAM’s previous report on Turkey’s digital media ecosystem\textsuperscript{18}


\textsuperscript{18} Ibid.
Polarization and hyperpartisanship are highly correlated with the prominence of false information and efficiency of disinformation in Turkey. Preceding this paper, EDAM’s report on the digital news ecosystem in Turkey documented the formation of extremely polarized conversation networks on social media, and how Turkey’s news outlets mostly remain in their partisan clusters. Due to the high frequency of important political events and crisis moments, as well as the continual domestic political climate that resembles referenda-like discourse, susceptibility to disinformation remains high among Turkish speaking online social networks. This vulnerability is often exploited by domestic actors, while it perpetuates Turkey’s vulnerabilities against hostile social manipulation campaigns. Currently, Turkey lacks a comprehensive strategy and political intent to tackle social manipulation problems. If Ankara opts for mitigating the overarching problem, political polarization and the very high baselines of susceptibility to falsehoods will be primary issues to address. In addition, the issues of political troll armies and botnets, due to their toxic impact, should be addressed.

On top of the abovementioned problems, conspiracy theories, false narratives, and rumors often develop into resilient false beliefs, adopted by large segments of the Turkish society. Among many factors enabling the phenomenon, Turkish news media’s amplification of false narratives, media literacy issues, and deep-rooted problems of the education system come first. The following chart shows the results of a small survey conducted by Istanbul Economy Research. The first two of the listed false narratives are older and well-known, showing the longevity of misinformation despite debunking and corrections. Others, relating to the COVID-19 pandemic, show the widespread susceptibility and readiness to adopt repeated false narratives. All examples have been amplified by the Turkish news media on a regular basis.

![Figure 6: Results of a survey conducted by Istanbul Economy Research. The question to respondents was: “Which of the following claims do you think are true?”](image)

Trust in news media and perceived exposure to disinformation generated by news outlets are two other telling indicators of false information related issues in Turkey. According to Reuters Institute Digital News Report, in 2019, the rate of overall trust in the news was 46 percent, with an eight-point increase from the previous year. In 2018, the report also documented the overall distrust with a 40 percent record, signaling the effects of political polarization and consolidation of major news media by similar ownership. In addition, trust in the news was higher for the right-leaning respondents of the survey. Finally, perceived exposure to misinformation was also very high, with distinctly high-point types that put Turkey in a different place than most of the other countries. According to the Digital News Report, 53 percent of the respondents stated that they were exposed to “stories where facts are spun or twisted to push a particular agenda”, while 49 percent also reported “stories that are completely made up for political or commercial reasons”.

21 Ibid.
Turkey’s disinformation ecosystem is largely driven by trolls, bots, news media, and partisan actors that pursue domestic political agendas, intimidation, political suppression, and amplification of narratives that serve existing sociopolitical fragmentation. However, as an important geopolitical actor, the country is also targeted by manipulation campaigns led by foreign states or non-state actors. The most frequent sources of such campaigns and narratives, as discovered by social media monitoring outlets so far, originate from the Middle Eastern or Russian entities. For example, one of the most successful disinformation campaigns targeting Turkey was the Russian-led narrative that alleged the Turkish government with smuggling oil from ISIS during the peak of the Syrian war. Although later debunked, Russian sources succeeded in amplifying a narrative that was later picked up by several Western news outlets and some Turkish-language news media. The claim was even re-disseminated by some sources recently, coinciding with geopolitical tensions and military escalation in Syria.

**Figure 7:** Results of a survey on perceived misinformation by the news outlets in Turkey, as reported by the Reuters Institute Digital News Report.23
Similar events and revelations originating from several sources took place in recent months. For example, in April 2020, Twitter removed thousands of accounts that created inauthentic campaigns to target Turkey. Reportedly, the accounts were linked to “Egypt, Saudi Arabia, and several other countries”. According to Atlantic Council’s DFRLab, removed Twitter bots were reported by several researchers to Twitter before being taken down. The botnet amplified manipulative content about the Turkish government, Turkey’s President Erdogan, and Ankara’s actions in Libya.

It also disseminated content related to the COVID-19 pandemic. As other examples also suggest, campaigns originating both from Russian and Middle Eastern sources take place in a regional geopolitical context, while the Russian-led operations seem to be more nuanced in terms of their intensity and frequency. Besides, Turkey’s cross-border military operations and counter-terrorism efforts often become subject to manipulative campaigns by states and terror outlets, sometimes achieving coverage in international news outlets and widespread dissemination on social media.

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Content on RT Arabic website, suggesting Turkey’s President Erdogan initiates cross-border operations to prevent a coup.

Automated translation of the headline

Shares and metrics of the given URL on Facebook, as depicted by CrowdTangle browser extension tool.

**Figure 9:** Screenshots and social media engagements of an article published by RT Arabic. Facebook metrics were retrieved from the CrowdTangle tool.

The screenshot of an article on a Russian website, with a misleading headline, claiming Turkey intends to build a “caliphate” in southern Ukraine.

English translation of the headline as translated by Google Chrome/translate extension.

**Figure 10:** Screenshots of a Russian website claiming Turkey would build a caliphate in southern Ukraine.

**Figure 11:** Turkey’s recent cross-border operations in Syria were targeted by multiple manipulation campaigns on social media. The visuals were retrieved from the Anadolu Agency.²⁶

Turkey amid Misinformation Storms: Case of the COVID-19 “Infodemic”

During the COVID-19 pandemic, global waves of misinformation and manipulative activities overwhelmed social media. In return, it led to the mobilization of collaborative efforts joined by academics, international nonprofits, social media platforms, and government institutions to curb the effects of misinformation and accompanying risks to public health. Statistics suggest that the number of “English-language fact-checks” increased more than 900 percent between January and March 2020. The global spread of misinformation about the pandemic was even categorized as “the biggest challenge fact-checkers have ever faced.” An overwhelming majority of misinformation originated from social media platforms, while false claims amplified by public figures received most of the engagement. That being said, most of the false information was disseminated by individuals on social media channels. As a major challenge, the gravity of closed platforms such as WhatsApp, Facebook messenger, or simple emails increased as platforms of choice in disseminating COVID-19-related misinformation.

Due to the massive spread of misinformation and weaponized falsehoods during the COVID-19 pandemic, several efforts emerged to curb the risks and increase public resilience. For example, Europol has a dedicated and informative webpage to “break the chain” of fake news, including a brief guideline for individuals to “flatten the curve” of misinformation spread. First Draft has a detailed set of guides and resources for reporters, ranging from verification tools to databases of debunked narratives, and other information sources.

Besides, academic institutions and researchers collated dedicated pages about the relevant content of misinformation. Center for Informed Democracy and Social Cybersecurity at Carnegie Mellon University regularly updated a list of false claims and narratives on its webpage, characterizing more than 200 separate narratives under various categories, including stories about preventive measures and cures, origins and nature of the virus, conspiracy theories, emergency responses, and others. Similarly, Arkansas-based Collaboratorium for Social Media and Online Behavioral Studies (COSMOS) keeps an aggregated list of known misinformation pieces, and a guideline to prevent their spread. As of this writing, the list includes 405 misinformation cases and 41 tips to promote public awareness. Social media platforms, to different extents, adopted partial countermeasures against debunked disinformation, including content removals and signposts warning the users about the false information.

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<table>
<thead>
<tr>
<th>Categories of COVID-19 Misinformation in Turkey</th>
<th>Description</th>
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| **Location of the original source**            | - Narratives originated elsewhere and plagued Turkish-speaking networks  
- Narratives or types of narratives originated/seem elsewhere but tweaked or evolved into more domestic characteristics in Turkey  
- Narratives that are largely Turkey-specific |
| **Types of false information**                 | - Completely fabricated content  
- Out of context or reconfigured content  
- Misleading  
- Conspiracy theories  
- Coordinated inauthentic social media campaigns |
| **Types of narratives**                        | - Origins and nature of the virus  
- COVID-19 as a weapon  
- COVID-19 as a pre-designed ‘scenario’  
- Consequences of the pandemic  
- False information about cures and preventive measures  
- Diagnosis  
- Stories about government response  
- Stories about individuals  
- Stories relating to and driven by domestic political, social, and demographic polarization  
- Stories relating to scale and reach of the pandemic |
| **Narrative popularity**                       | - Reach and engagement rates of aggregated narratives under each category, ranging from low to very high levels |
| **Potential motives/objectives**               | - Financial gain  
- Domestic political influence  
- Inflicting confusion and fear  
- Influencing foreign policy agenda  
- Undermining state institutions  
- Geopolitical objectives  
- Other |
| **Actors/Sources**                             | - Individuals  
- Media outlets  
- Politicians/political parties  
- Foreign governments/state-led news sources  
- Religion groups, cults, organizations  
- Other non-state actors |
| **Platforms of dissemination**                 | - Conventional media (TV, print, radio)  
- Facebook  
- YouTube  
- Twitter  
- WhatsApp  
- Other social media |

*Table 1: Types of false information relating to the COVID-19 pandemic in Turkey*
In this study, we tracked and collected the examples of false information about the COVID-19 pandemic that had been in circulation in the Turkish information environment. Furthermore, we adopted slightly modified versions of characterization models also used by others in academia. The table above outlines the categories of misinformation about the COVID-19 pandemic we observed on Turkish-speaking social media conversations, digital news outlets, and conventional news media.

First and foremost, several characteristics of false information spread seem to be prominent across the Turkish-language information ecosystem. Most of the wide-spread cases of global disinformation around the pandemic also plagued Turkish networks. For example, false narratives relating to origins of the virus, its alleged use as a biological weapon, false claims about Bill Gates’ role in its creation and spread, and a grand conspiracy that aims to cut the global population, and 5G communication networks causing the death spiral were continually apparent conspiracy theories across all platforms. However, some of the global cases of misinformation evolved into more Turkey-specific characteristics. Also, a large number of false narratives were specific to Turkey. Mostly, such claims were related to domestic political and social polarization.

Another prominent feature of the Turkish-language misinformation about the pandemic was the transitivity of narratives between social media platforms and conventional news media. Turkey’s digital news media outlets hosted false claims, hyperpartisan comments, and conspiracy theories at much higher rates than outlets in most of the other countries. In return, articles and videos of such coverage also received high levels of engagement on social media. Especially, some prominent conspiracy theories and partisan content gained cross-platform prominence, spreading across YouTube, Facebook, Twitter, and other platforms. In sum, Turkish digital news media seems to be much more susceptible to false information than their international equivalents and they were among the major amplifiers of pandemic-related false information in Turkey.

Figure 12: Google Search Trends for the term “biyolojik silah” (biological weapon)
Example 1: Adopting Global Conspiracy Theories and Disinformation

Before and during the spread of COVID-19 in Turkey, many cases of false information seen in other countries also appeared on Turkish-language platforms. Prevention and cures, the nature of the virus, conspiracy theories relating to origins and nature of the pandemic, false claims about 5G communication technology, biological weapons, and grand conspiracies to control or curb the world population were the most frequent narrative types in this category.

Original articles appeared on a Turkish newspaper and on its website, re-claiming narratives about pre-existing global designs, weaponization, roles of the wealthiest countries and individuals, and other frequent conspiracy/disinformation cases.

CrowdTangle stats showing the reach and shares of the article on Facebook. The engagement remains limited at this point.

YouTube video narrating the original articles. The video received more than 4 million views, 50,000 likes, and more than 10,000 comments. (authenticity of these metrics are unknown, that is, how many fake views and likes was received is not retrievable as data)

CrowdTangle stats for the YouTube video and some groups on which it was shared. The narrative now reaches many more social media users and receives a high number of interactions.

Figure 13: Propagation of misinformation across platforms and the growth of social media interactions
Turkish TV channels and print media disseminated several false stories about prevention of the disease, including the use of garlic, vinegar, herbal cures, and saltwater gargling as home-made remedies, although this category declined on conventional mainstream platforms after mid-March, partly due to a centralized communication strategy run by the government institutions. Such claims were also widespread on social media. False information in other categories included stories and claims that coronavirus is not different than common cold or flu, coronavirus does not exist, only Asians get coronavirus, or the pandemic is caused by Chinese culture or race.

Across social media platforms and conventional media in Turkey, conspiracy theories and disinformation attributing the pandemic to pre-existing global conspiracies, biological weapons, and pre-designed strategies to control the global population were prominent. Such stories were evenly distributed between narratives that completely copy cases in other countries and narratives that were slightly tweaked into characteristics matching longstanding myths and political discourse in the Turkish information environment. There is a high-level of transitivity between conventional news media, YouTube, Facebook, and Twitter. As the figure above shows, the cross-platform interactions often amplified the reach and effectiveness of false information in general, while also enabling the longevity of the misinformation.

Among the misinformation pieces and conspiracy theories that attributed the global spread of the virus to foreign entities, the United States was the most frequently targeted country followed by China, while technology companies, prominent wealthy figures, charities, and international organizations were also mentioned frequently. Several public figures and mediatic influencers amplified such messages with significant reach and efficiency. Individuals disseminating disinformation ranged from social media influencers to famous health professionals, while almost all major news channels either provided a platform for those individuals or deliberately broadcasted misleading content. As an example among many, the figure above shows the reach and engagement of an article in this category on Facebook.
We also observed that the reach of some conspiracy theories and disinformation narratives extended to different segments of the Turkish socio-political spectrum, despite the extremely polarized structure of any political conversation on social media. This success mostly depended on the apparent source of the content. Articles, broadcasts, and videos appeared on conventional news sources received more engagement from their partisan follower clusters, while others could reach social media users in different politically engaged groups. Thus, regardless of their source, many disinformation narratives were amplified by secondary narrators on YouTube or authors of blog posts with no declared connection to original outlets.

Example 2: Longstanding political polarization, COVID-19, and potential susceptibility to foreign information agendas

A particular type of misinformation and social manipulation during the pandemic was related to Turkey’s domestic political discourse and extreme levels of polarization. Such pieces of false information and coordinated maneuvers on social media sometimes trended for extended times and affected the entire conversational ecosystem. Although this study does not report activities on Twitter in detail, one of the most prominent and continual cases of coordinated manipulation involves political bots and trolls on the platform. Frequently, bots, trolls, and associated political accounts distorted the conversation and information flow, brought high levels of toxicity and intimidation, and distracted online communities into a hostile and dismaying environment. Some of such activities also occurred in a cross-platform nature, extending to Facebook and other platforms. Thus, this type of conversation was polluted by disinformation relating to domestic politics, mostly targeting mayors, politicians, journalists, news outlets, and longstanding social, demographic, and political faultlines.

We also recorded some other cases of misinformation that are not only connected to domestic political sensitivities but...
also shed light upon their potential impact on foreign policy discourse. During COVID-19 related events, one of the most engaged news pieces originated on a local outlet, claiming that China did not demand any payment for the first batch of 2 million testing kits it supplied, in return for Turkey’s vaccine assistance during the cholera epidemic in China in 1938. Later published by some other outlets, the news piece also implied that Chinese authorities considered the gesture as a return to Turkey’s founder and first president Ataturk’s help that took place decades ago.

Although later debunked by fact-checking organizations, the original piece received almost 850,000 social media engagements according to BuzzSumo statistics, excluding the rates received by other outlets. Two major themes of messaging regarding the news piece were the positive attitudes for Ataturk’s initiatives during the first decades of the republic, as well as the positive sentiment towards China’s gesture and overall foreign policy foothold in Turkey. To note, the fact checking piece published by Teyit, Turkey’s prominent verification organization, received significantly fewer levels of engagement. This gap fits the overall patterns that, globally, fact-checking pieces usually do not reach as far as false information in online social networks.

Figure 16: News pieces and Teyit’s fact-checking about Chinese testing kits supply. Facebook interaction metrics were retrieved from the CrowdTangle tool.
Turkish information environment, both online and offline, remained vulnerable and susceptible to false information during the COVID-19 pandemic. Many misinformation narratives that gained popularity across the globe also penetrated Turkey’s news outlets, TV shows, and online social networks. Some types of relevant false information remained more Turkey-specific, mostly having political narratives attached. A major feature of the COVID-19 misinformation in Turkey was news outlets’ susceptibility and willingness to disseminate falsehoods, mostly for potential increases in viewer rates, subsequent financial gains, or domestic political reasons. Finally, false information and manipulative activities around the pandemic also took place in connection with geopolitical and foreign policy narratives.

The following section will explore misinformation in the geopolitical context while focusing on the narratives and content on Turkey’s defense partnerships, NATO membership, and foreign affairs. In particular, it will briefly explore how such narratives spread through YouTube, which is an often neglected platform in Turkey-specific disinformation research.

**Disinformation, Geopolitical Events, and Alternative Realities on YouTube**

Turkey is surrounded by multiple geopolitical faultlines. Adding to domestic political considerations and information consumption issues mentioned in the previous sections, Turkey’s political discourse is also intertwined with its foreign affairs, and a continual element of its geopolitical identity. The country is at the intersection of multiple crisis zones such as Syria, Iraq, the Caucasus, and the Black Sea, and it is one of the major actors affected by the developments within Europe and the transatlantic alliance. Consequently, Turkey’s information environment often hosts heated conversations, myths, conspiracy theories, false beliefs, and disinformation with geopolitical characteristics. Moreover, politicians, influencers, and news media blend foreign policy discourse with hyperpartisan and polarizing rhetoric of domestic politics. From the perspectives of political psychology, popular culture, identity, and overall political culture, many factors enable the co-existence of alternative realities across sociopolitical groups in the country. In short, Turkey’s susceptibility to disinformation in geopolitical context has been high for a very long time.

In the following subsections, this paper will 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. However, elsewhere, YouTube has been at the epicenter of debates regarding the spread of misinformation, radicalization, feedback loops, and algorithmic contributions to such falsehoods. Moreover, the effectiveness of visual content such as images and videos, in comparison with text, has been studied by many to this date. Finally, the flow and exchange of content hosted on YouTube also take place in cross-platform settings. YouTube videos and channels are also shared on Twitter, Facebook, and web platforms. Also, most of the modern news media channels use YouTube channels as a major social media branch. Combined with its popularity rates in Turkey, mentioned factors make a study on YouTube a necessity, rather than an option having equal weight with other data sources.
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. In the preliminary list, we had the titles, identification numbers, and URL links of 55 videos. Later, we used the YouTube API (Application Programming Interface) to collect the data, including comments, video statistics, and the list of related videos. After a manual data cleaning effort to ensure the most relevant dataset containing false information, our final lists included around 1,500 videos and 700,000 comments 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, as previous academic studies documented the functionality and effectiveness of the method. 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. 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. As the figure below shows, the video network is extremely dense. The majority of the videos in the co-commented network are interconnected or have short paths from one to another. The density implies the presence of an active commenter community that comments on different sets of content on a regular basis. The colors in the network show the communities extracted by the modularity algorithm we used. However, the major distinction between the largest two groups seems to be the addition or deactivation of commenter groups over time, instead of content specific distinctions. Two groups of videos on the upper sections of the network visual also include the recent COVID-19 related content, as the channels in the dataset, include a number of conspiracy theories and misinformation that are combined in lengthy videos. Some of such content was also depicted in the previous sections.

Figure 17: The use of social media platforms in Turkey, for general purposes and news consumption. Data were retrieved from Reuters Institute Digital News reports. 

The next figure shows a visualization of the channel network. Similar to the videos, the majority of the channels are also placed in highly dense networks. Sizes of nodes (channels) imply the level of influence in the network, and a set of channels seems to be influencing the entire system. Combined with the prominent topics extracted by content analysis, the channel and video networks show the presence of a highly-active community being built around engaging, emotive, and often misleading political content that concentrates on Turkey’s involvement in regional conflicts, perceived hostilities with foreign countries, Turkey’s alleged rise to top ranks in global geopolitical competition mostly at the expense of other heavyweight actors, conspiracies, and alternative realities. The following subsections will show two examples of the most common narratives, consisting of an alleged imminent attack by the US on Turkish soil, Russia as a potential military ally, and Russian defense systems as potential inventory for Turkey. Besides, the following examples also show how narratives evolve but false information perpetuates over time.
Example Narrative Set 1: The US Military will attack Turkey. Turkey needs new military allies and S-400’s to counter it.

Within the YouTube dataset we used, the videos amplifying the narrative that the US would militarily attack Turkey received the largest number of views, likes, shares, and comments. As seen in the screenshots below, titles such as “This is how the US will invade Turkey”, “urgent importance of the S-400s”, “10 countries that will help if the US attacks Turkey”, “Russian expert: statements show the US considers the option of striking Turkey”, “did Turkey and Russia made a secret agreement, rules may change” and many others with similar narratives received a sizeable viewership. The videos in this group were also shared on Facebook and Twitter to different extents.

*Figure 20: Examples of videos disseminating the narrative*
The false narrative of an imminent attack by the US was originally disseminated by several news outlets and influencers. Primarily, the Russian outlet Sputnik regularly published such articles both in Turkish and foreign languages. Some of the videos amplifying the narrative either cited Sputnik’s content or narrated very similar ones. The narrative recorded a peak in terms of popularity and influence during the deterioration of the US-Turkey bilateral relations in 2019, mostly due to the Turkish-Russian S-400 deal and disagreements around the ongoing Syrian civil war.

![Figure 21: An example of Sputnik’s coverage of the narrative](image)

**Example Narrative Set 2: Turkey is now defeating Russia politically and militarily. Its other allies will come to assist.**

The prominent narrative shifted completely starting from late 2019. During the same timeframe, tensions between Russia and Turkey were high despite the ongoing diplomatic efforts. Syrian regime forces intensified their attacks on Idlib, the northwestern province of Syria, largely assisted by the Russian and Iranian military elements in the conflict zone. Turkish Armed Forces remained active within the deconfliction areas as previously with Russia and Iran, aiming to prevent a renewed flow of refugees and humanitarian catastrophe. On February 27, 2020, a series of airstrikes targeted Turkish troops while on the move to observation posts, causing 34 casualties. Military escalation, bilateral tensions, and a subsequent announcement of ceasefire followed.

Videos in this group include fabricated stories, many curations of conspiracy theories, and several sub-narratives that concentrate on why Turkey already is defeating Russia on many fronts. False claims, sometimes extending to imagination levels of cheap fiction and soap operas, ranged from secret weapons that deter Russia from any further military action to Turkish political mastermind that played Russia to acquire secret knowledge about S-400 systems, and an unstoppable emergence of the new Turkish “empire” in near future. Remarkably, some of the videos disseminating the narrative received over a million views and thousands of comments. Similar to the first group, this narrative was also shared on other platforms, although in more limited numbers. As explained in a recent EDAM report, the Turkish information environment was extremely polarized during the given timeframe, diversifying the sources of misinformation and the number of temporary peaks of different agendas during those conversations. 

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All in all, the exploratory network and content characterizations of YouTube content enable an overview of false information that impacts foreign policy discourse, and beliefs, attitudes, and potential behavioral consequences relating to geopolitics around Turkey. As mentioned in the earlier parts of this section, YouTube is one of the two top preferred news sources among all social media platforms. Also, the transitivity of information between YouTube and other platforms, including Facebook, Twitter, blogs, and websites is high. Within this context, the networks, communities, and engagement rates overall indicate the limitations to the spread of factual information and the widespread popularity of several falsehoods ranging from false claims to disinformation and hostile social manipulation.
Conclusion

This study explored instances of false information in the Turkish information environment, with a particular focus on digital platforms. Typologies and characterization of false information range from the formation of old-fashioned rumors to coordinated hostile social manipulation across the information ecosystem. In light of global trends and domestic features, Turkey remains polluted with almost all types of false information, often at overwhelming rates. Individuals, organizations, news media, and political entities are both targets and disseminators of misleading or manipulative content. Social media conversations are often overwhelmed or hijacked by political trolls and botnets. A vicious cycle of false information, extreme political and social polarization, and toxic discourse further weaken the quality of exchanges in the Turkish information environment.

This research effort intersected with the spread of the COVID-19 pandemic across the world, intensifying the challenges of misinformation, disinformation, and social manipulation at exponential rates. False claims, conspiracy theories, and coordinated manipulation also plagued the Turkish information environment during this study. Relevant sections outlined the overall typology of false information we observed on Turkish-speaking networks, including both online and offline platforms. Some false narratives resembled cases in other countries, while others were either tweaked into the Turkish context or completely originated in the domestic environment. As one of the most troublesome observations, Turkey’s news media was far from curbing the effects of “infodemic”, despite some limited centralized efforts led by public health officials. More often than not, Turkish news sources were in harmony with the disseminators of false information on social media, boosting the reach and influence of false narratives.

Disinformation also boosts the formation of alternative realities and false beliefs about Turkey’s foreign affairs, national security, defense partnership, and place in long-term alliances. Besides, foreign policy discourse is often blended with domestic hyperpartisanship. Therefore, as a country surrounded by and involved in frequent and highly important geopolitical events, Turkey remains vulnerable against internal and external social manipulation attempts that ultimately serve the strategic objectives of hostile foreign entities.
Backgrounder

Cyberspace offers a good, easy, and cost-effective venue and tools for communicating semantic outputs to large swaths of societies. This is why information warfare and information operations, being a centuries-long phenomenon, are now more effective than ever. Infosphere generally operates below the level of armed conflict. Information activity consists of both defensive and offensive transactions, namely the protection and assurance of information – which refers to information security –, along with efforts of advancing strategic interests by manipulating target audiences. The ultimate focus of information activities is human cognition.

Uncertainty, fear, and anger remain the major drivers of false information campaigns in digital news media. A careful use of these agents enables disseminations going viral. The initial disinformation output can emerge outside of the mainstream segments of a society’s information world. Nevertheless, mass coordinated action can still ensure penetration to larger audiences. Especially, bot networks can amplify the cognitive input and build the illusion of immense popularity and activity.

Information warfare and information operations are geopolitical assets. At present, for example, the Russian Federation’s strategy focuses on inflicting damage to the main Western institutions – NATO and the European Union – as well as democratic political aspects of modern Western societies. To do so, Russia employs a broad-array of techniques such as political and economic espionage, large-scale disinformation operations in the social media, and botnet activity. Information operations are designed in a customized fashion depending on the target country’s strategic constellation, geostrategic features, historic and cultural heritage, and linguistic characteristics. Each nation has informational gaps. The preparation for a campaign is about finding those which mark the right entry points.

Brief Assessment of the Report: Exploring Turkey’s Disinformation Eco-System

The referred study showcased that Turkey’s infosphere has been exposed to complex information pollution through disinformation and manipulation. This overall problematic situation translates into grave vulnerabilities against cognitive threats.

The strength of the report in the examination, I argue, stems from its rich content assessing the informational threats globally, breaking down types of manipulation and disinformation, and relating the theoretical framework to Turkey. Besides, the case study on the Turkish social media’s Coronavirus agenda offered a good overview of Turkey’s digital informational trends.

The examined study portrays the new information eco-system as an arena where machines, algorithms, and human beings interact in a complex fashion. This hyper-connectivity, the author argues, leads to a global-scale socio-economic transformation of societies. Since information remains at the epicenter of the new – or emerging – societal model, consecutive false information waves can alter human behavior. This capacity brings about political, financial, and security changes in many corners of the world.

Notably, the referred report concludes that Turkey’s media remains away from ‘becoming the gatekeeper of factual information’. Rather, the Turkish press has become the amplifier of false news and inauthentic activity. Along with the already troublesome Turkish social media landscape, Turkey’s infosphere highlights many lucrative entry points for foreign hostile activity. Barış Kırdemir’s findings as to the Coronavirus Pandemic are noteworthy. Conspiracy theories with respect to the origins of the virus outbreak plagued the Turkish social media, such as narratives related to Bill Gates, biological warfare, or 5G networks. Moreover, Turkey’s partisan polarization was also manifested in the Coronavirus debates across Twitter, Facebook, and YouTube.

Finally, Kırdemir argues that YouTube remains a multiplier tool of disseminating false information, especially given

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3 Daniel Milo, et.al. Countering Information War, NATO, 2016, pp.
the transitivity between YouTube and other social media venues, first and foremost Facebook and Twitter. Such campaigns may even impact foreign policy discourse.

**Conclusion**

The study’s key findings revealed that the Turkish information landscape is exposed to nearly all kinds of false information at very high rates. Frequent botnet and troll activity in Turkey’s social media use brings about more disinformation, fueling polarization and subversive discourse. Above all, one of the most troublesome suggestions is that “narratives evolve but false information perpetuates over time”.

The study also drew correlative lines between Turkey’s alternative political realities and its polluted social media information and communication environment.

Barış Kırdemir’s findings, showcasing that the Turkish information actors have become both disseminators and targets of manipulative inputs, remains the most notable finding of the examined report. This problematic outlook is worsened by high-levels of inauthentic activities on social media and the press’ troublesome approach to fake news. According to the reviewed study, a particularly important problem in the Turkish case is the high-levels of “transitivity of narratives” between social media and news media channels. Pieces of misinformation get easily amplified via news outlets on a regular basis.

Disinformation impacts almost all significant policy debates in Turkey, ranging from domestic politics to foreign policy and public health issues. For example, while the S-400 case was subject to ‘the US will invade Turkey’ paranoia as well as the false hopes revolving around the Russian SAM system as a ‘silver bullet solution to the imminent invasion’, the Coronavirus Pandemic witnessed biological warfare conspiracies going viral in the Turkish digital channels.

In sum, Turkey has long been exposed to the vicious cycle of toxic discourse, disinformation, and extreme polarization in its digital information environment. This shortfall leads to critical vulnerabilities in the face of various hostile actors, ranging from state competitors to radical extremists. The Turkish administration should take the disinformation risks into account in a national security strategy setting in the 21st century.
EXPLORING TURKEY’S DISINFORMATION ECOSYSTEM
An Overview

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