

Ceren YEGEN*
Bünyamin AYHAN**
Yavuz DEMİR***

Twitter's Role in Digital Democracy, Post-Truth, and Political Polarization

Abstract

Although the presidential election in the United States of America (USA) in November 2020 took place under the shadow of the COVID-19 pandemic, it has become one of the important points in terms of digitalization and the agenda. Donald Trump, who lost the election to Joe Biden, challenged the results, and even refused to concede for some time. Joe Biden, who based his election campaign on democracy and diversity, took the oath of office as the 46th President of the United States on January 20, 2021. His inauguration ceremony was marked by a call for “unity”. The ceremony became the agenda of social media as well as traditional media, and users simultaneously shared posts reflecting their views and attitudes on social media platforms. Most of these posts (on Twitter) were made using the hashtags #DonaldTrump and #inaugurationday. The discussion and political polarization that started during the election process continued after the election through social networks. In the study, the role of Twitter in digital democracy as well as its potential to serve as a public space were examined through the network and its features, interactions, and factions that were formed within the framework of the related hashtags on the inauguration day (January 20, 2021). Methodologically, social network analysis was utilized. The results indicate that the political agenda-setters on Twitter are dominating and resonate with users in terms of interaction.

Keywords: Democracy, Post-Truth, Political Polarization

Introduction

Democracy revolves around having the right to vote and exercising it on ballots. The ideal electoral system in a representative democracy is one that “enables all eligible citizens to vote with equal weight and allows joint electorate groups with the exception of underage individuals to elect one or more of their candidates to the administrative body” (Amat et al., 2017; Zimmerman, 1994). Elections, which play a role in the healthy functioning of democracy, undoubtedly have supra-political importance and influence. Although democratic process-

* Mersin University (Turkey), ORCID: 0000-0001-9582-0711 cerenyegen@mersin.edu.tr

** Selcuk University (Turkey), ORCID: 0000-0003-0476-8394, bayhan@selcuk.edu.tr

*** Selcuk University (Turkey), ORCID: 0000-0002-9755-0150, dmryavuz@gmail.com

es change over time, what is important is that the individual is able to make a choice based on free will and choose the tools they will use in this process. Every element that increases and diversifies participation is important in terms of democracy. In this respect, great importance is attributed to increasing the participation of citizens in democratic processes through media and technological tools, and the phenomenon of digital democracy, which indirectly mediates this. In the light of these debates and digital phenomena, which impact democracy in a digital sense, the 59th presidential election in the United States of America (USA) was held on Tuesday, November 3, 2020, with the 45th President of the United States, Donald Trump, running for reelection as the candidate of the Republican Party against the Democrat Party candidate Joe Biden. Circumstances such as the COVID-19 pandemic debates on violence against African-Americans and the changing voter profile was undoubtedly reflected in the election results. So much so that unexpectedly for himself, Trump lost the race and Joe Biden, who also served as the vice president between 2009 and 2017, became the 46th elected President of the United States. While it can be thought that what caused Trump the election is his unique style of politics and the failure to effectively manage the coronavirus process in the country (Peters, 2020), it can be said that what brought Biden the presidency is his efforts with Kamala Harris, the first female, African-American and Asian-American vice president, towards democracy, equality and diversity (Nagle & Verhovek, 2020; Choi, 2020; Ray, 2020). This process, which was followed closely all around the world, became the agenda of social media as well as traditional media. Even the trending gifs on Instagram, a popular social media platform, were designed with the theme of the inauguration ceremony.

Before and after the inauguration ceremony, users simultaneously shared posts reflecting their views and attitudes on social networks (particularly Twitter), which are tools of publicity. Most of these posts were observed to contain the hashtags #DonaldTrump and #inaugurationday.¹ These debates, within the framework of which democratic processes are reconstructed in digital spheres, revealed the differences in actors, their features, interactions, and polarization. As an argument for reaching the masses, hashtags can point to the existing divide on political issues on social networks. Therefore, examining the network and its features within the context of the #DonaldTrump and #inaugurationday hashtags is crucial in many aspects such as publicity, digital democracy, and polarization. Observing and following users' online discussions on social networks can provide insight into their individual or collective behaviors and attitudes regarding public issues (Srikanth et al., 2021).

Democracy and Elections

According to O'Donnell (1999), the definition of a democratic regime is realistic and limited, but not minimalistic. Democracy is not the official presence of a multi-party system, but the verification of the free and fair election of the governing body in accordance with the will of the general public (Amundsen, 2007). In order for democracy to survive for a long time, it is necessary to develop a democratic culture and for the support towards democracy to have the ability to respond to change with various events and phenomena (Robbins & Tessler, 2007).

Historically, elections have been both authoritarian means of control and tools of democratic governance (Schedler, 2012, p. 36). There are many controversial aspects to democracy. These are generally concentrated around electoral systems, representation, and voting. However, it is observed that one of the most controversial situations is that politicians accused

or convicted of corruption in court are reelected by voters. So much so that corruption appears to have no impact on the development of politicians' careers in certain cases. Democracies are organized with rules and institutional mechanisms that prevent corruption from reaching severe levels. Despite all these mechanisms, it is argued that corruption is still present in democracies, leading to destructive outcomes in terms of their legitimacy (De Souza & Moriconi, 2013, p. 471; Anderson, 2012). It would also be reasonable to add that the government systems adopted by countries run by democracy are determinative of the budget processes in these countries (Yegen, 2020, p. 153).

Elections are of great importance for the nature of modern democratic governance, and cause governments to be "responsive and accountable towards their citizens" (Bormann & Golder, 2013, pp. 360-361). Elections are tools of democracy, they belong to citizens and play a mediating role in linking the choices of citizens with the behavior of policy-makers. The principles of democratic elections are based on the fact that citizens have the right to participate in implementational procedures within their country (Aarts & Thomassen, 2005; Merloe, 2008). Electoral processes, which are carried out under circumstances that meet global and regional standards in order to ensure reliability, add meaning to the fundamental values of democracy, involving political equality and the accountability of administrators (Sisk, 2017, p. 2). On the other hand, according to Mvukiyehe & Samii (2015), one way of characterizing the "quality" of elections is in the form of the degree of clarity to which voters express their policy preferences. In "fragile states", which are defined by a lack of political authority, there are several factors interfering with the quality of elections, including challenges with citizens' access to information, coordination opportunities, and political factions' vulnerability to threats from those who influence them.

According to Blais (1999), two key reasons stand out for assuming that functioning with elected representatives is preferable to a dictator: the fact that it is more likely for the policies specified by elected representatives to reflect the views of the majority and for conflicts to be handled peacefully in democracies. Blais (1999) argues that policy-makers are not guaranteed to always follow the public sentiment in the legislative process. So much so that members of parliament and governments are free to do whatever they want after being elected. However, voters cannot re-elect their representatives if they are displeased. Voters have "A posteriori" authority over their representatives, which provides an incentive for them to be responsive to their constituents' concerns. Reilly (2002, p. 156) argues that elections are also important in terms of the idea that electoral systems can help promote both democracy and successful dispute resolution. According to him, "election engineering" has become increasingly appealing to those attempting to establish democracy in a divided society during the previous two decades (Egorov & Sonin, 2018, p. 1). Menocal (2008, p. 2), who argues that electoral systems, or the form of voting in general elections, alter the dimensions and dynamics of governance, also states that electoral systems can assist politicians in shaping their calculations regarding policy selection. As pointed out by Drumond (2015), international and local actors engage in a variety of actions involving election monitoring and observation, technical and logistical assistance, and the organization and supervision of elections to ensure that elections are free and fair.

Digital Democracy

While public opinion is an integral element of democratic theory, it is also a critical phenomenon for political representation (Druckman, 2012). Today, many forms of the digital revolution are occurring in a wide variety of fields, and even processes such as education and training are being transformed within the framework of digitalization (Simon et al., 2017, p. 8). Digitalization has also altered the concept of democracy, resulting in the emergence of the term “digital democracy” in discourse and literature. Hacker & van Dijk (2000) define digital democracy as “the use of information and communication technologies as well as computer-mediated communication in all forms of media in order to improve political democracy or the participation of citizens in democracy”. On the other hand, in addition to this definition, it is observed that comparable terms such as “virtual democracy”, “teledemocracy”, “electronic democracy” and “cyber democracy” are also used (Hacker & van Dijk, 2000).

Digital democracy is structured in a way that alters the way in which citizens participate in democracy and the way they perceive it, together with the political sphere. According to van Dijk (2000), the effects of digital democracy were drawn with the perspective of “revolution in the sense of a technological rectification to the trust issue experienced by citizens towards the government in politics and public administration”. The use of technology in this context was also viewed as a means of subverting institutional politics and forms of policy-making. Whatever form digital media take in the online and offline processes of political communication, digital democracy is defined as the “pursuit” and “implementation” of democracy.

As stated by Vedel (2006), although the idea of improving democratic processes with the use of information technologies did not emerge with the Internet, it has been developing since the end of World War II and the emergence of computers. In this context, three phases can be mentioned with regards to the relationship between democracy, the public and information-communication technologies (Vedel, 2006). The first phase is the post-cold war era, the second phase is the period between 1970 and 1980, and the third phase is the period between 1990 and 2000. In all three phases, the use of technical and technological elements, and their relationship with the state have been decisive. The following claims affirming digital democracy, put forward in the last quarter, are remarkable and significant (Tsagarousianou, 1999; van Dijk, 2000):

1. Digital democracy improves the access and exchange of political information between public administrations, representatives, political and social organizations, and citizens.
2. Digital democracy supports public discussion, debate, and the formation of communities.
3. Digital democracy increases citizens' participation in political decision-making processes.

Today, social networks have significant ergonomics in terms of digital democracy due to their structurality. Social network platforms, which reinforce public debates and promote diversity and visibility, have made it possible to shorten the distance between politics and citizens.

Political Polarization and the Role of Social Networks in Political Polarization

Due to the fact that political institutions and policy-making processes are based on sharp divisions between parties, it is known that political polarization did not emerge as a new concept (Walker, 2006). Apart from the behavior and perception of voters, ideological polariza-

tion should also be added to this phenomenon (Körösenyi, 2013, p. 11). Additionally, the phenomenon of change is observed here, as well. Changes in political beliefs become clearer based on race and ethnicity, and it is observed that individuals perceive the world to be more polarized than it actually is. "Political polarization", which is among the popular concepts of today, causes serious problems for democracy and the rate of polarization is rapidly increasing (Autor et al., 2016, p. 7; Lupu, 2015, p. 332; Baldassarri & Bearman, 2007).

With digitalization, traditional forms of political polarization carried on through digital channels. It is possible to articulate social networks as a different context and domain from the traditional one (Lazer et al., 2009) to studies suggesting that friendship is the dominant channel for influencing political attitudes and behaviors among the various types of social bonds (friendship, respect, time spent together, political talk). This is because political polarization, which was once only seen on the street, in individual conversations or in public areas, is now increasingly widespread in social networks. The introduction of online environments' speed, engagement, and massiveness allowed political divisions to interact with one another. Many facts and falsehoods that feed political divisiveness, on the other hand, can spread quickly through social media. One of the findings of a Facebook network poll in which participants were asked about their own political attitudes as well as their thoughts about their friends' attitudes was that friends rarely talk about politics, and when they do, they don't learn much from each other's perspectives (Goel et al., 2010). The rapid development of digital media environments, according to Kirdemir (2020), contributes to the exposure of political polarization, disinformation, and social manipulation efforts in digital environments. A study published in the United States found that social media contributes to political division. According to the Stern Center for Business and Human Rights at New York University, social media corporations generate a social divide since they are unable to regulate themselves sufficiently. The report emphasizes that social media is spreading the emotional polarization that has affected American politics, and that the congress raid on January 6 is the most vivid example of right-wing extremism as a result of Donald Trump's presidency and its continuing influence on conservatives in the country (*TRT Haber*, September 13, 2021). Some theories claim that situations that can be the source of crisis and conflict through political players or politics pique people's interest in politics. The sentiments of American society during the recent elections, for example, are considered current examples. So much so that, even though voting turnout dropped to 40%, fans and opponents of black leader Barack Obama's presidential campaign rallied, and voter turnout surpassed 80%. A similar situation was noticed in Donald Trump's candidacy, and the political polarization seen in the personalities of the leaders has increased election participation and interest in politics in recent years in the United States. (Çaha, 2020, p. 256).

Social media sites contribute to political polarization by creating "echo chambers". Therefore, it is believed that social media plays an effective role in isolating individuals from opposing views on current events (Bail et al., 2018). That is because websites record shares, likes, comments and other similar actions and show the user content that is in line with their views. This way, users' views echo back to them (Grömping, 2014). In addition to arguments claiming that the Internet, and spaces such as Twitter and Facebook in particular, function as spaces for public debate (political, cultural, economic, etc.) (Güz et al., 2019), there are also those arguing that the related spaces are do not fully meet the definition of the concept of public space. In order to understand whether Twitter functions as an echo chamber for users based on the ongoing debates on whether the Internet is a public space or an echo chamber, Takikawa

& Nagayoshi (2017), emphasizes that it is necessary to investigate the structure of the platform and the content of its political sphere, as well. The findings of the study carried out by the researchers showed that whether Twitter serves as an echo chamber depends on the topic (Takikawa & Nagayoshi, 2017). Due to the algorithms in social networks, the individual, who is the user of the network, lives in an echo chamber (Kocabey Şener, 2018), and reinforcing their existing ideology while also adopting it as more accurate and universal generates an illusion. The metaphorical terms “echo chamber” and “filter bubble” refer to the consumption and limitations of social media use in the context of information. On the internet, the filter bubble is about feeding on similar ideas and viewpoints and not being able to reach out to those who have opposing views. In customised filter bubbles, the user is almost imprisoned, preventing them from encountering conflicting perspectives. The term “echo chamber” refers to how the internet records a user’s online activities (likes, comments, shopping habits, and so on) and displays content within the context of their own thoughts and behaviors. The sound that users hear in these surroundings is essentially an echo of their own voice, not the voices of the individuals they communicate with. Echo chambers are also said to assist users to enhance their beliefs by communicating with like-minded people. The filter bubble, which has resurfaced in the aftermath of Donald Trump’s election as President of the United States, came to the fore when the sources from which liberal, left democratic voters and conservative, right republican voters obtained information about the agenda were completely different. In fact, the fact that both sides now believe in diametrically opposed realities, rather than differing perceptions of reality, is seen as an issue, with platforms that provide individualized results to their users being blamed as the source of the problem. Facebook and Google were the most often referenced channels in the filter bubble conversations (Bruns, 2021; Kitchens, 2020; Şener, 2017).

The echo chamber effect is a criticism of optimistic ideas claiming that opposing views are circulated on the Internet and the new media serves as a surrogate for the public sphere. The “Filter Bubble”, which is regarded as being mostly used to influence political decisions, has been criticized for trapping users knowingly or unconsciously in micro-domains where facts are delivered in an erroneous and biased manner. The filter bubble, a criticism of personalized content on the grounds that it results in a narrow worldview, also serves as an obstacle to the diversity of social discourse (Narin, 2018, pp. 240-242).

Furthermore, it is argued that social media contributes to polarization and the dissemination of “disinformation”, which is detrimental to the quality of democracy. On the other hand, social media should not be regarded as the sole cause of political polarization, and other factors should also be taken into consideration (Tucker et al., 2018, pp. 2-3). Due to its polarizing nature, disinformation is highly problematic on social networks, particularly with fake news. The spread of polarized masses and information flow in social networks is occasionally accompanied by fake news. According to some perspectives, the real concern is extreme polarization, not fake news or “the features of social media platforms that enable the rapid dissemination of misinformation;” the primary concern is not that partisan hostility encourages the dissemination of fake news, but that partisan hostility drives all news dissemination (Osmundsen et al., 2021). On the other hand, some perspectives propose that “situations generated by misinformation and political polarization can be overcome by ‘checking journalism’” (Hameleers & van der Meer, 2020).

The networked public sphere, which emerged with the dissemination of digital communication technologies, characterized an alternative arena for public discourse and political de-

bates. The networked public sphere is also important in terms of interaction and diversity as an arena that is less dominated by large media institutions, less subject to government regulation and more open to wider participation (Benkler et al., 2013, p. 5). So much so that the digital appearance of political polarization is present in many shapes in Twitter, a platform of public discussion that forms a basis for social consensus. In the case of any political debate, event or election, this polarization becomes apparent in the form of social media posts shared by users of various affiliations. For example, the hashtags #DonaldTrump and #inaugurationday, which trended within the context of the inauguration ceremony of Joe Biden, the 46th President of the United States, on January 20, 2021, can be interpreted as contemporary reflections of the digital political polarization on Twitter. That is because while many posts were shared with the hashtag #inaugurationday, during the ceremony, the hashtag #DonaldTrump was also visible on the site. In the posts made by the supporters of both politicians using the related hashtags, opposing views that can be regarded within the context of political polarization were shared. This event is a current example. It has been mentioned before. On the day Biden was sworn in, tweets with hashtags such as #DonaldTrump, #inaugurationday, #Not-MyPresident, and #TrumpsLastDay attracted attention. Similarly, during the ongoing Russia-Ukraine conflict, persons with a variety of viewpoints (opposing, supporting) may be found posting under various hashtags on social media platforms, particularly Twitter. The echo chamber and the filter bubble are reintroduced in this scenario. So much so that digital propaganda, as well as phenomena like the digital environment of the war and social media deception, have been heavily studied since the beginning of the war. In the face of Russia's deliberate propaganda, Ukraine appeared to have a lot of support on social media. The international community's backing also highlighted the war's digital dimension. At 21.00 on Ukraine's Unity Day (February 16), advocates of the country's territorial integrity used hashtags on Twitter to show their support. The Ukrainian Embassy in Ankara also used its social media account to call for support for Ukraine, inviting supporters to use the hashtags #StandWithUkraine, #Support-Ukraine, and #ProudofUkrainianPeople on Twitter (Crimean News Agency, February 16, 2022). According to an NBC report, Twitter suspended over 100 accounts using the #IStandWith-Putin hashtag, which is thought to be associated with pro-Russian President Vladimir Putin, for violating the "manipulation and spam policies" (Sözcü, March 6, 2022). Despite these disagreements, "slacktivism", a sort of digital activism that refers to "sluggish activism," in which individuals give online support to something/anyone to relieve themselves but do not actually take action (Yegen, 2014), is at the center of the digital context of conflict. There are also ways that believe there is no such thing as a "cure." So much so that, despite the fact that 'global networks' blocked Russian-backed media during the war, and Ukraine's "sympathetic resistance videos" were backed by hashtags and broke records all over the world, it is thought that in today's world, individuals making their voices heard through hashtag actions pushes them even further into laziness. According to this perspective, while the country appeared to be benefiting from social media tagging in the early days of the war in Ukraine, there is now a besieged Ukraine and a massively powerful Russian army, and slacktivist practices are not regarded as sufficient to win, lose, or terminate the war (Ertem, 2022).

Twitter in Debates on Political Polarization and Post-Truth

Social media is interpreted as an opportunity within the context of the relationship between civil society and collective movements. According to certain approaches, social media platforms may not be a suitable forum to communicate with civil society regarding certain topics (e.g. themes of sustainability such as climate change). Certain situations observed in the flow of information on social networks have also mediated the sphere to be discussed in terms of accuracy and truthfulness. Misinformation distorts the line between truth and falsehood and alters the way users consume and interact with information, and this situation has been labeled among the general public as the Post-Truth era (Kumar & Thapa, 2015; Jaques et al., 2019). Although Post-Truth is observed to be a new and current phenomenon of the post-modern age, according to Salgado (2018, p. 329), postmodernism itself does not fully explain the policy of Post-Truth. Although postmodernism has laid the groundwork for the development and success of the phenomenon, truth and information take the form of fields of ideological struggle. Due to the fact that various meanings can be attributed to the same text or facts, meaning always constitutes a potential field of interpretation and dissidence.

According to Kelkar (2019), the transition to the Post-Truth era in the United States of America (USA) has been influenced by the fact that even seemingly proven facts are regarded to be open for debate. Although debates on the phenomenon of truth are deep-seated, the events that occurred in the years 2016-2017 played a dominant role in the formation of Post-Truth. Based on the fact that Donald Trump achieved a compelling result against Hillary Clinton in the 2016 Presidential Election, Kolbert (2017) reviewed the pages of the New Yorker, thought about why facts do not alter personal views, and studied the phenomenon of Post-Truth, which was used to characterize the public debates emerging in the United States as part of epistemology. With the objection of the Trump administration towards global warming and vaccines, which had been among the hot topics of discussion at the time, the term *fake news*² became apparent in political discourse, and mainstream media outlets were labeled as suppliers of fake news (Kelkar, 2019, pp. 86-87). In 2017 at 16:32, President Trump posted the tweet “*The FAKE NEWS media (failing @nytimes, @CNN, @NBCNews and many more) is not my enemy, it is the enemy of the American people. SICK*” and this tweet was quickly deleted to be replaced 16 minutes later with the following: “*The FAKE NEWS media (failing @nytimes, @NBCNews, @ABC, @CBS, and @CNN) is not my enemy, it is the enemy of the American People!*”. In the changed tweet, the statement “and many more” written in reference to media outlets was changed to specifically refer to @ABC and @CBS, the extra spaces following the parentheses were removed, the letter p in the word “people” was capitalized and the expression “SICK!” was removed (Drum, 2017; Kelkar, 2019). Drum (2017) discussed whether Trump’s Hitleresque tweets were corrected after someone warned him or he did so on his own decision and, based on the presence of previous posts in his social media account that he seemingly composed himself, concluded that this change was likely made on his own decision. Drum, who described this situation as Hitleresque, expressed his concern that many of Trump’s supporters might not see this as such a bad thing, and stated that Trump’s tweets always have an audience (2017). As pointed out by Wells et al. (2016), Trump used social networks effectively. In addition to Stelter (2020), who focused on the claim that Trump distorts reality in a dangerous manner, and Dean & Altemeyer (2020), aiming to understand why his grassroots voters are so devoted to him, there have also been other current and significant studies conducted on analyzing Trump’s followers and understanding their behavior

and the factors that motivate them (Berger, 2020). Trump's tweet in June 2020, which allegedly showed a "racist baby", was also widely debated, and the manipulated video posted by President Trump³ was labeled as fake news by Twitter (Thorbecke, 2020). Fake news, which is observed to be frequently put in circulation on social networks for various purposes, also characterizes a social problem beyond an informational one. Rather than "a problem of critical awareness", fake news is interpreted as "a part of the political struggle on the borders of social reality" (Taş & Taş, 2018). The Post-Truth era has introduced a tendency to approach objective phenomena with emotion and belief, which in turn impacted the acceptance or denial of news. So much so that individuals accept elements that are close to their own emotions and beliefs in the news they encounter, and reject those that oppose them. This paves the way for the circulation of fake news (Kocabay Şener, 2018, p. 360).

The proliferation of fake news and accounts on numerous digital platforms, including Twitter, attracts attention. On Twitter, fake and bot profiles serve a variety of propaganda purposes. Fake, offensive accounts are quite prevalent and jeopardize the credibility of social media platforms (Elmas et al., 2021a). Twitter's algorithm identifies popular hashtag-driven topics and informs users about the context of top words, phrases, topics, and popular hashtags worldwide and locally. Additionally, Twitter Trends serves as an indicator in the form of an "influencer mechanism"⁴. In a previous study (Elmas et al., 2021a), it was reported that 47% of local trends in Turkey and 20% of worldwide trends were fake and manufactured from scratch by bots. Additionally, the study determined that Twitter does not consider deleted tweets when evaluating which terms should be trending, leaving it vulnerable to temporary attacks (Elmas et al., 2021a). In a 2016 study (Uzun, 2016) that collected data through fake account detection tools on social network platforms such as Facebook, Twitter, and Instagram, it was determined that the web programs built to detect fake accounts were insufficient. Therefore, the concept of public opinion formed/created by social media is a highly contentious and fairly technical subject.

The study conducted by Conover et al. showed that two main mechanisms for public political interaction (mentions and retweets) stimulated different network topologies. According to another finding of the study, it was observed that users applying hashtags with impartial or mixed values had a higher possibility of communicating with opposing communities (2011, p. 95).

Based on a report prepared by the European Parliamentary Research Service (EPRS 2019: 17-24), Giordano (2020) points out the phenomena of *polarization through social media* and *polarization through manipulation*. Polarization by design emphasizes the underlying structure of social media platforms and suggests that citizens can be polarized through the promotion of increasingly partisan and emotionally-charged content. Polarization induced by manipulation is even more detrimental. Because social media is not only capable of amplifying the reach of polarization and conspiratorial information and disseminating it to the general public, it also hosts influence campaigns aimed at sowing division and influencing the public via bot accounts, insignificant news, and propaganda. It is observed that these techniques are widely adopted in the political discourses of foreign and domestic actors. Post-truth and polarization endanger democracy by emphasizing undesirable emotions in order to affect collective or individual opinion and decision-making. However, it has been suggested that many countries impose traditional censorship tactics on social media platforms, and that many social media services, such as Twitter, adopt the position of not removing content but rather concealing it from the country concerned (Elmas et al., 2021b).

In the study conducted by Del Valle & Bravo, based on the social media-induced transformation of the relationships between members of parliament, it was aimed to clarify whether MPs utilized new media with the aim of expanding their parties and environment of ideological communication or to mainly communicate with other party members and ideologically-compatible colleagues. According to some of the conclusions reached by the study, the sample of which consisted of Catalan members of parliament, it is observed that flows of information are polarized throughout parties and ideological lines and the network's degree of polarization depends on where interactions take place: the network of relations is the most polarized fraction while cross-party and cross-ideological interactions are more common in the retweet network (2018). Weaver et al. (2018) also believe that the information provided by online contact can be used to explore political ties. According to Haman and Školník (2021), politicians can use Twitter to not only inform citizens about their activities, but also to communicate directly with the electorate. The drivers of MP Twitter adoption were also studied by Haman and Školník (2021), who conducted a study in which they assessed the MPs' Twitter adoption status and how active they were on the platform. In this regard, the study, which encompasses 32 European countries and concentrates on the European Union, the European Free Trade Association, and the United Kingdom, finds remarkable results. So much so that the study's analysis indicated that the majority of MPs in Western European countries like France, Ireland, the Netherlands, Spain, and the United Kingdom use Twitter, while MPs in Bulgaria, Hungary, Romania, and Slovakia use it the least. According to the study, whereas politicians in Spain and the United Kingdom use Twitter extensively, MPs in Bulgaria and Romania are the least active on the platform. However, there was a clear link between the number of Twitter users in a country and the usage of Twitter by MPs (Haman & Školník, 2021).

According to Kelkar (2019, p. 102), it appears that in an age of polarization, the future of media objectivity in the context of Trump and social media platforms depends on understanding how certain actors form new civil epistemologies. According to certain approaches, although Twitter has facilitated the Post-Truth political rhetoric, if this order is regarded as a game, ways to resist being affected by the said order can be found based on learning to play the game better or forming logical relations. It is thought that the infrastructural difficulty here is the fact that the logic supporting the rhetoric of Post-Truth is encrypted in the design of Twitter (Oliver, 2020).

Method

In the present study, the social network analysis method was used. Social network analysis aims to understand networks and their participants and focuses on two points: The actors within a specific social context and the relationship between these actors (Serrat, 2017, p. 39). As users engage in interaction through social media networks such as Twitter, they create connections that turn into complex social network structures. These connections are indicators of content sharing and network structures reflect information flow models (Himmelboim et al., 2017, p. 1). Social network analysis, which is a very useful method to analyze the complex network structures created by Twitter, is important in terms of using distinctive measurements as well as presenting usual statistical data. Social network analysis is a very beneficial method in terms of understanding the dependencies between actors based on data acquired from Twitter, and characterizing behaviors and their effects on the network as a whole over time (Tabassum et al., 2018, p. 1). Social network analysis was chosen as the method for the

present study in order to accurately evaluate the data in a social network that connects a diverse range of autonomous actors, such as Twitter, around specific topics, and it is intended to evaluate the actors who are autonomous from one another, their dominance within the networks, and the prestige attributed to the said dominance. The social network analysis to be carried out in the study will seek answers to the following research questions:

- RQ1. Is it true that political politicians are the most active users on Twitter?
- RQ2. Does Twitter increase political polarization?
- RQ3. Do political actors use hashtags to their advantage?
- RQ4. Do troll/fake accounts, as well as hashtags, have an impact on mediated interactions?

Data Collection Technique

Data related to the hashtags #inaugurationday and #DonaldTrump, created on Twitter on January 20, 2021, were collected using the NodeXL software. This software, which operates as an extension of Microsoft Excel, provides certain possibilities for the analysis and visualization of the networks as well as acquiring a general overview of the network. Through this software, multifaceted analyses can be performed, ranging from importing data from networks, calculating network statistics, and improving network visualization through the functions of sorting, filtering and clustering (Smith, et al., 2009, p. 255). In the study, the data on the related network were imported using the imported function of the Twitter Search Network. While the Betweenness Centrality value displaying the dominant actors on the networks was visualized using the Fruchterman Reingold method, the Eigenvector Centrality value displaying the prestige of the actors on the network was visualized using the Harel-Koren Fast Multiscale method.

According to Freeman, high nodes in betweenness centrality have network control ability (1978-1979). The centrality of the vertices in the graph is measured with this measurement. The goal of betweenness is to figure out how much of an individual is in a transition/bridge position between other people. That is, it displays the significance of each node in acting as a “bridge” between various areas of the network. Betweenness Centrality emphasizes nodes that would cause a network to scatter if they were eliminated. As a result, they are powerful nodes, according to Loosemore (1998), because they are crucial to the information flow’s continuity. Eigenvector centrality, a measure of a node’s importance in a network, displays the network’s nodes’ relative values dependent on the type of the link. Eigenvector centrality is affected by both the quality and the number of ties, thus a node with a few high-quality linkages contributes more than one with many low-quality links. This refers to the high-value-added node’s eigenvector centrality with a big number of average connections. PageRank is a type of eigenvector centrality measurement used by the Google search engine to rank web pages (Gürsakil, 2009, pp. 97-98). The degree of the node itself, as well as the degrees of the nodes to which it is connected, are taken into account by Eigenvector centrality.

The Fruchterman Reingold layout algorithm is part of the force-oriented algorithm family. Force-oriented graph drawing techniques are a subset of aesthetically pleasing graph drawing methods. Harel-Koren (HK) employs colors to distinguish vertices in different clusters in this study’s multi-scale architecture of the clustered network of Twitter users. This design creates a graph with overlapping cluster placements.

A social network graph was created using the Harel-Koren Fast Multiscale algorithm to assess the #inaugurationday and #DonaldTrump hashtags examined in the study in terms of intensity and interaction. The goal is to uncover the feature of density as a function of interaction and centrality as a function of density. The colors in the created graph represent the network's density, while the lines between the nodes represent the actors' connection and density. The density of the graph reduces as it is opened. The 46th President of the United States, Joe Biden, was sworn in for the president at an official event on January 20, 2021, which is why these hashtags were chosen for study. Biden was sworn in as President of the United States after the inauguration. Since January 2020, the hashtags #inaugurationday and #DonaldTrump have been trending on Twitter. The hashtags #inaugurationday and #DonaldTrump were used on Twitter on January 21, 2021, in the context of the Oath Ceremony, and were studied as part of this sample. While the #inaugurationday hashtags produced on this date are pro-Joe Biden, the #DonaldTrump hashtags are pro-former President Donald Trump supporters.

Findings

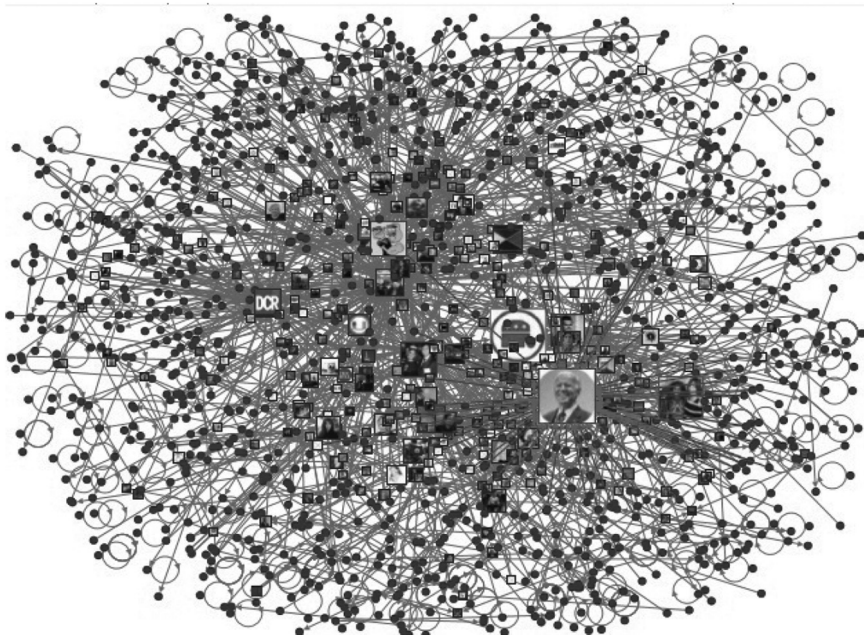
Tweets using the hashtag #DonaldTrump, which was also highly trending on the global agenda during the US Presidential Elections, on January 20, 2021, were accessed using the search function of the Twitter Search Network and analyzed using the NodeXL software. A total of 2689 links were established between 1521 actors related to the hashtag #DonaldTrump, trending on January 20, 2021. This shows that the strength of the relations between the actors is moderate.

When the general overview of the hashtag #inaugurationday is examined, it is observed that a total of 278 links were established between 372 actors. This shows that this network is of lower density compared to the hashtag #DonaldTrump. The strength of the relations between the actors is high.

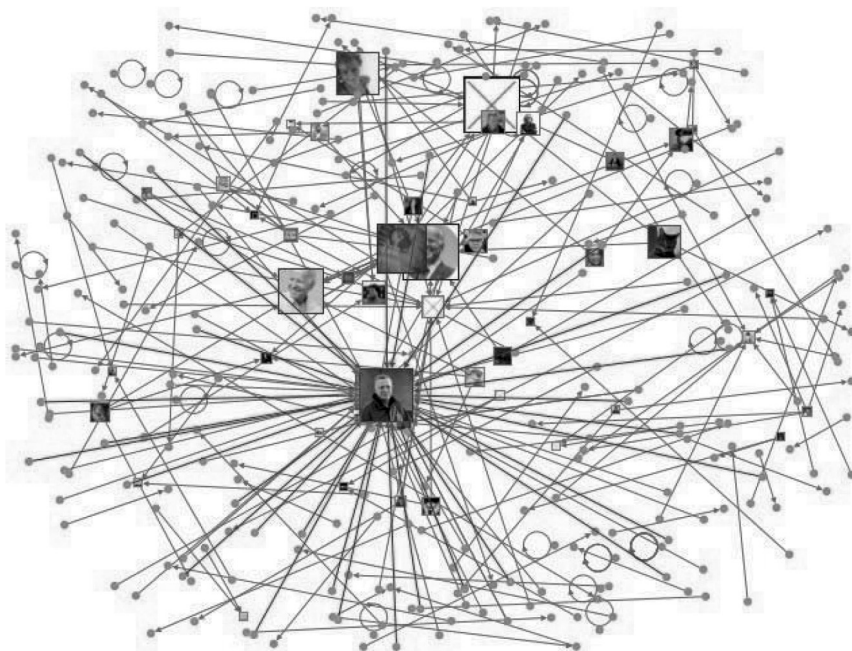
The Betweenness Centrality value of the hashtag #DonaldTrump was calculated as 100347.663. The Betweenness Centrality value displayed with the Fruchterman Reingold visualization is a strength-oriented layout algorithm established based on the assumption of strength between two nodes. The Betweenness Centrality value displays the links between the actors in the network and other, unlinked actors. In other words, this value expresses the connection of dominant actors with other actors. High values correspond to the strength of the relationship between the actors in the network and unlinked actors. As shown in the Figure, the dominant actor of the network is the official Twitter account of Joe Biden. Tweets were sent to Joe Biden's official Twitter account by unlinked actors through mentions. This shows that Biden's account is the dominant actor and constitutes the strength of the relationship between unlinked actors (Graph1).

When the Fruchterman Reingold analysis showing the Betweenness Centrality value of the hashtag #inaugurationday is examined, it is observed that the link between the networks is weak. The fact that the Betweenness Centrality value of this network is 958.000 shows that the link between the actors is weak. With regards to this situation in which the link between the nodes of individuals in the position of dominant actors is weak, it can be said that accounts regarded as "fake" and "troll" are dominant in the network, thus weakening the prevalence of the actors (Graph 2).

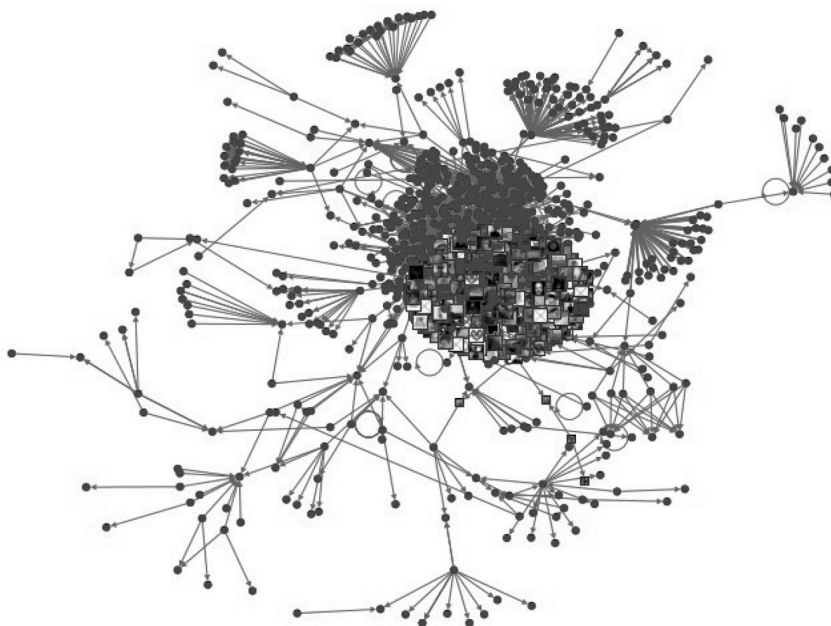
Graph 1. Fruchterman Reingold Analysis showing the Betweenness Centrality value of the hashtag #DonaldTrump



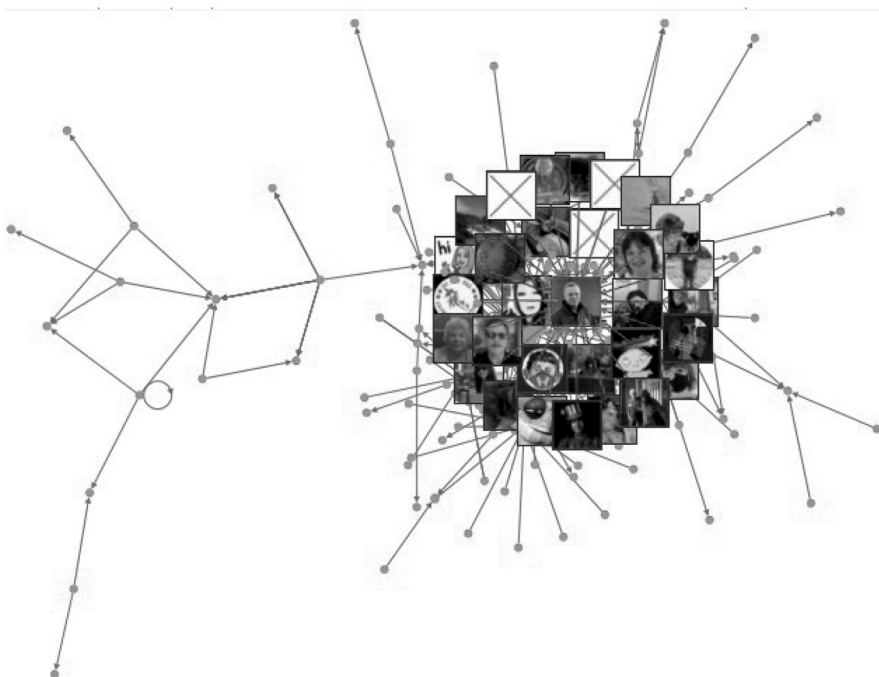
Graph 2. Fruchterman Reingold Analysis showing the Betweenness Centrality value of the hashtag #inaugurationday



Graph 3. Harel-Koren Fast Multiscale Analysis showing the Eigenvector Centrality value of the hashtag #DonaldTrump



Graph 4. Harel-Koren Fast Multiscale Analysis showing the Eigenvector Centrality value of the hashtag #inaugurationday



The Eigenvector Centrality value of the hashtag #DonaldTrump was calculated as 0.078. This shows that the actors in the network maintained their prestige as the dominant actors. Within this value, the nodes between the actors in the network are not equal. Particularly in terms of the fact that accounts regarded as fake and troll are included in the network, this value being high is significant. The high Eigenvector Centrality score suggests that the network's actors maintain their reputation and that no 'fake' or 'troll' accounts exist. The agenda is set by the actors in the network, and they have a say in it.

High values of this metric indicate that the actors in the network are prestigious and dominant. In order to display the prestige of the dominant actors in the network, the Eigenvector Centrality value was visualized using the Harel-Koren Fast Multiscale method. This visualization method can produce very large-scale graphics to exhibit the prestige of the dominant actors in the network (Graph 3).

When the Harel-Koren Fast Multiscale table displaying the Eigenvector Centrality value of the #inaugurationday network is examined, it is observed that dominant actors are concentrated in one point, and that intensive links could not be established between scattered groups. This shows that the dominant actors in the network have low prestige. The Eigenvector Centrality value of the #inaugurationday network was calculated as 0.032. (Grap 4).

Discussion

It is critical to discuss the findings relating to the following questions, taking into account the study's research questions, literature, and findings.

RQ1. Are politicians the most dominant users on Twitter?: It's critical to identify the dominating actors in complicated networks like Twitter. Dominant actors are effective in resolving existing network difficulties and ensuring contact between the center and the periphery. As seen in previous studies, in different cases, political actors draw attention to social/cultural issues (Demir & Ayhan, 2020), social interaction (Yon & Park, 2012), direct their followers with functions such as retweets and hashtags (Yoshida & Toriumi), and becomes the dominant actor in order to act as a bridge to their supporters (Khan et al., 2020). The dominant actors, who are the target of the created hashtags and mentions, are also the ones who direct the engagement from the perimeter to the center. While the policy agenda continues to impact the media agenda, politicians, who are the network's prominent actors, are seen strengthening centralization, which in turn strengthens direction and centralization with secondary actors via hashtags (Demir and Ayhan, 2020). According to the findings of this study, political actors assume the position of dominant actors on political issues, and mutual interaction is maintained, particularly in the context of center-periphery and periphery-center relationships. This demonstrates that political actors have established authority over the network and serve as guides on political topics.

RQ2. Does Twitter increase political polarization: Networked places, such as Twitter, are gaining traction as new public spaces where rapid and intensive organization takes place, particularly around political concerns. Political polarization on Twitter appears to increase with the intensive clustering of the same content among the supporters of the parties (Gruzd & Roy, 2014), and users partisanly tamper with the flow of information provided by dissident users (Conover, et al., 2011; Yardi & Boyd, 2010). The fact that politicians and politi-

cal groups from many political philosophies use Twitter appears to exacerbate divisiveness (Hong & Kim, 2016). Furthermore, depending on the nature of issues that espouse different ideologies, Twitter might act as an echo chamber (Takikawa & Nagayoshi, 2017). However, it is critical to undertake several studies on the current polarizing phenomena in order to provide more accurate and clear information regarding political polarization while these analyses are being conducted (Urman, 2020). According to the findings of this study, Twitter, like prior studies, enhances political division (Hong & Kim, 2016; Takikawa & Nagayoshi, 2017). In this study, the opposition to the #DonaldTrump hashtag, i.e., Joe Biden supporters, shared partisanally, and Joe Biden emerged as the dominating player in this network, similar to Conover, et al. (2011) and Yardi & Boyd (2010)'s studies. According to Urman (2020), this study comprises of mutually reinforcing outcomes and enhances political division as a result of its findings.

RQ3. Do political actors use hashtags to their advantage?: The main actors in networks are political actors, who determine and drive the agenda. Twitter, as one of the digital age's policy-making arenas, shines out in every policy-related event, particularly during election seasons. According to Small (2011), hashtags are used more for information sharing than for political debate and reporting during political events. Larsson and Moe (2014) discovered that minor politicians utilize Twitter a lot, although not to a great degree, in their election campaigns, and that users behave in ways that are counter to what high-end politicians predict. Political wrangling, on the other hand, has been seen to be effective in public-interest campaigns (Vicari et al., 2020). According to Soares and Recuero (2021), hashtags polarize some groups and expose them to excessive information, opposition media strengthens the polarized structure through framing, and opinion leaders boost political content and become major actors. The hashtag process is being continued by the key players. Users urge political players to be proactive, and actors produce difficult problems, according to Neyazi (2020, p. 51). As a result, performers employ hashtags in the fields in which they work. According to the findings of our research, Joe Biden's Twitter posts receive a lot of interaction in the form of retweets and mentions, and this network is controlled by Joe Biden's fans. The actors in the election are disabled, and the actors in the network are made up of supporters, according to the #inaugurationday hashtag. Joe Biden is the network's top actor in the #DonaldTrump hashtag, and his high status demonstrates the network's participatory structure. The accounts of Donald Trump supporters make up a significant portion of this network (heavily troll or bot profiles).

RQ4. Do troll/fake accounts, as well as hashtags, have an impact on mediated interactions?: Twitter has issues with political contact in general, and the root of these issues is policymakers' use of the state communication and interaction network, as well as corporate freedom policies (Albertus & Makoza, 2022). This, of course, has an impact on the interaction and the agenda. Fake and bot accounts are one of the most common topics of conversation when it comes to the issues. Both freedom and interaction are harmed by these accounts. Bot accounts influenced the argument in online protests, according to Suarez-Serrato et al. (2016). Bot accounts enhance polarization, according to Özer et al. (2017), and when automatic accounts are removed, polarization diminishes. Bot accounts, on the other hand, play a crucial role for patients (Zhang et al., 2017). Fake accounts, according to Chong (2019), boost interaction in Twitter trends. Troll accounts, fake news, and hashtags have all been seen to be actively directed and utilized to generate or influence the topic. Our findings, on the oth-

er hand, show that troll and bot accounts, which are frequently employed as a technique, particularly during election seasons, raise political polarization on Twitter and influence political rhetoric in a corrupting direction.

Following the discussion of the research findings, it can be suggested that a number of different discussions and studies be conducted, given that this study focuses on political polarization (via Twitter) specific to the inauguration ceremony of the 46th President of the United States, Joe Biden, and has a limitation in this direction. In reality, it is encouraged to initiate debates on various literature and communities on Twitter, particularly on political polarization talks, based on data such as country economic-political structures, level of use of digital media tools, digital literacy, and similar abilities and orientations.

Conclusion

Before proposing solutions that are technological as well as socio-political with regards to combating disinformation and fake news, it is important and necessary to discuss the fundamental theoretical and regulatory concepts of digital democracy and the network society (Iosifidis & Nicoli, 2020). Social networks, which stand out as the public domains of the digital world, have also caused the digitalization of democracy and changed the course of political polarization. The fact that the presidential elections in the United States took part under the shadow of the COVID-19 pandemic and within the framework of the measures related to it has caused the electoral atmosphere to take place on social networks and particularly Twitter. In the election process that took place between Donald Trump and Joe Biden, the supporters of each side shared their reactions using the hashtags #DonaldTrump and #inaugurationday, and caused political polarization as well as digital democracy to reach extreme points.

These hashtags created during the course of the election process allow for the measurement of individuals' reactions as well as causing political polarization to increase. In a platform that is susceptible to manipulation, such as Twitter, the Social Network Analysis method is used to make accurate interpretations. The NodeXL utility program, which is among the measurement tools of social network analysis, is significant in terms of acquiring accurate data and measuring the strength and prestige of the actors in a specific network.

When the hashtags examined within the scope of the present study are examined, the dimensions of political polarization stand out. The fact that Joe Biden is the dominant actor in the #DonaldTrump network and has high prestige within this network at the same time indicates the presence of an interactive structure. On the other hand, it was also revealed that supporters of Donald Trump - largely accounts that are regarded as troll or bot accounts - functioned within this network. The presence of fake and bot accounts on Twitter and the agenda established through these accounts are problematic in terms of validity and certain recent studies have revealed this (Güz et al., 2019). Some studies even suggest that the 'COVID-19 infodemic is partially fueled by Twitter bots (Lanius et al., 2021).

The posts shared by the Twitter account of Joe Biden receive heavy interaction through retweets and mentions, and this network is directed by Joe Biden's supporters. When the hashtag #inaugurationday is examined, it is observed that the actors of the election are out of the equation, and the network actors consist of supporters. While this shows that political op-

ponents have left interaction and channelization to other accounts during the electoral process, it is also revealed that the interaction coming from these actors is low.

Although the interactive structure of Twitter creates a new public sphere in which views can be shared among various mass groups, the presence of troll or bot accounts within this sphere causes political polarization to increase. Troll and bot accounts, which are part of a strategy that is frequently employed during important political periods such as elections, increase political polarization within Twitter and cause political language to be degraded.

Notes

¹ The #DonaldTrump and #inaugurationday hashtags were selected by simple random sampling after the authors observed the posts on Twitter on the day of the inauguration. It was observed on Twitter that related hashtags were used extensively by the supporters of both sides. In addition, tweets including hashtags such as #NotMyPresident and #TrumpsLastDay were also observed before and throughout the ceremony on Twitter. See also: “TEARS FOR TRUMP Inauguration Day – #NotMyPresident trends on Twitter during Biden ceremony as Trump leaves Office”. Joseph Gamp, 15:51 ET, Jan 20 2021 Updated: 16:35 ET, Jan 20 2021, <https://www.the-sun.com/news/2177629/inauguration-day-biden-twitter-not-my-president-trending-trump/>, “Die besten Tweets zu #TrumpsLastDay und #InaugurationDay”. 20. Januar 2021, Autor*in Business Punk Redaktion, <https://www.business-punk.com/2021/01/die-besten-tweets-zu-trumpslastday-und-inaugurationday/>

² Deceptions in any subject (religion, etc.) can cause harm to the foundations of nations. Since individuals tend to be negatively affected by deceptions, it is known that legal sanctions should take online content into consideration, as well (Alimi, 2019, p. 215-216).

³ It is clearly observed that Trump has a unique rhetoric. Some definitions of “Trumpocalypse”, which was put forward as a concept that points out to the Trump order are as follows: “*the potential catastrophe that will be triggered by the election of Donald Trump as US president*” (Macmillan Dictionary, 2017). “*The universal wide spread destruction, disaster and collapse of the United States due to Donald Trump’s corruption, lack of experience and hard work, malignant narcissism and his relationship with Putin of Russia. Which includes the encouragement of the extreme military right wing*” (Urban Dictionary, 2017).

⁴ See “Mass scale manipulation of Twitter Trends discovered”, Tanya Petersen, 02.06.21, <https://actu.epfl.ch/news/mass-scale-manipulation-of-twitter-trends-discov-2/>

References

- Aarts, K. & Thomassen, J. (2005). Electoral Institutions and Satisfaction with Democracy. Paper presented at the international conference on Elections and Democratic Governance. Organized by the Institute of Political Science. Academia Sinica (IPSAS) Taipei, April 10-11, 2005.
- Albertus, R. W. & Makoza, F. (2022). Habermasian analysis of reports on Presidential tweets influencing politics in the USA, *Int Polit*. <https://doi.org/10.1057/s41311-022-00396-7>
- Alimi, M. Y. (2019). Theorizing Internet, Religion and Post Truth an Article Review. *Komunitas: International Journal of Indonesian Society and Culture*. 11(2), 207-222.
- Amundsen, I. (2007). Donor Support to Political Parties: Status and Principles. R 2007: 6, CMI Reports. This series can be ordered from: Chr. Michelsen Institute.
- Anderson, J. C. (2012). How Electoral Systems Shape What Voters Think About Democracy. Paper presented at the conference on “Duty and Choice: Participation and Preferences in Democratic Elections”. On the occasion of André Blais’s 65th birthday, 20-21 January, 2012, Université de Montréal.
- Autor, D., Dorn, D., Hanson G. & Majlesi, K. (2016). Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. NBER Working Paper No. 22637, Issued in September 2016, Revised in December 2017.

- Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. B. F., Lee, J., Mann, M., Merhout, F. & Volfovsky, A. (2018). Exposure to opposing views on social media can increase political polarization. *PNAS*. 115, 9216–9221 (2018).
- Baldassarri, D. & Bearman, P. (2007). Dynamics of Political Polarization. *American Sociological Review*, 72 (5).
- Benkler, Y., Roberts, H., Faris, R., Solow-Niederman, A. & Etling, B. (2013). Social Mobilization and the Networked Public Sphere: Mapping the SOPA-PIPA Debate. Berkman, The Berkman Center for Internet & Society at Harvard University, Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2295953.
- Berger, A. A. (2020). *Trump's Followers: A Socio-Semiotic Analysis*. Peter Lang Publications.
- Blais, A. (1999). Criteria for Assessing Electoral Systems. Presented to the Advisory Committee of Registered Political Parties Elections Canada Ottawa. Ontario April 23, 1999.
- Bormann, N. C. & Golder, M. (2013). Democratic Electoral Systems around the world, 1946–2011. *Electoral Studies*. 32(2013), 360–369.
- Bruns, A. (2021). Echo chambers? Filter bubbles? The misleading metaphors that obscure the real problem. In *Hate Speech and Polarization in Participatory Society*. Edited By Marta Pérez-Escobar, José Manuel Noguera-Vivo, London: Routledge.
- Choi, M. (2020). 2020 ELECTIONS Biden: Latino community is diverse, ‘unlike the African American community’, President Donald Trump quickly attacked Biden over the remark. Retrieved 08/06/2020, from <https://www.politico.com/news/2020/08/06/joe-biden-latino-african-american-remark-392354>.
- Chong, M. (2019). Discovering fake news embedded in the opposing hashtag activism networks on Twitter: #Gunreformnow vs. #NRA. *Open Information Science*. 2019; 3: 137–153.
- Conover, M. D., Ratkiewicz, J., Francisco, M., Gonçalves, B., Flammini, A. & Menczer, F. (2011). Political Polarization on Twitter. Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media, pp. 89–96, (www.aaai.org).
- Çaha, Ö. (2020). Yeni Medya ve Değişen Toplumsal Hareketler. In *Information Technologies and Communication: Individual and Community Safety*, Turkish Academy of Sciences, Eds. Prof. Dr. Muzaffer Şeker, Assoc. Prof. Dr. Yasin Bulduklu, Assist. Prof. Dr. Cem Korkut, Teaching Assistant Mürsel Doğrul, Berk Group Printing: Ankara.
- Dean, J. W. & Altemeyer, B. (2020). *AUTHORITARIAN NIGHTMARE TRUMP AND HIS FOLLOWERS*. Melville House Publishing, October 2020.
- Del Valle, E. M. & Bravo, B. R. (2018). Echo Chambers in Parliamentary Twitter Networks: The Catalan Case. *International Journal of Communication*. 12(2018), 1715–1735.
- Demir, Y. & Ayhan, B. (2020). Sosyal medyanın gündem belirleyicileri: Twitter’da gündem belirleme süreci üzerine bir sosyal ağ analizi. *İletişim Kuram ve Araştırma*. (51), 1–19.
- Dimensions of Polarization in Turkey. (2017). Conducted by Istanbul Bilgi University Center for Migration Research with the support of Black Sea Trust for Regional Cooperation - a project of the German Marshall Fund, completed with field studies in November–December 2017 and findings are presented on February 5th, 2018 in Istanbul Bilgi University santralistanbul Campus.
- Druckman, J. N. (2012). The Politics of Motivation. *Critical Review: A Journal of Politics and Society*. 24(2), 199–216.
- Drum, K. (2017). “Donald Trump Edits a Tweet”. February 17, 2017, MOTHER JONES, Retrieved July 27 2021, from <https://www.motherjones.com/kevin-drum/2017/02/donald-trump-edits-tweet/>.
- Drumond, P. (2015). Promoting Democracy in Preventing Electoral Violence: The Women’s Situation Room. Sustainable Development Solutions Network a Global Initiative for the United Nations, June 1, 2015, Issue Brief.
- Elmas, T., Overdorf, R., Özkalay, A. F. & Aberer, K. (2021a). Ephemeral Astroturfing Attacks: The Case of Fake Twitter Trends. <https://arxiv.org/abs/1910.07783v4>, Retrieved from <https://arxiv.org/pdf/1910.07783.pdf>.
- Elmas, T., Overdorf, R. & Aberer, K. (2021b). A Dataset of State-Censored Tweets. arXiv preprint arXiv:2101.05919 (2021).
- Egorov, G. & Sonin, K. (2018). Elections in Non-Democracies. July 2018, Retrieved from <https://www.kellogg.northwestern.edu/faculty/egorov/ftp/Elections%20in%20Non-Democracies.pdf>.

- Ertem, L. (2022). "Hashtag veya retweet ile savaş kazanılmıyor!" March 4, 2022, Retrieved from <https://gaze-teoksijen.com/yazarlar/levant-ertem/hashtag-veya-retweet-ile-savas-kazanilmiyor-150521>.
- Freeman, L. C. (1978-1979). Centrality in social networks conceptual clarification. *Social Networks*. 1(3), 215-239.
- Giordano, A. (2020). Post-Truth, Polarization and Other Emotional Threats to Democracy. Retrieved from <https://nome.unak.is/wordpress/volume-15-no-2-2020/conference-proceedings/post-truth-polarization-and-other-emotional-threats-to-democracy/>.
- Goel, S., Mason, W. & Watts, D. J. (2010). Real and Perceived Attitude Agreement in Social Networks. *Journal of Personality and Social Psychology*. American Psychological Association.
- Grömping, M. (2014). 'Echo Chambers' Partisan Facebook Groups during the 2014 Thai Election. *Asia Pacific Media Educator*. 24(1) 39-59.
- Gruzd, A. & Roy, J. (2014). Investigating political polarization on Twitter: A Canadian perspective. *Policy & Internet*. 6(1), 28-45.
- Gürsakil, N. (2009). *Sosyal Ağ Analizi: Pajek, Ucinet ve Gmine Uygulamalı*. Bursa: Dora.
- Güz, N., Yegen, C. & Aydın, B. O. (2019). Dijital Propaganda ve Politik Başarı: 24 Haziran 2018 Cumhurbaşkanlığı Seçiminin Twitter Analizi. *Erciyes İletişim Journal*. 6(2), 1461-1482.
- Hacker, K. L. & van Dijk, J. (2000). What is Digital Democracy?. In *Digital Democracy: Issues of Theory and Practice*. Part I, Introduction and History, Publisher: Sage, Editors: Kenneth L. Hacker and Jan van Dijk.
- Hameleers, M. & van der Meer, T. G.L.A. (2020). Misinformation and Polarization in a High-Choice Media Environment: How Effective Are Political Fact-Checkers?. *Communication Research*. 47(2), 227-250.
- Haman, M. & Školník, M. (2021). Politicians on Social Media. The online database of members of national parliaments on Twitter. *Profesional de la información*. v. 30, n. 2, e300217.
- Himelboim, I., et al. (2017). "Classifying Twitter topic-networks using social network analysis." *Social media+ society* 3.1, 1-17. 2056305117691545.
- Hong, S. & Kim, S. H. (2016). Political polarization on Twitter: Implications for the use of social media in digital governments. *Government Information Quarterly*. 33(4), 777-782.
- Iosifidis, P. & Nicoli, N. (2020). *Digital Democracy, Social Media and Disinformation*. Routledge: London.
- Jaques, C., Islar, M. & Lord, G. (2019). Post-Truth: Hegemony on Social Media and Implications for Sustainability Communication. *Sustainability*. 2019, 11, 2120.
- Kelkar, S. (2019). Post-truth and the Search for Objectivity: Political Polarization and the Remaking of Knowledge Production. *Engaging Science, Technology, and Society*. 5, 86-106.
- Khan, A., Zhang, H., Shang, J., Boudjellal, N., Ahmad, A., Ali, A., & Dai, L. (2020). Predicting politician's supporters' network on Twitter using social network analysis and semantic analysis. *Scientific Programming*, 2020.
- Kirdemir, B. (2020). TÜRKİYE'DE DİJİTAL HABER ORTAMI Kutuplaşma, Sosyal Medya ve Yükselen Trendler. edam (Center for Economics and Foreign Policy Studies), Cyber Politics and Digital Democracy 2020/03/TR. This research was carried out with the funds provided by the US-based Chrest Foundation within the scope of the "Digital Media Ecosystem in Turkey: Actors, Interests, and Policies" project.
- Kirim News Agency. (2022). "Bugün Ukrayna Birlik Günü: Twitter'da Ukrayna'ya destek etkinliği yapılacaktır." February 16, 2022, Retrieved from <https://qha.com.tr/haberler/bugun-ukrayna-birlik-gunu-twitter-da-ukrayna-ya-destek-etkinligi-yapilacak/374899/>
- Kitchens, B., Johnson, S. L. & Gray, P. (2020). Understanding Echo Chambers and Filter Bubbles: The Impact of Social Media on Diversification and Partisan Shifts in News Consumption. *MIS Quarterly*. 44(4), 1619-1649.
- Kocabay Şener, N. (2018). "Doğruluk Kontrol Merkezi" ve "Yalan Haber" Kavramlarına İlişkin İçeriklerin Medyada Yansımalarının Araştırılması. *Journal of Akdeniz University Faculty of Communication*. (30), 355-373.
- Körösenyi, A. (2013). Political Polarization and its Bconsequences on democratic accountability. *Corvinus Journal of Sociology and Social Policy*. Vol. 4(2013) 2, 3-30.
- Kumar, R. & Thapa, D. (2015). Social media as a catalyst for civil society movements in India: A study in Dehradun city. *new media & society*. 17(8), 1299-1316.

- Larsson A. O. & Hallvard, M. (2014). Triumph of the Underdogs? Comparing Twitter Use by Political Actors During Two Norwegian Election Campaigns Anders. *SAGE Open*. 4(4), 1-13.
- Lazer, D. M. J., Rubineau, B. & Neblo, M. A. (2009). "Picking People or Pushing Politics: Selection and Influence on Five Network Criteria." American Political Science Association Annual Meeting 2009, Retrieved from https://polisci.osu.edu/sites/polisci.osu.edu/files/NebloESFpickPeople062014_0.pdf.
- Loosemore, M. (1998). Social network analysis: Using a quantitative tool within an interpretative context to explore the management of construction crises. *Engineering, Construction and Architectural Management*. 5(4), 315–326.
- Lupu, N. (2015). Party Polarization and Mass Partisanship: A Comparative Perspective. *Polit Behav.* (2015) 37, 331–356.
- Macmillan Dictionary. (2017). "Trumpocalypse", Definitions and Synonyms Noun Humorous. Submitted from: United Kingdom on 01/02/2017, Retrieved from <https://www.macmillandictionary.com/dictionary/british/trumpocalypse>.
- Menocal, A. R. (2008). Why electoral systems matter: an analysis of their incentives and effects on key areas of governance. Overseas Development Institute.
- Merloe, P. (2008). Human Rights – The Basis for Inclusiveness, Transparency, Accountability and Public Confidence in Elections. In J. H. Young (Ed.). *International principles for democratic elections*, Washington, DC: Sandler, Reiff, and Young.
- Mvukiyehe, E. & Samii, C. (2015). Promoting Democracy in Fragile States Insights from a Field Experiment in Liberia. WORLD BANK GROUP. Development Research Group Impact Evaluation Team, July 2015.
- Nagle, M. & Verhovek, J. (2020). "Biden faces backlash for comparing diversity in African American, Latino communities, President Trump seized on the comments as a very insulting statement." Retrieved August 7 2020, from <https://abcnews.go.com/Politics/biden-faces-backlash-comparing-diversity-african-american-latino/story?id=72218939>.
- Narin, B. (2018). Kişiselleştirilmiş Çevrimiçi Haber Akışının Yankı Odası Etkisi, Filtre Balonu ve Siberbalkanizasyon Kavramları Çerçevesinde İncelenmesi. *Selçuk İletişim*. 11(2), 232-251.
- Neyazi, T. A. (2020). Digital propaganda, political bots and polarized politics in India. *Asian Journal of Communication*. 30:1, 39-57.
- O'Donnell, G. (1999). Democratic Theory and Comparative Politics. WZB Discussion Paper. No. P 99-004 Provided in Cooperation with: WZB Berlin Social Science Center.
- Osmundsen, M., Bang Petersen, M. & Bor, A. (2021). "How partisan polarization drives the spread of fake news." May 13, 2021, Retrieved from <https://www.brookings.edu/techstream/how-partisan-polarization-drives-the-spread-of-fake-news/>.
- Oliver, M. (2020). Infrastructure and the Post-Truth Era: is Trump Twitter's Fault? *Postdigital Science and Education*. (2020) 2, 17-38.
- Özer, M., Yildirim, M. Y. & Davulcu, H. (2019). Measuring the Polarization Effects of Bot Accounts in the U.S. Gun Control Debate on Social Media. In Proceedings of ACM Conference (Conference'17). ACM, New York, NY, USA.
- Peters, C. (2020). "A detailed timeline of all the ways Trump failed to respond to the coronavirus". Retrieved Jun 8, 2020 from <https://www.vox.com/2020/6/8/21242003/trump-failed-coronavirus-response>.
- Petersen, T. (2021). "Mass scale manipulation of Twitter Trends discovered", Retrieved 02.06.21, from <https://actu.epfl.ch/news/mass-scale-manipulation-of-twitter-trends-discov-2/>.
- Ray, R. (2020). HOW WE RISE How Black Americans saved Biden and American democracy. Tuesday, November 24, 2020, Retrieved from <https://www.brookings.edu/blog/how-we-rise/2020/11/24/how-black-americans-saved-biden-and-american-democracy/>.
- Reilly, B. (2002). ELECTORAL SYSTEMS FOR DIVIDED SOCIETIES. *Journal of Democracy Volume*. 13, Number 2 April 2002, pp. 156-170.
- Robbins, M. D. H. & Tessler, M. (2007). The Effect of Elections on Public Opinion towards Democracy: Evidence from Longitudinal Survey Research in Algeria. Conference Paper for Delivery at the 65th Midwest Political Science Association Annual Meetings, 12-15 April 2007.

- Salgado, S. (2018). Online media impact on politics. Views on posttruth politics and postpostmodernism. *International Journal of Media & Cultural Politics*. 14 (3).
- Schedler, A. (2012). Elections Without Democracy THE MENU OF MANIPULATION. *Journal of Democracy*. 13(2), 36-50.
- Simon, J., Bass, T. & Boelman, V. (2017). Digital Democracy The tools transforming political engagement. Nesta, Retrieved from https://media.nesta.org.uk/documents/digital_democracy.pdf.
- Sisk, T. D. (2017). Elections, Electoral Systems and Party Systems. In *Elections, Electoral Systems and Party Systems a Resource Guide*. 2017 International Institute for Democracy and Electoral Assistance.
- Srikanth, M., Liu, A., Adams-Cohen, N., Cao, J., Alvarez, M. R. & Anandkumar, A. (2021). Dynamic Social Media Monitoring for Fast-Evolving Online Discussions. In Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'21), August 14–18, 2021, Virtual Event, Singapore. ACM, New York, NY, USA.
- Small, A. T. (2011). What The Hashtag?, A content analysis of Canadian politics on Twitter. *Information, Communication & Society*. 14:6, 872-895.
- Smith, M. A., Shneiderman, B., Milic-Frayling, N., Rodrigues, E. M., Barash, V., Dunne, C., Gleave, E. (2009). Analyzing (Social Media) Networks With Nodexl. The Fourth International Conference on Communities and Technologies. pp. 255–264.
- Stelter, B. (2020). *Hoax: Donald Trump, Fox News, and the Dangerous Distortion of Truth*. Simon & Schuster.
- Soares, F. B. & Recuero, R. (2018). Hashtag Wars: Political Disinformation and Discursive Struggles on Twitter Conversations During the 2018 Brazilian Presidential Campaign. *Social Media + Society*. April 2021.
- Sözcü. (2022). "Twitter, Putin yanlisi hashtag'ı kullananları yasakladı". March 6, 2022, Retrived from <https://www.sozcu.com.tr/2022/teknoloji/twitter-putin-yanlisi-hashtagi-kullananlari-yasakladi-6992341/>.
- Suárez-Serrato, P., Roberts, M. E., Davis, C. A. & Menczer, F. (2016). On the influence of social bots in online protests. Preliminary findings of a Mexican case study. *SocInfo*. (2) 2016: 269-278.
- Şener, O. (2017). "Filtre balonu patlıyor mu: Guardian'dan sagci yazar açılımı". February 20, 2017, Retrived from <https://journno.com.tr/filtre-balonu-patliyor-mu>.
- Tabassum, S., et al. (2018). "Social network analysis: An overview." Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery 8.5, 1-30.
- Takikawa, H. & Nagayoshi, K. (2017). Political Polarization in Social Media: Analysis of the "Twitter Political Field" in Japan. 2017 IEEE Conference on Big Data, Boston, MA.
- Tsagarousianou, R. 1999. Electronic democracy: rhetoric and reality. *European Journal of Communication Research*. 24(2), pp. 189-208.
- Taş, O. & Taş, T. (2018). Post-Hakikat Çağında Sosyal Medyada Yalan Haber ve Suriyeli Mülteciler Sorunu. *İleti-ş-im* 29. aralık/december/décembre 2018, 183-207.
- Thorbecke, C. (2020). "Trump's tweet blasting 'Fake News' labeled as 'Manipulated Media' by Twitter." 19 June 2020, 18:23, Retrieved from <https://abcnews.go.com/Politics/trumps-tweet-blasting-fake-news-labeled-manipulated-media/story?id=71342477>.
- Tucker, J. A., Guess, A., Barberá, P., Vaccari, C., Siegel, A., Sanovich, S., Stukal, D. & Nyhan, B. (2018). Social Media, Political Polarization, and Political Disinformation: A Review of the Scientific Literature. Prepared for: William + Flora Hewlett Foundation, March 2018.
- TRT Haber. (2021). "Rapor: Sosyal medya toplumsal kutuplaşmayı artırıyor". September 13, 2021, Retrieved from <https://www.trthaber.com/haber/dunya/rapor-sosyal-medya-toplumsal-kutuplasmayi-artiriyor-608647.html>.
- Urban Dictionary. (2017). "Trumpocalypse". by geraldwork February 07, 2017, Retrieved from <https://www.urbandictionary.com/define.php?term=Trumpocalypse>.
- Urman, A. (2020). Context matters: political polarization on Twitter from a comparative perspective. *Media, culture & society*. 42(6), 857-879.
- Uzun, H. (2016). Sosyal Medyanin Bilgi Kalitesine Etkisi: Sahte Hesaplar. *Akademia Social Sciences Journal*. 2016, 2(1), 1-31.

- van Dijk, Jan A.G.M. (2000). Digital Democracy: Vision and Reality. In book: *Digital Democracy. Issues of Theory and Practice*. Publisher: Sage, Editors: Hacker, Kenneth L. and van Dijk, Jan.
- Vedel, T. (2006). The Idea of Electronic Democracy: Origins, Visions and Questions: Origins, Visions and Questions. *Parliamentary Affairs*. 59(2), 226-235.
- Yardi, S. & Boyd, D. (2010). Dynamic Debates: An Analysis of Group Polarization Over Time on Twitter. *Bulletin of Science, Technology and Society*. 20:S1-S8.
- Yegen, C. (2014). Bir Dijital Aktivizm Biçimi Olarak Slaktivizm: Change.Org Örneği. *Karadeniz Technical University Journal of Communication Studies*. 4(2), 84-108.
- Yegen, B. (2020). Cumhurbaşkanlığı hükümet sistemi kapsamında bütçe sürecinin analizi. *Dokuz Eylül University Journal of Social Sciences Institute*. 22(1), 151-170.
- Yoon, H. Y. & Park, H.W. (2014). Strategies affecting Twitter-based networking pattern of South Korean politicians: Social network analysis and exponential random graph model. *Quality & Quantity*. 48.1 (2014): 409-423.
- Yoshida, M. & Toriumi, F. (2018). Analysis of political party twitter accounts' retweeters during Japan's 2017 election. In Proceedings of the 2018 IEEE/WIC/ACM International Conference on Web Intelligence, Santiago, Chile, 2018.
- Vicari, S., Iannelli, L. & Zurovac, E. (2020). Political hashtag publics and counter-visibility: a case study of #fertilityday in Italy. *Information, Communication & Society*. 23(9), 1235-1254.
- Walker, R. (2006). Political Polarization—a Dispatch from the Scholarly Front Lines. *Issues in Governance Studies*, Special Edition, December 2006.
- Weaver, S. I., Williams, H., Cioroianu, I., Williams, M. & Coan, T. (2018). Dynamic social media affiliations among UK politicians. *Social Networks*. 54 (2018), 132-144.
- Wells, C., Dhavan V. S., Pevehouse, J. C., Yang, J., Pelled, A., Boehm, F., Lukito, J., Ghosh, S. & Schmidt, J. L. (2016). How Trump Drove Coverage to the Nomination: Hybrid Media Campaigning. *Political Communication*. 00:1-8.
- Zhang, Y., Ruan, X., Wang, H., Wang, H. & He, S. (2017). Twitter Trends Manipulation: A First Look Inside the Security of Twitter Trending. *IEEE Transactions on Information Forensics and Security*. 12(1), 144-156.
- Zimmerman, J. F. (1994). Alternative Voting Systems for Representative Democracy. *PS: Political Science & Politics*. 27(4), 674-677.