



Universiteit
Leiden
The Netherlands

What if we all logged out? A Twitter Analysis on echo-chambers and the impact of online political polarization on the public's view of democracy.

Paillot, Francois

Citation

Paillot, F. (2023). *What if we all logged out? A Twitter Analysis on echo-chambers and the impact of online political polarization on the public's view of democracy.*

Version: Not Applicable (or Unknown)

License: [License to inclusion and publication of a Bachelor or Master Thesis, 2023](#)

Downloaded from: <https://hdl.handle.net/1887/3630007>

Note: To cite this publication please use the final published version (if applicable).

Master Thesis:

What if we all logged out? A Twitter Analysis on echo-chambers and
the impact of online political polarization on the public's view of
democracy.

Paillot Francois

S3436403

12/06/2023

Dr. Rutger Hagen

[Dr. Femke Bakker](#)

10.000 words

Abstract

Although social media has revolutionized how we learn, form opinions, and have conversations, it also has the potential to undermine democracy. Due to the rise of social media and digital media, political polarization online has sharply increased, with even elected officials and members of the political elite class also engaging in divisive propaganda and false information. This study, through a Twitter analysis, explores the impact of political polarization on citizens' beliefs in their democratic institutions, electoral systems, and government. This research applies relevant but underappreciated theories like the legitimacy theory and the homophily theory to understand how democracy and the internet interact.

1. Introduction

At the dawn of the 21st century, through innovating technologies, humanity invented the Internet with the promise of a chance to better connect with each other, to learn more easily, and work in a simpler way (Diamond, 2019). As Barberà et al. (2018) explain, many promoted this new tool, and its apparition into our lives was met with brief euphoria. At the centre of that belief was the unexplored potential for the newly created social media to bring forward the golden age of global democratization and unwoundable freedom of speech (Barberà et al., 2018). The new scene that social media represented, advertised as an environment prone for debate and discussion, can be defined according to Miller et al. (2016, p. 9) as the “colonisation of the space between traditional broadcast and private dyadic communication, providing people with a scale of group size and degrees of privacy”. For two decades, this new tool in particular has drastically altered how we inform ourselves, develop our opinions, and debate about various topics with the opposing sides (Diamond, 2019). Nonetheless, scholars, politicians, philanthropists, and civil servants today have identified and highlighted the potential that social media platforms such as Facebook and Twitter also possess for the undermining of democracy (Theocharis et al., 2017). Indeed, some scholars such as Miller et al. (2016) or Rogers and Niederer (2020) pointed out the fact that the number of media choices available to consumers throughout the world has exponentially grown. Likewise, so has the consumption of partisan media, hence ushering forward an increased political polarization of the population (Lelkes et al., 2017). This newly discovered online polarization phenomenon is defined by Enders and Armaly (2019, p. 816) as the “widening gulf on attitudes about various political issues and stimuli between groups”.

Schroeder (2018, p. 28) further argues that digital media can now be regarded as “an autonomous system, a transmission between citizens and elites in the political process”. Indeed, the spread of digital media and social media use has more than ever reduced the gap between citizens and elites when it comes to actively using these new platforms. Consequently, both ends of the social class spectrum are now also partaking in the same polarization phenomenon online. Well known examples of elected officials and members of the elite class of society taking part in polarizing propaganda or disinformation on social media platforms can be found in former United States of America President Donald J. Trump, or Congresswoman Marjorie Taylor-Greene (MTG).

These campaigns of disinformation based on a large volume of polarizing news and conspiracy theories have targeted democratic institutions such as the American presidency and have put into question the impartiality of its judicial and elective system. As a result, the legitimacy of these political institutions themselves have been strained and the belief of American citizens in them has diminished, as public opinion polls showcase (Pew Research Centre). This polarization phenomenon has known some scrutiny from academics through quantitative studies which monitored or measured its existence both on the internet and in the public discourse. A majority of these studies thus confirmed its overwhelming presence on social media and the overall rise of polarization in our society (Howard et al., 2019). Moreover, they occasionally have also presented polarization as having the potential to threaten political stability, or how polarization online can be linked to the rise of dangerous social or political movements. Schwalbe, Cohen and Ross (2020) for instance, argue this very point, while underlining that the same focus on different aspects of the political realm, such as legitimacy, has not been replicated.

The events of the 2016 United States of America presidential election, and the subsequent enquiry into Russian involvement further exhibited the potential for the internet to mould how we see and think of our governments through the use of social media and the spread of false information (Howard et al., 2019). Built on these events, a research exploring whether the polarization occurring throughout social media has an impact on voters and the opinions they hold regarding those who lead them represent not only a worthwhile endeavour for academics, but also a puzzle worth solving. This thesis thus aims to answer the following research question:

“How does online political polarization impact domestic political legitimacy?”

Hence, this thesis aims to ponder whether a causation link can be drawn between the political polarization taking place online and the domestic political legitimacy of a country. More accurately, this thesis makes use of the social media platform Twitter as its chosen polarized online environment and as a data source. In addition, this thesis focuses on the political landscape of the United States of America, including its democratic institutions and electoral processes as its case study. The analysis of this thesis will thus further the understanding of how social media in this day and age impacts the polarization of political

beliefs, and the threat that this latter poses on the trust laid in government and democratic processes such as elections.

2. Literature Review

This section seeks to review the state-of-the-art literature on the subject of political polarization and political legitimacy, as well as to identify and contextualise the gap present in the academic published works.

When discussing the concept of political legitimacy, many different viewpoints have been taken by political analysts over the years. Buchanan (2002) makes the case for a conception of political legitimacy that is based on the Robust Natural Duty of Justice and the liberal notion that the preservation of fundamental individual rights is the essence of justice. It also contends that if institutional resources are available for the democratic selection of an agent to exercise political power, then the requirement of democratic authorization is necessary for political legitimacy. If so, democracy can be justified on the grounds that it is required for the exercise of political authority to be morally acceptable. In contrast, other academics have had very different approaches. For instance, Weathford (1992) aimed to measure political legitimacy through macro and micro theories. The argument is advanced that pioneers attempted to use individual-level technique to address macro difficulties, but this resulted in an undue focus on individual-level measurement problems. As he argues, multilevel concepts such as legitimacy or representation pose more analytical problem given that they do not have a direct individual level counterparts. Thus, legitimacy can be defined, measured and researched according to the system level or the individual level. Each of these perspective also possess different methodological approaches, as well as large difference in what can be seen as empirical evidence to support their view. Hence, new criteria for determining legitimacy are listed in his work, along with a comparison of formal measurement models for both traditional and updated conceptualizations of legitimacy orientations. Legitimacy is thus conceptualized in new indicators such as accountability, efficiency, procedural fairness and distributive fairness (Weathford, 1992, p. 150).

While there is a lack of consensus present in the academic debate regarding the definition, conceptualisation, and measurement of political legitimacy, political polarization also suffers from the same type of ailment. Indeed, Lelkes (2016) analyses the debate

between Fiorina and Abrams (2005), and Abramowitz and Saunders (2005) regarding the measurement of mass political polarization. Lelkes (2016) observes that the two sides diverge since they do not define the term from the same perspective. While Fiorina and Abrams (2005) define political polarization as the divergence in ideologies within a society, Abramowitz and Saunders (2005) opt for a perspective geared towards ideological and alignment consistency.

Barberà et al. (2018) approach the phenomenon of polarization through its impact on the American Democracy. Hence, the authors group misinformation and polarization together by looking at how each variable impact democratic performance, and how each variable interact with the other. Their research suggests that not only has partisan polarization dramatically increased since the middle of the 20th century at the mass and elite level in the USA, but the challenges that they also generate for the American democracy are largely unanticipated. While at the elite level, a deep strain is observed on the norms of political institutions, at the mass level, social identities are being formed more and more according to partisan affiliation, hence creating an increasingly hostile environment for opposition partisans. This in turn encourages extreme tactics which undermines individual's ability for compromises and civility. This increase in polarization also reveals the political system's vulnerability to misinformation from partisans, often promoted by polarized elites to a sympathetic partisan audience. Barberà et al. (2018) also identify the widespread usage of social media and the increasingly popular distrust of media as means that would accelerate and worsen these trends. Indeed, the concern surrounding the political polarization of many is directly related to the use of social media, in which individuals are not confronted with diverging views, but instead comforted in their own pre-existing beliefs in environments nicknamed 'echo-chambers' (Bail et al., 2018). This digital environment is defined by Taylor et al. (2018, p.7) as one "in which a person encounters only beliefs or opinions that coincide with their own, so that their existing views are reinforced and alternative ideas are not considered". Barberà et al. (2018) also argues that echo-chambers have been shown to reinforce polarization around political topics. Moreover, Hong and Kim (2016) research's findings support this view. Through the measurement of social media accounts belonging to members of the U.S House of Representatives and their various political ideology, this study showcases that the association between the politicians' ideological positions and the size of their Twitter readership can be defended. The findings, which detail a strong political

polarization through social media accounts, thus confirm the existence and relevance of the echo-chamber phenomenon.

Hong and Kim (2016) further argue that social media increases online political polarization and is playing a role in new heightened levels of extremism being reached. Indeed, this type of environment has become regular on social media and coordinated events such as the January 6th 2020 insurrection on the United States of America's Capitol building in Washington, or its Brazilian equivalent three years later on the 8th of January 2023 have showed its destructive potential. Nevertheless, other research has argued for a more limited impact of these echo-chambers. Bail et al. (2018) observed an increase in polarization from both Democrats and Republicans on Twitter when confronted with a bot that held views opposite to theirs. Hence, republicans held substantially more conservative views after following a liberal Twitter bot. The same can be said for Democrats, who increased liberal attitudes after following a conservative Twitter bot. Although Bail et al. (2018) conclude that these effects were not statistically significant, the increase in individuals' polarized attitude when confronted with opposing views diverges from the echo-chamber logic and offers an interesting contrast. Finally, Larson and Tsang (2016) focus on the occurrence of plurality voting, where strategic voting is a major concern. Through their own experiment, the echo-chamber effect and the homophily theory are pointed as dampening the likelihood of strategic voting. Homophily being defined in their research as the effect thanks to which voters tend to think of their position or beliefs as more widely supported than they are, hence making them less likely to change their vote towards a strategic choice. This is presented as a reason why there are very few instances of strategic voters in real life elections (Larson & Tsang, 2016).

On one hand, the academic literature regarding political legitimacy does not offer, in contrast to other aspects of our democracies and institutions such as stability, authority, or norm backsliding, many insights as to its relationship with the internet. Indeed, given the very recent relevancy gained in observing political legitimacy in relation with social media, and the recent widespread use of these platforms, the debate presented is limited to the different definitions and conceptualisations of this notion, as well as its measurement. On the other hand, political polarization occurring online has been measured through various lenses and perspectives, offering quite different findings. Moreover, the literature also showcases the relevance of the echo-chamber phenomenon and the risk that online political polarization presents to our democracies and our ability to debate with opposition partisans.

Furthermore, this research uses relevant and underused theories such as the homophily theory (Gandica & Garguilo, 2017) and the legitimacy theory built on German sociologist Max Weber's work by Seymour Martin Lipset (1959). In addition, a new approach on the conceptualisation of key variables such as 'political polarization' and 'political legitimacy' furthers the academic relevance of this research as showcased in the theoretical framework. The academic relevance of this research thus stems from the causation mechanisms identified, which can be interpreted and analysed through an under-researched theoretical framework and a relevant conceptualisation of its key variables. Moreover, there is still a prevalent gap in the understanding of the numerous ways democracy and the internet interact to this day. Indeed, the impact of the political polarization occurring online on the public trust and belief of citizens in their government, democratic institutions and electoral processes is still widely under researched. Hence, this research aims at bettering this understanding and partly filling this gap by showcasing some of the ways each of these factors impact each other. Finally, this thesis inscribes itself in not only a topical research made relevant by political analysts and the ongoing American political situation, but also in the topic of internet governance.

3. Theoretical Framework

This section focuses on the Homophily theory and Legitimacy theory, in which they are defined, their respective variable contextualised, and operationalised. Related hypotheses are advanced.

When conceptualising the term "political polarization" this research makes the distinction between mass polarization, and elite partisanship. Mass polarization refers to the polarization that is being driven from individuals, sometimes anonymous, to others, as can be seen in Facebook and Twitter groups, or Reddit subgroups (Schwalbe et al., 2020). This represents the majority of polarizing news and comments shared online. Nevertheless, due to its recent and uncontrolled rise, elite partisanship, while representing more of a minority online, has become one of the main leading drivers of polarization on social media (Weeks et al., 2017; Schwalbe et al., 2020). This concept regroups all actions by members of the political elite such as elected officials and government agents, whom, knowingly, share polarizing information or disinformation to a receptive and like-minded audience, while benefiting from

a higher level of trust given by their status in the political realm (Schwalbe et al., 2020). As Barberà et al (2018, p. 41) further argue when discussing the United States' situation; "party elites may bear more of the responsibility for the polarized state of the country" than mass polarization. This Elite partisanship concept has been embodied by politicians such as Donald J. Trump who have driven the polarization online further than many could have imagined (Schwalbe et al., 2020).

Now that political polarization has been conceptualised, is still needed. The homophily theory offers an adequate answer as to how political polarization online has been driven so high. Indeed, the theory of homophily has been advanced in a few cases of the literature when looking at the polarization phenomenon online. Larson and Tsang (2016) define the sociological concept as the tendency individuals have to gravitate, discuss, or debate with like-minded individuals with whom they share religious beliefs, political ideologies, or life values. Through many sociological and psychological analyses, homophily has already been confirmed as a major element of the connections humans form in the real world (Larson & Tsang, 2016). Nowadays, the same theory is being applied to online environment and virtual connections made on social media. Massachs et al. (2020) through their research based on Trump's partisans Reddit subgroup, aimed at understanding the likelihood of an individual in becoming a voter for Trump in the next four years. Through their use of three different hypothesis, homophily was shown as the most predictive tool, arguing that "homophily is the most powerful predictor of Donal Trump support" (2020, p. 53). Indeed, as Bessi et al. (2015) argue, when discussing the likelihood of an individual becoming politically involved with either side of the political spectrum, the best prediction tool is to observe which social networks is that individual part of (i.e. who they discuss with, what values are important to them).

Weeks et al. (2017) further argues the importance of social media in our daily life, arguing that nonconsumers of social media behave differently politically than consumers. Moreover, Weeks et al. (2017, p.19) also noticed through their study that "a growing subset of the population is turning to social media not only for interaction but also to discuss, share, consume and produce political information". The authors conclude by stating that the ramifications of these behaviours not only have implications for political participation and the perception of opinion leadership, but for the democratic process at large. These claims were echoed by Garret et al., (2014, 2016) and Levendusky (2013) who argued that, indeed,

inaccurate beliefs about politically significant issues are positively correlated with exposure to ideologically biased websites and polarizing environment such as social media.

Political legitimacy can also be clarified and conceptualised for this research by using the Legitimacy theory as a way to measure legitimacy and the potential impact of political polarization on it. As showcased in the Literature Review, political legitimacy as a concept has been measured and conceptualised in various ways. However, given the approach taken in this thesis and the angle of research chosen, legitimacy must be defined in relation with public opinion. Moreover, political legitimacy still has to be contextualised in ways it can be measured in today, while also befitting the theoretical aspect taken by this research. Indeed, defining and measuring legitimacy through public opinion befits an analysis and measurement conducted throughout social media, and public opinion polls, hence justifying this theoretical approach. For this qualitative research to stand out and gain relevancy from the rest of the literature, political legitimacy shall be defined through the underused Legitimacy Theory. As Seymour Lipset (1959) claims, power can only be deemed legitimate if it is acknowledged, accepted, or affirmed by those upon which it is exercised. Hence, it can be understood as B's acceptance of A's power over them, which renders A's power legitimate (Lipset, 1959). Vila-Henniger (2019, p. 493) furthers the understanding of this theory by stating that "a political system is legitimate in the eyes of a group of citizens to the extent that citizens deem that system to be appropriate {...} and that the values upon which the political system is based need to match the group's values".

Hence, given the large focus that was established on trust and acceptance from the citizens perspective towards their government, this research enables relevant ways for the concept to be identified as. Thus, political legitimacy in this research is conceptualised as (i) The trust laid by the citizens in their domestic government and democratic institutions, (ii) The trust laid by citizens in their electoral democratic processes (such as elections). This research thus uses the measurable notion of trust as the operationalisation of the legitimacy concept. Consequently, the use of the Legitimacy theory and its operationalisation are expected to provide a valuable mean for the analysis and measurement of public opinion trust in their government and institutions.

Throughout social media platforms, a new phenomenon coined "echo-chambers" has been observed, which directly relates to the theory used within this thesis. Indeed, 'echo-

chambers' are deemed to be the consequences of homophily type of decisions made online. Indeed, Larson and Tsang (2016) identify the existence of these echo-chamber as being a direct consequence of 'network homophily' (p. 374). Moreover, as Larson and Tsang (2016, p.369) argue, if the environment and connections the user has moulded through its use of social media was based on homophily decisions to connect with like-minded individuals, it is very likely to lead to the "echo-chamber effect'. This effect is defined by Larson and Tsang (2016, p. 329) as a situation "where a voter is surrounded by associates that share similar beliefs, reinforcing its validity regardless of merit". Hence, in order to determine the relevance of the homophily theory when looking at the political polarization online, the argument can be made that individuals who fall into these 'echo-chambers', one of the consequences of a polarized digital environment, have done so following a homophily reasoning. Importantly, these echo-chambers have caused an increase in polarization, in which individuals held more extreme views when conversing with like-minded individuals rather than opposition partisans (Larson & Tsang, 2016). Consequently, given that the formation of these polarization-driving echo-chambers is qualified by academics as a consequence of homophily type behavior, one can test the argument advanced that homophily, indirectly drives polarization online further. In order to test the theoretical approach taken by this research, the use of hypotheses is academically sound. Thus, two hypothesis aimed at answering the research question of this thesis shall be tested, one for each theoretical approach developed.

- 1) "Both Elite partisanship and Mass polarization spaces on Twitter represent polarizing online environments regarding American political institutions and processes."
- 2) "The higher the level of political polarization on Twitter, the higher the loss of the American public's trust in their political institutions and electoral processes. "

The selected approach thus grants a means of measurement of relevant online political polarization in different types of environments. Hence, the choice of using the Homophily theory has for purpose to test and verify the veracity of the claims made by academics in pre-existing data regarding the polarizing nature of echo-chambers online. In addition, this analysis enables the researcher to confirm the political polarization taking place online regarding this thesis' research topic. Through the chosen theories, the importance of the public's perspective detailed in both their ability to drive political polarization online further

and integrate ‘echo-chambers’ is highlighted. In addition, the core aspect the citizens play in the recognition and acknowledgment of a government’s legitimacy is reciprocated in the theories used and the conceptualisation of its main variables. The first hypothesis consequently aims to confirm and measure the presence of political polarization in polarised echo-chambers environments, before the second hypothesis scrutinizes the increase or decrease of the polarisation level present on the social platform. Moreover, the second hypothesis makes use of public opinion polls, thus offering a mean to observe causal mechanisms and similar trends between the two set of findings.

4. Research Design

This section focuses on the case study chosen for this research, as well as the explanation of data sources and data collection method chosen, and the method of data analysis.

This research centres its analysis around the language used in tweets on the social media platform Twitter, and the type of information provided (polarizing or not). To do so, the language driven Discourse Analysis method is used, because of its focus on the study of language. Klajn (2020) further argues that discourse makes reference to the way we think, talk, write and generally communicate about a given topic. Hence, by studying the language used in the analysed tweets, underlying assumptions, ideologies and deeply embedded notions can be discovered and analysed (Klajn, 2020). This approach grants the research the ability to focus on the meaning behind written or spoken texts, by focusing on instances of them that could lead to further discourse (Uzokova, 2020). Although the content analysis method could have been applied to this research, the focus that is put on linguistics and the capacity for true meaning and ideologies hidden in text to be discovered by the Discourse Analysis method makes it the most relevant and useful data gathering method. To be more accurate, this study uses the thematic approach to discourse analysis, defining a discourse analysis study with pre-existing theme identified for the categorisation/coding of the findings (Blum et al., 2020).

Since some information regarding the data analysed are more important for this research than others, having an already laid out categorisation for the findings enables the researcher to identify relevant data in a faster and more consistent approach. Consequently, given that this research measures polarization through various forms, each of them must be

identified. Hence, a politically polarizing tweet in this study shall refer to Twitter posts which include misinformation, conspiracy theories, or personal attacks. Misinformation thus designates all non-factual claims made by individuals or elites. Likewise, tweets can be defined as conspiracy theories after making reference to a popular QAnon theories and other theories classified as non-factual beliefs. Finally, personal attacks refer to defamatory insults directed at US officials based for instance on ethnicity, religion, mental aptitude or sex. Hence, Twitter posts containing one or several of these indicators will be identified as polarizing for this research.

This thesis, although it focuses on the internet and the realms of social media which are borderless and cannot be attributed to one nation, will direct its attention on a case study in order to analyse a specific government and its citizens opinion on political matters. Given the interest that this research has on the role played by both the ‘masses’ and the ‘elites’ in the polarization phenomenon online, the case study chosen has to be one where both this elements can be found aplenty and analysed. Although a few countries fit these criteria such as France, the United Kingdom or others, the political polarization phenomenon online has been heavily linked to the American political scene (Bail et al., 2018). Thus, given all that needs to be accounted for, for this research to be conducted, the case study chosen is the United States of America, its government and institutions, and its public opinion. Moreover, given the daily vast amount of information shared on Twitter through posts and comments regarding political matters, the analysis section of this thesis is centred around the 2021-2022 period. This timeframe was chosen for this research given that the Twitter accounts of US officials such as Marjorie Taylor-Greene (MTG) were only created following their recent entry in the American political landscape, and thus did not exist prior late 2020.

This thesis uses two different types of primary sources. Firstly, Twitter posts (tweets) from both Elite partisanship and Mass polarization environments which were posted between January 2021 and January 2022 will be analysed through US officials accounts representing elite partisanship; MTG, Lauren Boebert, and right leaning podcasts as mass polarization spaces such as Tim Pool or Charlie Kirk. Secondly, public opinion polls on relevant issues for this research conducted by Gallup, and the Pew Research Centre will be analysed between the years 2020 and 2022. Although the tweets analysed cover the 2021-2022 period, the opinion polls will additionally present the numbers of the year 2020. This timeframe was chosen to not only match the duration in which tweets are analysed, but also to better

showcase the public opinion trends and offer a wider and better understanding of how these trends evolve over time.

Thus, to summarize, this thesis operationalizes, on one hand, online political polarization through the analysis of Twitter posts between 2021 and 2022, and their polarizing nature, in order to measure its proportionality in the overall discourse online. Consequently, a percentage of polarizing news spread by each type of online environments regarding this thesis' research topic can be advanced. This, in turn, allows for the measurement of the polarization level present in these two distinct online environments. Through the second hypothesis, the subsequent measurement of engagement and traction created by these polarizing news allows this research to observe either an increase or decrease in the level of political polarization in the Twitter accounts chosen. On the other hand, this thesis operationalizes political legitimacy in line with its conceptualisation, thus revolving around public opinion and trust. Hence, this research uses public opinion polls available through the Pew Research Centre and Gallup, regarding American public opinion on relevant topics such as the American political institutions. This operationalization allows this research a consistent understanding of its variables and an efficient measurement based on the same time period, thus allowing for the findings to be corroborated.

As it was mentioned in the theoretical framework, this study analyses Twitter posts as a measurement of political polarization online. Hence, for the analysis of the first hypothesis *“Both Elite partisanship and Mass polarization spaces on Twitter represent polarizing online environments regarding American political institutions and processes”* Twitter posts (tweets) between the years of 2021 and 2022 will be analysed by comparing both types of echo-chamber environments in the form of private groups (mass polarization) and official accounts of US political figure (elite partisanship) partaking in the polarization phenomenon. More precisely, the accounts analysed for this thesis are those of Lauren Boebert, MTG, Tim Pool, and Charlie Kirk. These account were chosen for a variety of reasons. MTG, the Georgia representative in the US Congress, for instance has known some scrutiny from academics for the past couple of years due to her important presence and contribution to the online polarization of the American public (Wu et al., 2022). Her abundant use of conspiracy theories, misinformation, and aggressive behavior both offline and online towards members of Congress or the US government have also been documented in the past (Wu et al., 2022). Alongside her, Lauren Boebert, representative for the state of Colorado in the US Congress,

has followed suit in the use of conspiracies and misinformation, as well as having created a very large following online (2.5 million followers). Charlie Kirk and Tim Pool on the other hand, represent the new wave of disinformation and polarizing attitudes online. Through both their consequent following (2.2 and 1.6 million followers), their weekly podcast and their incendiary political takes, they today share the polarising stage with US officials such as Boebert or MTG. This group of individuals was also chosen due to the consequent place they occupy in the public discourse throughout social media, making them ideal candidate in a study focused on the consequences of online polarization on the public's opinion offline.

In order to gather a randomized selection for the analysis, the first ten tweets of every month between January 2021 and January 2022 will be analysed for all four Twitter accounts selected, thus resulting in 120 tweets per account. Consequently, 480 tweets will be analysed in total. Tweets that are not categorised as polarising according to this study will be retained in order to measure and compare the amount of polarising and non-polarising tweets observed in each account and the engagement they generate. The amount of polarizing information found in their tweets such as personal attacks, misinformation, and conspiracy theories directed at American political officials or institutions, will then be pondered in each environment.

Moreover, this comparison aims to not only measure the political polarization regarding American institutions and electoral processes, but also investigate the claim made by academics which stipulates that these homophily driven echo-chambers increase polarisation. In addition, by focusing the research on a segment of the polarizing discourse online regarding the American government, electoral processes, institutions and political officials, their relevance, proportionality, and importance in the overall online political polarization process online can be highlighted. Indeed, by scrutinizing all posts regarding political subjects, this will enable the analysis to measure the proportionality of polarizing information regarding the US institutions and electoral processes.

The second hypothesis "*The higher the level of political polarization on Twitter, the higher the loss of the American public's trust in their political institutions and electoral processes*" focuses on Twitter posts and public opinion polls. Firstly, similarly to the first hypothesis, Twitter posts from both Elite partisanship and mass polarization environments spanning from 2021 to 2022 will be analysed. In contrast, these posts will be scrutinized

regarding the traction and the engagement they create on the platform. The increase or decrease of the polarization level will thus be measured through the number of likes, retweets, and shares obtained. An increase in these numbers would signify an increase in the number of individuals convinced by these polarizing takes, and thus an overall increase in the level of polarization of said Twitter account. In contrast, a decrease in these numbers through time would represent a loss of interest by Twitter users either for this type of polarizing news or for the individuals presenting them, hence lowering their influential capability. Posts identified as politically polarizing following the analysis of the first hypothesis will hence be carried over for the analysis of the second hypothesis. This method not only offers a more complete mean of analysis, but also proves itself useful in the context of a time-limited research. Next, the findings detailing the amount of polarisation aimed at each important US political institution and electoral process by each account will be corroborated with public opinion polls obtained from the Pew Research Centre and Gallup regarding the same topics (US institutions and electoral processes) between the years of 2020 and 2022. Hence, both sets of findings will be scrutinized for the identification of a common trend.

Given the academic consensus on the opinion influencing capacities of the Internet and social media (e.g.: Bail et al., 2018; Diamond, 2019; Miller et al., 2016; Weeks et al., 2017), a high level of political polarization online regarding the US government, institutions, and elections is likely to translate into a loss of trust by the public in polls' findings. However, it is important to note that the American public's opinion in their government, institutions and elections is determined by a plethora of issues, and that online polarization cannot be qualified as the sole reason for a loss of public trust. Nevertheless, the importance and relevance of the online dimension of political polarization for the public's trust loss in their institutions and elections can still be measured and determined.

5. Results

This section focuses on the results of the analysis and the assessment of the hypotheses.

Hypothesis 1: *“Both Elite partisanship and Mass polarization spaces on Twitter represent polarizing online environments regarding American political institutions and processes”.*

The Elite partisanship environment on Twitter is analysed through the official accounts of MTG and Lauren Boebert. In both instances, the findings reveal an astonishing level of polarisation. Indeed, out of 120 tweets written throughout the 2021 year by MTG, 87.5% (or 105) of them were found to be polarising according to this research's criteria. The several types of polarisation mentioned earlier are almost equally used throughout the year observed. While misinformation was the most used (40%) in the tweets analysed, personal attacks towards US officials (35%) and the use of conspiracy theories (25%) were also rampant. In comparison, 85% (or 102) tweets from Lauren Boebert were analysed as fitting the polarisation criteria of this study. However, the use of personal attacks from Boebert towards US officials, and in particular current Democrat President Joe Biden were found to amount to 50% of all polarising tweets. The use of misinformation (35%) and conspiracies (15%) in these tweets is limited in comparison. This represents the first difference observed between the two accounts. Other differences can be observed by closely analysing the target of these polarising tweets. For both MTG and Lauren Boebert, the US presidency represent an important target, with 16% and 27% of their respective tweets mentioning it. The Democratic party and the US government are similarly targeted (between 20 and 30%). Differences emerge when observing the importance given to the media (15% - 7%), the US congress (17% - 10%), and the US Supreme Court (14% - 6%). One surprising finding concerns the US elections, which were mentioned in only 5% and 4% of the tweets analysed from MTG and Lauren Boebert in 2021. In addition, the tweets that were identified as non-polarising for both accounts took the same shape; asking for donations or spreading the word on an incoming political rally in which the account holder will be participating.

Mass polarization environment on Twitter is analysed through the accounts of Charlie Kirk, host of the Charlie Kirk Show, and Tim Pool, host of the Timcast. Quite incredibly, the findings reveal that this type of environment is even more polarized than the accounts already analysed in the Elite partisanship space. Indeed, 92.5% (or 111) tweets were categorised as polarising for Charlie Kirk's account, and 96.5% (or 116) tweets for Tim Pool's account. Although both accounts were analysed as using misinformation as the most common shape of polarisation, they did so to different extent. Indeed, while Tim Pool uses misinformation in 62% of his tweets, Charlie Kirk used it for 41% of his. Consequently, while Charlie Kirk was found to also use personal attacks in 38% of his tweets, and conspiracies in the remaining 21% of them, Tim Pool only used personal attacks in less than a quarter of his tweets (24%)

and conspiracies in 14% of them. Observations can be made as for the target of these tweets, just as it was done for the analysis of the Elite partisanship environment.

Indeed, similarities can be found in both Kirk's and Pool's tweet analysis. As it was for the two accounts previously analysed, the US presidency (19.5% – 12%) and US government (20% - 19%) also represent a preferred target in this environment. Other subjects that were not deemed important by the two podcasts hosts were however showing the difference in targets compared to US officials such as MTG. Hence, the supreme court was surprisingly almost never mentioned in Kirk's and Pool's tweets (1.5% - 0%), as well as the US Congress (2% - 1.5%). However, many differences can also be spotted. On one hand, while Charlie Kirk targeted the elections (11.5%) for its more consequent use of conspiracies, Tim Pool only mentioned the topic in 4% of his tweets. On the other hand, Tim Pool's Twitter account was overflowed with misinformation targeting the news reporting of the US media, targeting them in more than 55% of his tweets, against 22% for Charlie Kirk. In contrast to Lauren Boebert and MTG, the rare instances of non-polarising tweets in the accounts of Charlie Kirk and Tim Pool took the shape of merchandising and self-promotion advertisement.

The findings of this study thus confirm that both the Elite partisanship and Mass polarization environments on Twitter are very polarising spaces regarding the US political institutions and electoral processes, albeit to different extents. While in all four accounts the US presidency and US government were heavily targeted, other institutions such as the US Congress or the Supreme Court did not know the same scrutiny in both environments. Likewise, other topics such as the US electoral process and its election were rarely mentioned throughout the 480 tweets analysed. However, all accounts chosen displayed evidence of the use of conspiracy theories. These conspiracies were in all cases used surrounding the Covid-19 crisis and the Covid-19 vaccine, as well as the 2020 US presidential election. The consequences of election-based conspiracies online will be extensively discussed in the second hypothesis through the use of public opinion polls. Nevertheless, this study's findings showcase that the Mass polarization environment contains an even more polarized level of online discourse than the Elite partisanship space. Moreover, the level of polarization observed throughout these four accounts and their respective tweets reveals that this level sits between 85% and 96.5%, which largely surpasses the author of this thesis' expectations, and constitutes a worrying discovery as for the polarization level of the entire social platform.

Moreover, not only has the first hypothesis been proven, but the role of homophily can be further discussed. Indeed, the claim made by academics which argued that the echo-chambers which were created online as a consequence of homophily-type decision, drive online polarisation further, can be assessed. Hence, the level of polarisation observed in online echo-chambers environments such as the ones analysed in this study reveals it as dramatically high. Thus, beginning to confirm the suspected indirect causal mechanisms in which homophily drives the creation, proliferation and popularity of these now confirmed highly polarising environments. This, in turn, represent a risk for the political polarization of the American public, and a potential risk for the Twitter experience of all its users in general.

Hypothesis 2: “The higher the level of political polarization on Twitter, the higher the loss of the American public’s trust in their political institutions and electoral processes”.

As it was discussed above, the polarization level observed through the four Twitter accounts scrutinized has reached an alarming level. Nonetheless, the engagement that these tweets have known can also be measured by calculating the monthly average of comments, retweets, and likes obtained by the posts analysed in this study. Doing so enables this research to observe whether that average has increased or decreased throughout the 2021 year. This exercise can also reveal more differences between each polarising environment and their engagement capacities. Hence, although all accounts scrutinized possess a large audience (between 1.6 and 2.5 million followers), the engagement their tweets create have largely differed.

For instance, MTG’s and Lauren Boebert’s average tweet through the months of January and December obtained between 1.5 and 2 thousands comments, upwards of 4 thousands retweets and close to 10 thousands likes per tweet. In comparison, Charlie Kirk and Tim Pool, have never, through the course of the 2021 year obtained a monthly average anywhere near the like of US official representatives mentioned above. Indeed, their respective monthly average shies just south of 1 thousand comments, 1 thousand retweets and 5 thousands like. Thus representing less than half of the engagement produced by the tweets from MTG and Lauren Boebert. The further analysis of these accounts reveals that, while MTG has almost

tripled her numbers in terms of monthly tweet engagement average between January and December 2021 (2k/1.5k/7k → 5.5k/4.4k/16k), Charlie Kirk's monthly average has, in the same time period, decreased by more than 50% (0.5k/2.5k/8.5k → 0.2k/1k/3.4k). The difference in environment types in this observation is even more striking given that Lauren Boebert has known a slight increase in her monthly engagement throughout 2021, whereas Tim Pool was met with a slight decrease throughout the course of the year. Hence, both accounts from the Elite partisanship scene have seen their tweets create more and more engagement from their audience, while Mass polarisation accounts have seen their number decrease. This, in turn, can be observed as a further increase in polarisation level for the Elite partisanship environment given the continuous increase in audience and engagement created by their tweets.

Nevertheless, all accounts do share a similarity when observing the monthly engagement average of their non-polarising tweets. Indeed, for each Twitter account, that average landed far below the lowest monthly average of their polarising tweets. This interesting discovery does echo the findings of other studies which concluded that the posts gaining most engagement on the social media platform always contain incendiary/polarising takes (Garimella & Weber, 2017). Consequently, this means that what is most shown to the public on Twitter contains polarising takes or criticism, hence accelerating the online polarisation process of the American public and bridging the gap between online and offline political views for the average American citizen. Given the academic consensus discussed earlier regarding the opinion influencing capacities of social media, the use of public opinion polls in this thesis should reveal trends between what can be observed in them, and the findings that were already presented following the Twitter analysis. Indeed, for this hypothesis to be confirmed, since this thesis has argued that the polarization level of both types of echo-chamber environments has reached a high level, the public opinion polls must show as significant a decrease in the American public's view of their political institution and electoral processes.

The public opinion polls used for this thesis were taken from the Pew Research Centre and Gallup concerning the years 2020, 2021, and 2022. The findings suggest that there is indeed a widespread loss of public's trust in their several political institutions. For instance, both Gallup and the Pew Research Centre polls find a significant decrease in the public's trust of their government and presidency. Indeed, the Pew Research Centre measures a 7%

decrease (from 27% to 20%) in the public's trust in their government between 2020 and 2022. During the same period, Gallup measures a 12% drop in the public's trust of the executive branch of government (28% → 16%) and 10% for the judicial branch (17% → 7%). As it was observed earlier, the US presidency was a popular target for each account from which the polarising tweets were analysed. As the Gallup polls show, the public opinion seems to match that distrust. Indeed, between 2020 and 2022, people who claimed to have a great deal of confidence in the US presidency have decreased from 22% to 10%. Likewise, people who shared very little confidence in the US presidency have increased from 32% to 45% in just two years. Several other Gallup polls highlight the decreasing trust of American citizens in their other political institutions. For example, low confidence in the US Congress, which was a popular target for MTG and Lauren Boebert, has increased from 18 to 23% for people who claimed they had not trust whatsoever in the institution. In addition, confidence in the US Supreme court has also decreased, with people who shared having a great deal of confidence in the institution dropping from 17% to 7%, and the American citizens who did not trust it growing from 8% to 22% between 2020 and 2022.

Public opinion polls regarding trust in elections and in election administration offer a more surprising result. Indeed, Gallup reports that confidence in the accuracy of US elections increased from 59% to 63% between 2020 and 2022. Likewise, the Pew Research Centre observed a slight increase in the confidence entrusted by the public towards election administration (15% to 22%). However, these polls do not showcase the truth behind election confidence. While the average confidence in election has increased, the gap between how republicans and democrats partisans answer that question has never been wider in the country's recorded history (Gallup, 2022). For instance, 37% of republicans trust the mail-in-ballots voting system, against 88% for democrats. In-person voting is also down from 92% in 2020 for republicans, to 79% in 2022. In contrast, Democrats believe this voting system at 90% in 2020, up to 95% in 2022. The information regarding mail-in ballot voting especially suggests that this drop in confidence comes from the last US presidential elections and the widespread conspiracy of a stolen election, in which mail-in-ballot-voting was used. Although, as it was seen earlier in the analysis, the Twitter accounts chosen only targeted the elections occasionally (except Charlie Kirk's 12%), the numbers shown by the polls prove the tenacity of the lies spread through misinformation campaigns lead by republicans such as Kari Lake, Donald Trump, MTG and others in 2020 following the results of the election. Thus further arguing the long-lasting impact of online political polarization on American

citizens and their political beliefs. Consequently, this slight increase in electoral processes confidence can be attributed to one side of the political isle only and does not reflect the wide gap present between opposition partisans.

These polls showcase a widespread loss of confidence for several of the United States' most important political institutions. Moreover, similar trends between the most targeted recipient of the tweets analysed and the US institution which have lost a lot of the public's confidence can be scrutinized. Indeed, massive confidence drops have been observed in public opinion polls for the US presidency, US government, US congress and the US supreme court. These same political institutions were all, to different extents, criticised, shamed, or lied about by all Twitter accounts analysed in this thesis. Thus confirming that, to some extent, this second hypothesis can be argued as true. However, to argue that these public opinion polls are the pure reflection of the Twitter social platform and the information shared through it, would be quite the hyperbole. However, in light of the astonishing level of polarisation observed in every Twitter accounts selected, the consequent growth in engagement for the Elite partisanship environment accounts, and the academically claimed argument that the Internet and social media in particular possess an important opinion influencing abilities, one could argue the following; The political polarization level of popular Twitter accounts and their influence on the American citizens who take part in these echo-chambers environment are significant variables to take into account when researching US voting behavior and public opinion on US political matters and institutions.

In addition, the growth observed in the public's engagement towards polarising information shared by US officials, such as MTG, which are known for their use of conspiracy theories and misinformation, showcases that more and more people are seduced by these echo-chambers as a consequence of homophily-type decisions. As a result, the findings of the Twitter analysis and the public opinion polls demonstrate a number of trends in which political institutions which were heavily criticised online, have lost a consequent amount of trust from the public offline in the same time period. Another observable dimension of this causal mechanism can be seen in Tim Pool's relentless attack on national news organizations (targeted in 55% of his tweets), and public opinion polls which detail that Americans between the age of 18 and 49 are as likely to trust information on social media as information from national or 'conventional' news outlet (Pew Research Centre, 2022).

6. Conclusion

This thesis set out to deliver an answer to the following research question: *How does online political polarization impact domestic political legitimacy?* Consequently, a review of the academic debate surrounding key concepts such as political legitimacy, polarization and echo-chambers was presented through the literature review section. In addition, the academic relevance of this thesis was advanced in relation to academic gaps still present in the study of internet governance. Next, the theoretical framework of this thesis was presented through the use of two theories. Firstly, the Legitimacy theory enabled this research to conceptualise legitimacy as the trust of citizens in their own institutions and elections. Secondly, the Homophily theory was advanced, and its role in the creation of polarisation-driving echo-chambers environments was argued through existing academic claims. Consequently, two hypothesis making use of the social media platform Twitter, and the theoretical and conceptual work already presented, were drawn up.

The first one to test the very same academic claim and measure the amount of polarisation present in two different echo-chamber environments; Mass polarisation and Elite partisanship. The second one to monitor an increase or decrease of the engagement created by selected polarising Twitter accounts and compare trends between online political discourse, and public opinion reports regarding the same US institutions and elections. The findings presented for the first hypothesis revealed an incredible amount of polarisation. Both types of environments were showcased to contain high levels of polarisation regarding the most important US political institutions, as well as its elections and its media. The first hypothesis can thus be regarded as true, since the polarising capacities and abilities of these echo-chambers was demonstrated, and the claim made by academics was confirmed. The second hypothesis revealed an increase in engagement for one of the two online environments. In addition, similar trends were observed between the most targeted institutions on Twitter, and the highest loss of trust by the public in the same institutions, during the same time period. The US presidency, the US government, the US congress and Supreme court were all part of these similar trends, thus confirming the veracity of the second hypothesis.

Hence, this thesis argues that, although the political polarisation occurring on Twitter is not a direct reflection of public opinion, the academic consensus on the internet's opinion

influencing abilities, and the numerous trends observed deny the possibility of it being a coincidence. Indeed, this thesis argues the presence of a direct causal relationship between the subject of political polarization observed on Twitter, and the opinions held by citizens offline regarding the same subject. Consequently endangering the popularity of any democratic institutions or officials being targeted online by these echo-chambers spaces. This thesis has also highlighted the risks that can be attached to such a level of polarisation on Twitter for the health of the US public political discourse offline and online. To conclude, this thesis thus argues that online political polarization does impact the domestic political legitimacy of domestic institutions and electoral processes as seen through public opinion.

Further research in a grander scale as to the overall polarisation level of social media platforms such as Twitter or Facebook is needed to better the understanding of the risk they present to public discourse everywhere. In addition, studies regarding the nature of polarizing social media content and the engagement they create could represent a pertinent avenue. For instance, a study focused on the different spread of misinformation through text or through images and videos could further our understanding of how misinformation operates online. Furthermore, academics could already speculate as to the likely effects of new laws and regulations intended to combat misinformation. There is thus important work still to be done in this field.

7. References

- Abramowitz, A. I., & Saunders, K. L. (2008). Is Polarization a Myth? *The Journal of Politics*, 70(2), 542–555. <https://doi.org/10.1017/s0022381608080493>
- Arceneaux, K., & Johnson, M. (2015). More a Symptom than a Cause: Polarization and Partisan News Media in America. In J. Thurber & A. Yoshinaka (Eds.), *American Gridlock: The Sources, Character, and Impact of Political Polarization* (pp. 309-336). Cambridge University Press. <https://doi.org/10.1017/CBO9781316287002.016>
- 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. *Proceedings of the National Academy of Sciences of the United States of America*, 115(37), 9216–9221. <https://www.jstor.org/stable/26531294>
- Barberá, P., Tucker, J. A., Guess, A., Vaccari, C., Siegel, A., & Sanovich, S. (2018). Social media, political polarization, and political disinformation: A review of the scientific literature. https://www.academia.edu/58647274/Social_Media_Political_Polarization_and_Political_Disinformation_A_Review_of_the_Scientific_Literature
- Bessi, A., Coletto, M., Davidescu, G. A., Scala, A., Caldarelli, G., & Quattrociocchi, W. (2015). Science vs Conspiracy: Collective Narratives in the Age of Misinformation. *PLOS ONE*, 10(2), 1-17. <https://doi.org/10.1371/journal.pone.0118093>
- Blum, E., Stenfors, T., & Palmgren, P. (2020). Benefits of Massive Open Online Course Participation: Deductive Thematic Analysis. <https://www.jmir.org/2020/7/e17318>
- Boebert, L. (@laurenboebert). (2021). Tweets. (Lauren Boebert). Retrieved 20th May 2023 <https://twitter.com/laurenboebert>
- Buchanan, A. (2002). *Political Legitimacy and Democracy*. University of Chicago.

Druckman, J. N., Peterson, E., & Slothuus, R. (2013). How Elite Partisan Polarization Affects Public Opinion Formation. *American Political Science Review*, 107(1), 57 -79.

<https://doi.org/10.1017/S0003055412000500>

Enders, A., & Armaly, M., (2019). *The differential effects of actual and perceived polarization*. Political Behavior, Springer.

Fiorina, M., & Abrams, S., (2005). Political Polarization in the American Public. *Annual Review of Political Science*, 11, 536-588.

<https://doi.org/10.1146/annurev.polisci.11.053106.153836>

Gallup. (2022). “Congress and the Public”. Gallup World Poll

Gallup. (2022). “Confidence in Institution”. Gallup World Poll

Gallup. (2022). “Public Trust in Government”. Gallup World Poll

Gallup. (2022). “Confidence in the accuracy of US elections”. Gallup World Poll

Gandica, Y., & Gargiulo, F. (2017). The role of homophily in the emergence of opinion controversies. *Journal of Artificial Societies and Social Simulation*, 20(3), 8.

<https://doi.org/10.18564/jasss.3448>

Garimella, V. R., & Weber, I. (2017). A Long-Term Analysis of Polarization on Twitter. *Proceedings of the Eleventh International AAAI Conference on Web and social media*, 11(1).

<https://doi.org/10.1609/icwsm.v11i1.14918>

Garrett, R. K., Gvirsman, S. D., Johnson, B. K., Tsfati, Y., Neo, R., & Dal, A. (2014). Implications of Pro-and Counterattitudinal Information Exposure for Affective Polarization. *Human Communication Research*, 40(3), 309-

332. <https://doi.org/10.1111/hcre.12028>

- Garrett, R. K., Weeks, B. E., & Neo, R. L. (2016). Driving a Wedge between Evidence and Beliefs: How Online Ideological News Exposure Promotes Political Misperceptions. *Journal of Computer-Mediated Communication*, 21(5), 331-348. <https://doi.org/10.1111/jcc4.12164>
- Hong, S., & Kim S. (2016). Political polarization on Twitter: Implications for the use of social media in digital environments. *Government Information Quarterly*, 33(4), 777-782. <https://doi.org/10.1016/j.giq.2016.04.007>
- Howard, P. N., Ganesh, B., Liotsiou, D., Kelly, J., & François, C. (2019). *The IRA, social media and political polarization in the United States, 2012-2018*. Oxford: University of Oxford.
- Kirk, C. (@charliekirk11). (2021). Tweets (Charlie Kirk). Retrieved 20th May 2023. <https://twitter.com/charliekirk11>
- Klajn, M. (2020). Discourse Analysis. *Leiden law methods portal*. Leiden University. <https://www.leidenlawmethodsportal.nl/topics/discourse-analysis>
- Kosloff, S., Greenberg, J., Schmader, T., Dechesne, T., & Weise, D. (2010). Smearing the Opposition: Implicit and Explicit Stigmatization of the 2008 U.S. Presidential Candidates and the Current U.S. President. *Journal of Experimental Psychology: General*, 139(3), 383-398. <https://doi.org/10.1037/a0018809>
- Larson, K., & Tsang, A., (2016). *The Echo-Chambers: Strategic voting and Homophily in Social Networks*. Proceedings of the 15th International Conference on Autonomous agents and Multiagent System. Singapore.
- Lelkes, Y. (2016). Mass Polarization: Manifestations and Measurements. *Public Opinion Quarterly*, 80(S1), 392-410. <https://doi.org/10.1093/poq/nfw005>
- Lelkes, Y., Sood, G., & Iyengar, S. (2017). The Hostile Audience: The Effect of Access to Broadband Internet on Partisan Affect. *American Journal of Political Science*, 61(1), 5-20. <https://www.jstor.org/stable/26379489>

- Levendusky, M. S. (2013). Why do Partisan Media Polarize Viewers? *American Journal of Political Science*, 57(3), 611-623. <https://www.jstor.org/stable/23496642>
- Lipset, S. (1959). Some social requisites of Democracy: Economic development and Political legitimacy. *The American Political Science Review*, 53(1), 69 -105. <https://doi.org/10.2307/1951731>
- Massachs, J., Monti, C., Morales, G.D., & Bonchi, F. (2020). Roots of Trumpism: Homophily and Social Feedback in Donald Trump Support on Reddit. *12th ACM Conference on Web Science*, 49-58. <https://dl.acm.org/doi/10.1145/3394231.3397894>
- Miller, D., Sinanan, J., Wang, X., McDonald, T., Haynes, N., Costa, E., Spyer, J., Venkatraman, S., & Nicolescu, R. (2016). *How the world changed social media*. UCL Press. <https://doi.org/10.14324/111.9781910634493>
- Pew Research Centre. (2022). “Public Trust in Government”. Pew Research Centre, Washington.
- Pew Research Centre. (2022). “Confidence in Elections Administration”. Pew Research Centre, Washington.
- Pool, T. (@Timcast). (2021). Tweets (Tim Pool). Retrieved 20th May 2023 <https://twitter.com/Timcast>
- Schroeder, R. (2018). *Social theory after the internet*. UCL Press.
- Schwalbe, M., Cohen, G., & Ross, L. (2020). *The objectivity illusion and voter polarization in the 2016 presidential election*. National Academy of Science.
- Taylor, S.A., Pickering, B., Grace, P., Boniface, M.J., Bakir, V., Boyd, D., Engesser, S., Epstein, R., Fawzi, N., Fernbach, P.M., Fisher, D.R., Gardner, B.G., Jacobs, K., Jacobson, S., Krämer, B., Kucharski, A., McStay, A., Mercier, H., Metzger, M.J.,

Polletta, F., Quattrociocchi, W., Sloman, S.A., Sperber, D., Spierings, N., Wardle, C., Zollo, F., & Zubiaga, A. (2018). Opinion forming in the digital age: Fake news, echo chambers and populism - Key themes, concerns & recommendations for European research and innovation.

<https://www.semanticscholar.org/paper/Opinion-forming-in-the-digital-age%3A-Fake-news%2C-echo-Taylor-Pickering/d26e8fc20cd8ac3b9a726faa888edde2ff0b5f2f>

Taylor Greene, M. (@RepMTG). (2021). Tweets (Rep. Marjorie Taylor Greene).

Retrieved 20th May 2023. <https://twitter.com/RepMTG>

Theocharis, Y., Roberts, M., Barberá, P., & Tucker, J. (2017). From Liberation to Turmoil: Social Media and Democracy. *Journal of Democracy*, 28(4), 46-59.

<https://www.journalofdemocracy.org/articles/from-liberation-to-turmoil-social-media-and-democracy/>

Uzokova, S. (2020). Principles of Discourse Analysis in Linguistics. *Журнал иностранных языков и лингвистики*, 1(1), 7-12. извлечено от

<https://fl.jdpu.uz/index.php/fl/article/view/100>

Vila-Henninger, L. (2020). *A theory of popular legitimation: A dual-process model approach to legitimation and political socialization*. Institut de Science Politiques (ISPOLE).

Weatherford, S. (1992). Measuring Political Legitimacy. *The American Political Science Review*, 86(1), 149-166. <https://doi.org/10.2307/1964021>

Weeks, B. E., Ardevol-Abreu, A., & Gil de Zuniga, H. (2017). Online Influence? Social Media Use, Opinion Leadership, and Political Persuasion. *International Journal of Public Opinion Research*, 29(2), 214-239. <https://doi.org/10.1093/ijpor/edv050>

Wu, V., Carey, J., Nyhan, J., & Reifler, J. (2022). Legislator criticism of a candidate's conspiracy beliefs reduces support for the conspiracy but not the candidate: Evidence from Marjorie Taylor Greene and Qanon. *Harvard Kennedy School Misinformation Review*, 3(5). <https://doi.org/10.37016/mr-2020-103>