THESIS APPROVAL FORM NAZARBAYEV UNIVERSITY SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

PROPAGANDA THROUGH MIMICKING:

THE 2016 IRA PROPAGANDA CAMPAIGN ON FACEBOOK IN THE U.S.

ПРОПАГАНДА ЧЕРЕЗ ПОДРАЖАНИЕ: ПРОПАГАНДИСТСКАЯ КАМПАНИЯ АИИ 2016 ГОДА В FACEBOOK В США

ЕЛІКТЕУ АРҚЫЛЫ НАСИХАТТАУ:

2016 ЖЫЛЫ АҚШ-ТА ҒАСЕВООК-ТЕ АИИ ҮГІТ-НАСИХАТ НАУҚАНЫ

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A Thesis Submitted to the School of Humanities and Social Sciences of Nazarbayev University in Partial Fulfillment of the Requirements for the degree of

MASTER OF ARTS IN POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

NUR-SULTAN, KAZAKHSTAN

2021

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List of Abbreviations

HPSCI	US House of Representatives Select Committee on Intelligence
IRA	Internet Research Agency
CTR	Click-through Rate
СРМ	Cost per Impression

Abstract

The thesis research analyzes the mimicking in the Russian propaganda campaign on Facebook against the US in 2016. I identify a gap in the literature: the scholars have noted that Russia has mimicked American activists by creating groups on Facebook that wrote about political and social issues but they have not studied the effects and effectiveness of the mimicking. Consequently, the focus of the research is to find the effects of mimicking of the Russian propaganda campaign on Facebook. To analyze mimicking, I used the Facebook dataset shared by the US House of Representatives on the Russian propaganda campaign in 2016 against the US. Through the content and regression analyses, I found the following effects: the propaganda messages with more sophisticated mimicking of the rhetoric of their targeted audience on Facebook have attracted more attention and led to higher engagement rates. The implication of the finding is that such propaganda campaigns may have the capacity to amplify the polarization of the society by providing polarizing content on social media more reach, while its reach might be limited by the mimicking itself. Whether amplification of polarization occurred in actuality and the extent of it requires further research. Other implications of mimicking in foreign political propaganda have also been discussed.

Acknowledgements

I express my gratitude towards my thesis committee, Professor Alexei Trochev and Professor Gento Kato. Their guidance, patience, supervision, and constant revision of my work made this project possible.

I wanted to express my special gratitude to Professor Alexei Trochev, from whom I learned a lot during our countless discussions of the topic. I am thankful for his encouragement and patience from the beginning of my study in the program to the completion of this thesis.

I wanted to express my special gratitude to Professor Gento Kato who helped me with data extraction as well as for his supervision during the regression analysis. Thanks to him, I learned a lot about how to work with data and measurements.

My thanks to external reviewer Professor Scott Radnitz, his input has always been helpful and impactful throughout the project.

A special thanks to Professor Caress Schenk, who, beyond being an exceptional supervisor, also helped me to understand how to work with coding in content analysis during my research assistantship.

I express my gratitude towards the entirety of the PSIR faculty for everything that I learned in the MAPSIR program.

Introduction

This thesis explores the effects of mimicking of American political activists by the Internet Research Agency (IRA) in the Russian propaganda campaign in 2016 through an analysis of Facebook propaganda advertisements. According to the report prepared by the United States Senate Select Committee on Intelligence (2019), the Internet Research Agency (IRA), a Russian organization, has intervened in the 2016 US presidential elections through the propaganda spread by fake accounts and groups on Facebook, YouTube, Twitter, Instagram, and multiple other social media platforms. Throughout 2016, the IRA has targeted African Americans, conservatives, and liberals to polarize society by antagonizing them to each other and discrediting government institutions and the mainstream media. The IRA attempted to dissuade liberals and African Americans from voting for Hillary Clinton and they have attempted to encourage conservatives to vote for Donald Trump. Shortly after Trump's victory, the IRA has used Trump's electoral win to publish Facebook ads aimed at polarizing the US Facebook users further. The IRA did this by pretending to be the members of their targeted audiences and by targeting different social groups in the American society across the political spectrum by mimicking the language, social beliefs, symbols, interests, and rhetoric of these groups.

Given this information, I ask what were the effects of mimicking in the IRA propaganda campaign on Facebook and if there were effects, how those effects were achieved. Answers to these questions might shed light on the effectiveness of the IRA propaganda in accomplishing its goals: weakening of the voter trust in American democracy through polarizing politics, a process that had been strengthened by Trump's victory (Howard et al. 2019; Maher et al. 2018).

This thesis has two purposes. The first purpose is empirical. I investigate what were the effects of mimicking employed by the IRA on their audiences. The second purpose is theoretical. I ask how foreign-made mimicking can be effective in political propaganda.

These questions have not been tackled in the literature as there was no research on the effects and effectiveness of mimicking in political propaganda on social media. Moreover, the thesis aims to understand the effects of the IRA campaign in 2016, which in turn, may contribute to the literature on the effectiveness of the campaign. Especially, since scholars debate whether the 2016 IRA propaganda campaign has been successful in polarizing American society and/or has been able to affect the outcome of the 2016 US presidential elections (Ribeiro et al. 2018; Howard et al. 2019; Bail et al. 2020: Jamieson 2020).

To analyze the effects of mimicking in the IRA propaganda, I focus on how different levels of mimicking affect the attention and engagement rates on Facebook. I carried out descriptive content analyses, both thematic and statistical, of the dataset provided by the United States House of Representatives Permanent Select Committee on Intelligence (HPSCI) on the IRA activity in Facebook for 2016. To test my hypotheses about the effects of different levels of mimicking on the targeted audience, I conducted regression analysis across the level of mimicking, text density, and sentiment of propaganda messages to see their impact on the attention and engagement rates on Facebook. I also conducted trend analysis of the IRA Facebook groups present in the HPSCI dataset, to see whether they have been able to adapt to the Facebook algorithm and garner more attention over time.

From first sight, it seems that mimicking works. The regression analysis has shown a statistically significant correlation between the advanced level of mimicking in the IRA-made political ads on Facebook and attention and engagement rates. Moreover, the IRA seems to show adaptability as the trend analysis indicates that the IRA was able to sustain their Facebook groups across both click-through rate and costs per thousand impressions, and even achieve better numbers as time went on.

In short, more sophisticated mimicking of rhetoric produces the following effects on social media: it catches the attention of the audience and generates engagement. A more detailed contextual analysis of the HPSCI dataset based on the descriptive content analyses and regression analysis shows that the IRA-made propaganda may have had the capacity to amplify the polarization in the US. This may be possible since the IRA gathered audiences on Facebook and showed them polarizing content, and since they based their content on American media and even reposted already existing content, they may deepen polarization by providing such polarizing content more reach.

I argue that while mimicking allowed the IRA to garner attention and facilitate engagement with their targeted audience, mimicking was also the limitation of the IRA propaganda campaign on Facebook. Why? Because the strategy of mimicking limited the content they were able to show to each audience by limiting them to already existing content and narratives towards which their audiences were already predisposed to.

While the mimicking may serve as a double-edged sword, the IRA may have the capacity to amplify polarization by providing polarizing narratives in the society more reach and, in certain conditions, mobilize people to attend rallies and protests in an attempt to provoke violent encounters between opposing social groups. Whether amplification happened in actuality and the extent of it requires further research. My research contributes to the literature on political communication by identifying conditions that make foreign political propaganda on social media effective.

Chapter 1. Literature Review: What We Know and Don't Know about the IRA Propaganda

From Leaflets to Social Media

History has shown that propaganda goes along with political competition and military confrontation, a fact that was witnessed even during the times of Alexander the Great (Jowett and Donnell 2018). According to White (1948), propaganda was employed extensively during the two World Wars by all sides. The propaganda was spread through leaflets, posters, and radio. Furthermore, the literature describes how propaganda aided the victory of the Allies in important battles during the Second World War (Whitton 1951; Ellul 1973; Belmonte 2013). The role of propaganda changed with the beginning of the Cold War, as propaganda became the main instrument of non-military contestation between the Soviet Union and the US as they used it against each other, on a scale not quite seen before. As scholars point out, with the end of the Cold War, the interest in the study of propaganda has subsided as well. As Bastos and Farkas (2019) argue, after the Cold War, the use of information warfare has declined in international relations, which was followed by a decrease in the study of propaganda.

According to Ajir and Valliant (2018), Russia had spent around 1.5 billion dollars on international propaganda from the fall of the Soviet Union until 2011. Strickland (2020) states that in 1994, the US promotion of democracy in Russia has reached 1.3 billion dollars, the money, which was allocated to funding pro-reform activities and propaganda of democracy. Thus, both the US and Russian had well-developed propaganda machines prior to the emergence of social media. Nowadays, both states spread propaganda through media websites, television channels, radio, and social media (Ajir and Valliant 2017; Bradshaw and Howard 2017). The interest in the study of propaganda has risen in the recent decade, as digital technologies and social media on the Internet became increasingly popular; propagandists have turned to these technologies and new communication channels to try to change peoples' perception of politics. The emergence of highly popular social media platforms allows propagandists to reach different audiences abroad for very low costs. For instance, Persily (2017) notes that traditional media is losing its power and appeal for the majority of Americans, who instead began receiving news from social media. Consequently, social media is being used extensively for political campaigning as well. As Persily (2017) points out, Trump heavily relied on social media and his popular Twitter account in 2016 to promote himself during the elections. This was possible because traditional media became a preferable source of news (Bjola, 2017). However, there is a debate among scholars about the role of social media as a source of news, for instance, Allcott and Gentzkow (2017) note that only 14 percent of adults considered social media their main source of electoral news in 2016.

Nevertheless, social media is not only a popular source of news but also can affect and shape the political discourse (Howard et al. 2017; Woolley and Howard 2017). Badawy et al. (2018) point out how Twitter has been praised for its contribution to enabling discourse on political issues. Apart from the low costs and its rising reach, social media is global, which makes it a great medium for propaganda for political actors, who irrespective of their regime type use it to spread propaganda to foreign audiences (Bialy 2017; Bradshaw and Howard 2017).

These characteristics of social media have resulted in what Bradshaw and Howard (2017) call "cyber troops", government-controlled organizations that spread both domestic and foreign propaganda on social media using automated bot accounts. Bradshaw and Howard have found that 28 states, including Russia that use 'cyber troops'. While most states

use these organizations to spread domestic propaganda, some states have used them against foreign audiences as well. The Internet Research Agency (IRA), a Russian company, based in St. Petersburg that is dubbed a "troll factory" because it interferes in the public discourse by posting negative or inappropriate comments to quell online discussions, is one of these organizations (Bastos and Farkas 2019; Ajir and Valliant 76; Golovchenko et al. 2019).

This form of political influence has been witnessed on a much larger scale, as the Russian propaganda campaign during the 2016 presidential elections in the US attempted to influence the outcome of the elections and polarize the American society (US Senate Committee on Intelligence 2019; Golovchenko et al. 2020; Bialy 2017; Bradshaw and Howard 2017; Bail et al. 2020). Consequently, Woolley and Howard (2017) consider computational propaganda, propaganda that spread on social media through automated scripts and bots accounts, to be one of the modern enemies of democracy. On the other hand, the propaganda may also backfire and lead to unintended consequences for the propagandist. For example, Bjola (2017) mentions the declining perception of Putin in Europe, where Russia has spread propaganda as well.

The IRA Propaganda Campaign in the US in 2015-2017

The most prominent case of a modern propaganda campaign on social media was revealed after the presidential elections in 2016 in the US when the United States Senate Committee has shared that Russia has carried out massive Propaganda campaign on social media throughout 2015-2017 (US Senate Committee on Intelligence 2019). They have also found out that, throughout 2016, the IRA attempted to support the presidential candidate Donald Trump, disparage the presidential candidate Hillary Clinton, and polarize American society across social, ideological, and racial issues (Bradshaw and Howard 2017; US Senate Committee on Intelligence 2019). They informed that Twitter, Facebook, Instagram, Google+, and YouTube have been used as a channel for propaganda, as these companies shared the data on the interference with the US Senate. The scope of this interference has also been substantial, as according to Bail et al. 2020, for instance, in 2016 the IRA posted more than 57 000 posts on Twitter.

The IRA has been active on Facebook, Twitter, Instagram, Reddit, Youtube, Tumblr, Google+, PayPal, and other social media. (Howard et al. 2019). 30 million people between 2015 and 2017 have shared the IRA posts on Facebook and Instagram (Howard et al. 2019). The current literature debates whether the goal of the IRA propaganda was to affect the outcome of the elections or to sow social discord in American society. (Golovchenko et al. 2020, Ribeiro et al. 2018). The IRA has played for both sides: they have targeted both leftleaning and right-leaning audiences in the US and targeted them through Facebook targeting algorithm and pitted them against each other (Howard et al. 2019; Golovchenko et al. 2020). Golovchenko et al. (2020) concluded through the analysis of 1052 IRA Twitter accounts, that the IRA has pursued multiple goals and objectives, and has attempted to support Donald Trump. Prier (2017) notes that one of the goals of Russian trolls was to discredit American media and institutions. Nevertheless, scholars agree that the IRA propaganda has been multifaceted and followed multiple objectives.

These developments show the growth of propaganda in the world of politics and the rise of public interest in the functioning and effectiveness of propaganda today. As Jowett and O'Donnell (2018) point out, modern propaganda has changed from traditional propaganda in a way that it targets certain specific groups rather than the mass audience. The modern propaganda might also be able to interfere in democratic processes as the 2016 IRA campaign has shown. Scholars note that the meddling into elections may destabilize democracy as well as further distort the perception of politics (Howard et al. 2017; Woolley and Howard 2017). Moreover, young people develop their political identities on social media (Bradshaw and Howard 2017). Thus, understanding how such propaganda campaigns affect

different foreign audiences and whether they are effective is important in order to understand and prevent them.

We Don't Know Much about Effects of Propaganda on Social Media

As Bjola (2017) points out that despite the growing use of propaganda and disinformation on social media, we do not know whether digital propaganda is effective as there is little to no empirical data on this. Moreover, he notes that states began using digital propaganda to gain power and promote their interests, but there is no evidence of its success.

Furthermore, we do not know whether the IRA propaganda campaign in 2016 has been effective or not. Even if political polarization could be attributed to propaganda through social media, there is no evidence that Russian propaganda has changed the minds of voters during the US 2016 presidential elections (Bail et al. 2020). Furthermore, according to Bjola, there are traces that Russia is interfering with EU member states in the same fashion by spreading social media propaganda, yet the opinion of the Russian president has significantly declined in the past years in Europe. In a similar vein, Gerber (2017) also points out that the think tank experts are claiming Russian propaganda to be effective at achieving its objective in the post-USSR territory, yet the evidence is insufficient to claim so.

While the effects of modern propaganda seem to be unknown, scholars have analyzed the effectiveness of propaganda campaigns in similar circumstances. Political advertising is ineffective at changing the attitudes of voters or has a small insubstantial effect (Coppock et al. 2020).

Regionally, as Gerber and Zavisca (2016) point out, Russian propaganda campaigns, have only been effective in Russia by raising anti-Americanism attitudes among domestic audiences but ineffective otherwise. Still, these scholars have found, in their study of Russian propaganda campaigns inside of Russia and neighboring countries, that Russian propaganda seemingly has achieved some influence in Russia and Kyrgyzstan. Internationally, similarly to the interference in the 2016 US elections in terms of strategy, Russian propaganda has failed to discredit Emmanuel Macron in the eyes of voters in the 2017 presidential elections in France as well as failed in the attempt to influence the elections in Germany in the same year (Lightfoot 2017). On the other hand, Russian propaganda efforts, according to Peisakhin and Rozenas (2018), have been effective at persuading the pro-Russian voters in the 2014 Ukraine presidential and parliamentary elections, nevertheless, they have been counter-productive at persuading the pro-Western voters. This led the scholars to conclude that the propaganda spread among the polarized society may deepen the level of polarization even further, but propaganda cannot change the opinions of its audience who do not have a prior disposition to the contents of propaganda.

In the case of the IRA propaganda campaign in the US, Ribeiro et al. (2018) have analyzed 905 high-impact data entries from the HPSCI dataset on Facebook and have conducted surveys using the images the IRA has used. They have concluded that the IRA propaganda has been effective in their targeting of the segments of the American population that would agree and believe their propaganda. While Bail et al. (2020), who have analyzed the effects of the IRA activity on Twitter, have found no evidence that the IRA have impacted the political attitudes of audiences they targeted since they interacted with members of society who were already predisposed to the contents of their messages and highly polarized.

What We Know About Effectiveness of Propaganda

While there is a lack of consensus in the literature about whether online propaganda is effective and what makes it effective, we can make certain assumptions about the conditions that may make propaganda more effective. The literature agrees that the *frequency* of propaganda is important, as the chances, that the propaganda will find individuals that will agree with it increases (Martin 1970; White 1948). This also can correspond with the *reach* of

propaganda messages on social media, the higher the reach of propaganda on social media the higher chances that it will find an audience that will agree with it.

Moreover, according to Martin (1971: 67), propaganda is more effective when it agrees with the attitudes, opinions, beliefs, values, and norms of the targeted audience, which translates to correct *targeting* on social media. These conditions can have a positive effect that adds to the persuasiveness of the message, but the more of these conditions are met the better, to the extent when a message is tailored to a specific individual. Martin points out that in 1971, the time the article was published, there was no way to make use of these factors because there was no way to segment the audience, but with the rising popularity of social media, such a limitation is in the past. Social media allows propagandists to segment society and deliver propaganda messages tailored specifically to them.

Furthermore, we can assume the *length* of the propaganda message on social media, that is, the word count might affect its effectiveness, as Pancer and Poole (2016) have found that on Twitter the lower the word count, the better the political messages will do in terms of popularity. This might be due to the attention span of people when engaging with social media.

Moreover, the negative sentiment in the propaganda might contribute to the effectiveness of propaganda as well. Scholars argue that propaganda that relies on *negative and violent sentiments* tends to be more effective (Ellul 1973; Bastos and Farkas 2019).

It can also be assumed that *rhetoric* also plays a considerable role in the effectiveness of propaganda. Rhetoric has been an essential part of propaganda since its conception, as the propagandists have used different emotions and complex argumentation to make their message more persuasive and impactful to their audience (Margolin 1979; Auerbach and Castronovo 2013; Jowett and Donnell 2018).

What Do We Know about Mimicking in Propaganda?

As can be seen in the data provided by the US House of Representatives Permanent Committee on Intelligence (HPSCI 2017), the IRA disguised themselves as political activists and average American citizens and mimicked conservatives and liberals by using images and language that would indicate ideological alignment. Scholars who have engaged with the data on the IRA activity on Facebook have observed this strategy (Ribeiro et al. 2017; Howard et al. 2019). Many scholars have observed the mimicking of the IRA in 2016 (US Senate Committee on Intelligence 2019; Howard et al. 2019; Kim 2018; Snegovaya and Watanabe 2021), although the terms they have used to denominate mimicking have been different. For example, the US Senate Select Committee on Intelligence uses the term "mimicked" only once in its report, when describing how the IRA 'mimicked' the narratives of Black Lives Matter when targeting African-Americans (United States Senate Select Committee on Intelligence 2019: 53).

It is worth pointing out that Facebook and Twitter discovered the IRA intervention not because the mimicking failed and users found that out but because the IRA was careless with their IP addresses, as their posts originated from Saint Petersburg, Russia (Prier 2017, Howard et al. 2019).

The literature discusses how the IRA mimicked the US political activists and citizens, but there is no research on what the effects of mimicking on social media were and whether it has been effective. The concept of mimicking also lacks systematic analysis or theoretical framework.

Nevertheless, the mimicking has been used prior to the 2016 propaganda campaign by the IRA, and is known method of disinformation. For instance, Carroll (2017) analyzes Russian use of mimicking in spreading counter-narratives during 2014 and 2015 in Ukraine, where the mimicking takes an important role. Mimicking, in this case, was not perpetrated on social media, but has taken the form of posters on the streets and Russian soldiers posing as local soldiers. Carroll argues that the mimicking that was employed by Russian has been sophisticated, as they used semiotic techniques to affect the interpretation of photos that have been circulating at the time. Furthermore, according to Pomerantsev (2019), imitation was a traditional method of information war in Russia, which also is called "maskirovka" according to the Russian manual on propaganda "Information-Psychological War Operations: A Short Encyclopedia and Reference Guide". Examples of mimicking include targeting a specific audience, like a particular group on Facebook, e.g., "Being Patriotic" or "Army of Christ", consisting of conservatives and Christians respectively, and mimicking social beliefs and cultural values of those audiences.

We also know that the mimicking that conceals its origins well and targets the proper audience can go undetected, as Ribeiro et al. 2018 have found that socially divisive ads of the IRA propaganda on Facebook may go undetected since they have their specific targeted audiences. Consequently, these audiences do not report illegal or inappropriate content in such propaganda messages.

Understanding the function of mimicking has important practical implications, as Carroll argues, imitation will become a staple in Russian information war toolshed. Moreover, other state and non-state actors may replicate the IRA activity and carry similar propaganda campaigns. Learning to identify mimicked messages can also allow for developing methods that would prevent foreign interference on social media.

Chapter 2. Research Design: Investigating the Effects and Effectiveness of Mimicking Research Questions

From the gaps found in the literature review on the mimicking used by the IRA propaganda in 2016 and its effects on social media, I ask the following research questions:

Research Question 1: What were the effects of mimicking of the IRA advertisement campaign on Facebook in 2016?

Research Question 2: If there were effects of mimicking, how those effects were achieved?

My theoretical research question is the following:

Theoretical Question 1: What makes mimicking in foreign political propaganda effective? How and Why?

To find answers to these questions I ask the following empirical questions about the IRA propaganda on Facebook in 2016. To investigate the effects of mimicking, I introduce its level: basic and advanced mimicking.

Empirical Question 1: Does advanced mimicking make propaganda more effective than basic mimicking, i.e., better attracts the attention of the targeted audience?

Empirical Question 2: Does advanced mimicking make propaganda more effective than basic mimicking, i.e., leads to more engagement with the targeted audience?

Since there is a gap in the literature concerning the effects of mimicking, there is no theoretical framework that would allow direct measurement of the effectiveness of mimicking. In order to overcome this limitation and find empirical evidence of the effects of mimicking, I have divided the mimicking of IRA propaganda into two categories of basic and advanced mimicking based on the complexity of rhetoric that the propaganda messages have employed. Consequently, I will need a theoretical framework that would allow me to operationalize the level of the IRA propaganda in this manner.

Mimicking in Propaganda: Theory and Definition

Theoretical Framework of Mimicking

I use the theoretical framework of Jacques Ellul, who argued that, "The propagandist builds his techniques on the basis of his knowledge of man, his tendencies, his desires, his needs, his psychic mechanisms, his conditioning" (Jacques Ellul 1973: 4).

As Jowett and O'Donnell (2018: 278) note, when exploring Ellul's theory, propaganda messages are more effective when they show consistency with the existing beliefs and predisposition of the targeted audience.

Definition of Mimicking

I base my definition of mimicking on the definition provided by Carroll. Carroll provides a definition for mimicking, as she explains, "imitation is an attempt to make one thing appear as another by copying its features" (Carroll 2017, 40).

I define mimicking in foreign social media propaganda as an attempt to make posts written by a propagandist appear as if they were written by the members of the targeted audience by copying the features of the targeted audience, such as the language, specific jargon, style of presentation, symbols, beliefs, and the rhetoric that is used by the targeted audience.

Dimensions of Mimicking

Mimicking in the context of the IRA propaganda has served two functions. The first function is to use mimicking as a way to conceal the origin of propaganda. The second function is to make the propaganda message more appealing to the targeted audience by discussing topics, which are important to the audience in a language that is commonly used by the targeted audience. This kind of mimicking entails using specific jargon and symbols to make the messages of their propaganda more appealing to the targeted audience.

Carroll (2017: 42 - 43) points out that imitation does not contradict already existing narratives but attempts to enhance already existing ones. While the context for Carroll's analysis is different, this does apply to Facebook propaganda as well. Carroll (2017: 69) also notes that new images that imitate the already existing ones introduce new meanings to the symbols they employ, which means that new values may replace the old values assigned to an image. Therefore, the potential danger of the foreign propaganda that uses mimicking might be its capacity to corrupt the meanings and symbols of the targeted audience.

We can also assume that propaganda can be persuasive even if it strays from consistently following the predisposition of the audience by introducing new values and interpretations of the events that might contradict the prior dispositions of the audience. The cognitive consistency model developed by American social psychologists Leon Festinger (1957), Thomas Newcomb (1953), Fritz Heider (1958), and Charles Osgood (1955) provides an insight into how foreign political ideas in a propaganda message could become persuasive even if it contradicts the predispositions of the audience. If the propagandists won the trust of the audience, the introduction of new ideas to the audience might create a cognitive dissonance when the audience member has to choose to accept the foreign idea or choose to disbelief the propagandist. The cognitive consistency model states that people strive to maintain consistency in their thoughts and beliefs and this is the mechanism that propagandists can exploit. It is important to keep in mind is that the effectiveness of the method is not guaranteed and hard to realize since for it to be effective, the propagandists would have to establish sympathy and authority towards themselves from the audience. Moreover, from the results of my descriptive content analysis, it is obvious that the IRA rarely attempted to stray from the prior disposition of their audience and rarely have introduced new narratives.

Effects of Mimicking

I use the theoretical framework of Klapper and Lowenthal (1951) who argue that to measure the effect of the propaganda message one should look to the reactions of the targeted audience. Since the propaganda in the case of the IRA was spread on social media, I identify the following potential reactions of the targeted audience to the content of propaganda messages: attention and engagement.

Attention shows whether a propaganda message does or does not attract the attention of the audience member when the propaganda message is presented, and it measures whether the audience is interested in the topic of the propaganda message.

Engagement shows whether the propaganda message not only picked the interest of the audience member, but also whether the audience member also wants to engage with the propagandist or other audience members in the discussion of the contents of the propaganda message. Both attention and engagement are not the measurements of *agreement* with the contents of the propaganda messages, as disapproval could also be the cause of propaganda messages catching the attention of its audience or generating engagement. Mimicking in this case serves as a mechanism to achieve these effects. *Agreement* is an effect that is hard to measure, especially when using content analysis with measurements that might be indicative of many differing reactions from the audience. Consequently, I will not develop hypotheses regarding agreement in this research.

Effectiveness of Mimicking

I identify two codependent dimensions of effective mimicking:

The first dimension of effective mimicking is the ability of mimicking to conceal the origin of the propaganda message from the targeted audience. In this case, since the IRA is

pretending to be members of their targeted audiences, they would not want their audiences to identify the IRA propaganda as a product of Russian propagandists.

The second dimension of effective mimicking is the ability of mimicked messages to attract attention and generate engagement. Such ability of propaganda that uses mimicking comes from the mimicking of the features of the targeted audience by the propagandists with precision. For instance, if the conservative audience is presented with liberal rhetoric, that would lead to backlash and would not be effective mimicking. In this case, it does not necessarily mean that the identity of the propagandists would be revealed, but using features of their targeted audience correctly to mimic them is a requirement for a mimicking that consistently attracts attention and generates engagement.

Terms and Concepts

Before I proceed, I need to clarify the key concepts and terms that will be used throughout this thesis:

Propaganda: Propaganda can be defined as persuasive communication aimed at foreign audiences to popularize a certain political idea spread through a certain communication channel (Martin, 1971). This does not mean that propaganda is inherently persuasive but the intent of such type of communication is to persuade its audience. While the same definition can be applied to advertising, political campaigning, and education, according to Martin, the factors that make propaganda different are the target of the propaganda, its purpose, and its source. In the case of the IRA propaganda on Facebook, a propaganda message was spread as a political advertisement, exploiting a feature of the communications channel.

Scholars also categorize propaganda across white and black propaganda. According to Bastos and Farkas (2019, 1), white propaganda is propaganda where the origin is identifiable,

and in black propaganda, it is hidden or false. Suffice to say that all Facebook IRA posts in the HPSCI dataset are black propaganda as the origin of the propaganda was concealed.

Some concepts have similar meanings to propaganda. These terms include fake news, junk news, disinformation, and misinformation. The difference between these terms and propaganda will be clarified below.

Facebook Group: Facebook group is a feature of Facebook that allows its users to create platforms within Facebook that would allow them to share their interests and opinions with other users (https://www.facebook.com/help/1629740080681586/).

Audience

From the literature review and initial content analysis of the IRA activity on Facebook, it was evident that the IRA has created Facebook groups that targeted different audiences in the US. The audiences that have been targeted by the IRA, that will be referred to throughout this research are presented in Table 1 below.

Table 1. Audiences targeted by the IRA

Audience	Description
African American	An audience that consists of African Americans.
Conservatives	An audience that consists of people who hold conservative ideology.
Liberals	An audience that consists of people who hold liberal ideology.
LGBT	An audience that consists of members who are LGBT.
Christians	An audience that consists of people who are Christians.
Muslims	An audience that consists of people who are Muslims.
NA	The audience is unknown or cannot be specified

Fake news: Persily (2017) and Badawy et al. (2018) notes that there is a debate in the literature about the definition of fake news since it can take on a variety of meanings – from downright lies to simple exaggerations with unknown intent. In the scope of this research, I

identify fake news as intentionally spread false news stories and information (Prier 2017:60; Allcott and Gentzkow 2017).

Disinformation: I use the definition of disinformation proposed by Fetzer (2004) who defines disinformation as intentionally spread false information. Propaganda can be disinformation but disinformation is not necessarily propaganda, as it may not follow the goal of persuading its audience. Misinformation is different from disinformation in that it does not have an intention to deceive its audience, but is false information nevertheless (Fetzer 2004).

Computations propaganda: Propaganda that is spread through scripts and automated bots accounts on social media (Woolley and Howard 2017).

Bots: Fake accounts on social media that function on written scripts that govern its behavior on social media. They can serve multiple functions, beginning from serving as a filler number to increase the numbers of subscribers on social media to managing an account on social media and behave as an actual person (Bjaly 2017).

Meme: Application of humor to an image or a video (Prier 2017).

Propaganda message: In the context of this research, *propaganda message* refers to *propaganda posts* and *advertisements*. These terms will be used interchangeably if not specified otherwise.

Facebook ad targeting system: Facebook has a system that allows advertisers on the platform to be able to target the audience that would be interested in their product. Setting parameters in the ad targeting system allows the advertisers to decrease the costs of ads since they are targeting the audience who are already interested in the product (Inc. 2017). Showing the ad to an audience who is not interested in the contents of the ad will increase the costs of ad publishing. This also applies to political advertisements on the platform. The parameters set in the Facebook ad targeting system include but are not limited to age, gender, race, ethnicity, location, general interests, and ideological alignment.

Cost per Impression (CPM): The costs of ads on Facebook are measured in costs per impression that is the cost of an ad per the number of times an ad has been seen by its targeted audience. CPM may also serve as an indicator of the precision of the parameters set by the advertisement, which means whether the audience the advertiser has chosen is interested in the similar content an advertiser is posting (Inc. 2017).

Impressions: The number of times an ad has been seen on Facebook. If one person has seen one ad multiple times, this also counts towards the number of impressions.

Clicks: Clicks indicate the number of people who have clicked on the ad. This may be an indication that the person who clicked on the ad wanted to learn more about the content of the ad or engage with it.

Click through Rate (CTR): The number of people who clicked on the ad when they have seen the ad. An important indicator of interest by the targeted audience to an ad.

Reactions: Reactions indicate the number of people who engaged with the feature of Facebook that allows users to post an emoji under a post, this might be an indication of many emotions from the audience, depending on the emoji that was used. Prior to 2016, Facebook used to employ the "Like" feature instead of "Reactions", which could have been used as a measurement of agreement. The number of reactions is a measurement that is indicative of many potential reactions, but there is no possibility to differentiate them, consequently, will not be used in this research as a measurement.

Comments: The number of posts people commented on in the comment section of the post. Indicates the number of people who wanted to express their opinion about an ad. Might be an indication of both approval and disapproval.

Shares: The number of posts people shared a post with other members of Facebook. Shows the potential reach and popularity of an ad.

Hypotheses

Based on the theoretical framework, I have developed the following hypotheses to answer my empirical questions:

Hypothesis 1: *Messages with advanced mimicking of rhetoric attract more attention than messages with basic mimicking of rhetoric, i.e., produce more click-through rates.*

Hypothesis 2: *Messages with advanced mimicking of rhetoric lead to higher engagement than messages with basic mimicking of rhetoric, i.e., produce more comments and shares.*

Research Methodology

My research method for the analysis of the IRA mimicking was content analysis. *Data:* For content analysis, I have used the dataset provided by the US House of Representatives Permanent Select Committee on Intelligence on Facebook ads spread by the Internet Research Agency for the entirety of 2016 (<u>https://intelligence.house.gov/social-</u> <u>media-content/social-media-advertisements.htm</u>).

Previously, Ribeiro et al. (2018) and Howard et al. (2019) used this dataset in their analysis of the IRA propaganda.

Content Analysis

To understand how the IRA have mimicked the Americans, what they mimicked, and how they approached the different audiences they have targeted, I conducted both thematic and statistical descriptive content analyses. This would also allow me to understand the results of hypothesis testing better as well. Content analysis is one of the most frequently used research methods for the study of propaganda (Klapper and Lowenthal, 1951), which became even more relevant with the rise of social media (Bradshaw and Howard, 2017; Golovchenko et al., 2020). This is a fitting method to study mimicking since the IRA has exclusively used social media when spreading mimicked propaganda messages and the content analysis would allow me to engage directly with the mimicked propaganda messages and conduct an analysis of mimicking.

Descriptive Content Analysis (Thematic)

Before testing the hypotheses, I need to understand the data, what audiences have been targeted, how they have been mimicked, and what arguments have been used to appeal to different audiences. This also might shed light on the strategies the IRA have used as well as the potential limitations they might have encountered.

Consequently, I have carried out thematic content analysis across the purpose of a post, targeted audience, presence of falsehood, presence of omission, level of mimicking, text density, type of sentiment, and themes and arguments the IRA has used. I coded the dataset manually across the aforementioned variables both deductive and inductively. Moreover, the content analysis for the presence of falsehood included fact-checking of all data entries for the 2016 year to identify whether the information the IRA used was disinformation or was based on the content circulating in American media. This also allowed me to establish what sources of information the IRA has used in their propaganda campaign and to what extent they have spread original fake news.

Descriptive Content Analysis (Statistical)

Similarly to thematic content analysis, I have also analyzed the data across the measurements present in the dataset, to identify statistical patterns and relationships between measurements and variables. This included the trend analysis and share to comments ratio analysis.

Trend Analysis

I conducted trend analysis for the entirety of the HPSCI dataset across measurements, to see whether IRA has been able to attract more attention over time to their propaganda messages. Moreover, I conducted separate trend analyses of the IRA Facebook groups where the sample size allowed such analysis, to see if there is an increase in the size of an audience and signs of adaptation from the IRA to the Facebook advertisement targeting system across all Facebook groups. This was done where such analysis was feasible, that is., there were enough entries per group for a trend to have relevance.

Share to Comments Ratio Analysis

Additionally, to trend analysis, I carried out a share to comments ratio analysis to understand whether the IRA audience on Facebook has shown any signs of discontent with the content that the IRA has put out. Since there is no theoretical framework for this, and this is based on the assumption about the behavior of people on Facebook, there are no hypotheses developed for this method, and the results of this analysis will be analyzed in the context of the results of other analyses.

Linear Regression Analysis

For my hypothesis testing, I use exclusively categorical linear regression analysis based on my coding of the dataset across the level of mimicked rhetoric, text density, and sentiment. Linear regression analysis allowed me to test whether the level of mimicked rhetoric does affect my dependent variables: attention and engagement rates on Facebook.

Operationalization of Independent Variables: Basic and Advanced Mimicking

To measure the effectiveness of mimicking, I coded the HPSCI dataset into two types of propaganda messages based on the complexity of rhetoric an advertisement has used: basic and advanced mimicking. I base these categories of propaganda on Aristotle's theory of persuasion, which has not been used directly in the study of propaganda, but has been used before to analyze rhetoric political campaigns in political communication (Demirdogen, 2010; Samuel-Azran 2015; Shabrina, 2016). First, the rhetoric used in the IRA propaganda is based on the prior dispositions, preferences, and interests of the targeted audience. If they were not able to mimic that correctly, then we would not expect a statistically significant correlation between the level of mimicking and measurements. Furthermore, if the language and the symbols the IRA used were not mimicked correctly, then the effectiveness of their rhetoric would be diminished as well and the statistically significant correlation would not be expected.

If the results show that advanced mimicking will be more impactful than basic mimicking across measurements, it would be an indicator of the following:

- 1. A direct indicator of the effectiveness of advanced mimicking of rhetoric to better attract attention and generate engagement.
- 2. An indirect indicator of the effectiveness of mimicking in a function of concealment.

Control variables

Sentiment: Scholars argue that propaganda that used negative imagery, violent and negative sentiments will be more successful than propaganda with positive sentiment (Bastos and Farkas, 2019; Ellul, 1965; Persily, 2017). Consequently, I used the sentiment that the IRA propaganda has used as a control variable.

Density: This is a contextual condition of effectiveness on social media, as scholars have found that shorter word counts and videos with shorter durations perform better on social media (Pancer and Poole, 2016).

Dependent Variables

Attention: Attention is the measurement that shows how many people who have seen the post in their social media feed showed interested in learning more about the post. This measures whether such content is interesting to the audience the propaganda targeted. Nevertheless, this is not a measurement of agreement, since social media users may click on a post because they disagree with it as well. This only measures the ability of a post to catch attention and generate interest in its content.

Engagement: Engagement and attention are codependent and linked with each other, since engagement also indirectly shows how many people have been interested in learning about the contents of a post, but does not capture all cases. This is expected since not all people who have clicked on a post to learn more will not necessarily engage with it, that is., express their opinion of it or show it to other users through the sharing feature of Facebook. Engagement is a more important variable since it also shows the level of exposure a post has gained, because of the share feature on Facebook. It is important to point out that popularity does not mean approval.

The operationalization of these variables will be discussed in detail in chapter 4.

Chapter 3. Descriptive Content Analysis of the IRA Propaganda Campaign on Facebook

Structure and Contents of the HPSCI Dataset

The current dataset that is available and was used for this research has been accessed through the US House of Representatives Permanent Committee on Intelligence website (https://intelligence.house.gov/social-media-content/social-media-advertisements.htm). According to the HPSCI, Facebook provided the data to them. The dataset that the HPSCI provided on the website is freely accessible and consists of recorded advertisements from the IRA for 2015, 2016, and 2017 years, which are provided in separate files. Out of the datasets for all years, the 2016 year has the most amount of entries at 1863, while the data for 2015 has 618 entries, and 2017 has 1036 entries. In this case, one entry contains one Facebook advertisement. While these numbers seem to be substantial, the content analysis shows that Facebook has captured the data inconsistently, as there are certain problems with this dataset, and one of them, is the possibility that there were more advertisements by the IRA than the dataset shows. I will address these problems below in detail. For all the analyses, I am using exclusively the data for 2016, the year of the US presidential elections.

The HPSCI data is presented in individually recorded data entries in PDF format. In most cases, the PDF file has two pages where the first page has all the information pertaining to the ad and the second page has the image of the ad that was posted with the number of reactions, comments, and shares, and the image that was uploaded by the IRA. These are presented below in Figure 1 and Figure 2 respectively.

I chose to categorize the ads in the HPSCI dataset into three types according to their inherent differences. The first type of data is considered **standard** posts, the majority of the dataset consists of these posts and contain the main propaganda messages that the IRA has

posted. An example of such posts is presented in Figure 2. Standard posts were used for all analyses with few exceptions, exceptions will be specified.

The second type of advertisements is the advertisement of the groups and serve as a means of *self-promotion*. These have two different formats, basic form, which seems to be the one that was widely used. The second form is a more complex form, where the already published standard posts were used as a part of the advertisement, both types are presented in Figure 3 and Figure 4 respectively. These do not contain any specific message apart from presenting the topics of the group or, in some cases, present titles of multiple previous ads.

The third type of post is the *post that call for rallies and serves the purpose of mobilizing people*. These are quite important as it demonstrates the intent of the IRA propagandists to mobilize Americans. An example is presented in Figure 5. These rally posts also have a counter of people who are going and who are interested in the rally, presented in the image of the ad.

Figure 1. An example of the first page of each data entry in the dataset

Ad ID 470

AuiD	478
Ad Text	Good morning, Americans! Enjoy the beauty of our national symbols, praise our Lord, honor American traditions and obey the Constitution written by our forefathers. Do that - and we will make our great nation live in a perfect society and make America great again.
Ad Landing Page	https://www.facebook.com/Being-Patriotic-1601685693432389/
Ad Targeting	Location - Living In: United States Age: 18 - 65+ Placements: News Feed on desktop computers or News Feed on mobile devices People Who Match: People who like Being Patriotic, Friends of connections: Friends of people who are connected to Being Patriotic
Ad Impressions	1,089
Ad Clicks	153
Ad Spend	100.00 RUB
Ad Creation Date	05/06/16 08:10:31 AM PDT
Ad End Date	05/07/16 08:10:31 AM PDT

Figure 2. An example of the second page of the data entry in the dataset



Like Page

Good morning, Americans! Enjoy the beauty of our national symbols, praise our Lord, honor American traditions and obey the Constitution written by our forefathers. Do that - and we will make our great nation live in a perfect society and make America great again.



Figure 3. An example of the self-promotion type of the Facebook post by the IRA



Figure 4. An example of the complex form of self-promotion of the Facebook group by

the IRA



Figure 5. An example of the post that calls for a rally



Don't Shoot shared their event. Sponsored · @

Last month, Edward M. Nero, the second to be tried in Freddie Gray's case among the six of



227 Reactions 32 Comments

Problems with the HPSCI Dataset

While the form of presentation of Facebook data in the HPSCI dataset is much more accessible and informative compared to the way Twitter has presented its data, the HPSCI dataset has a set of problems that limits its use for research purposes and might add bias to the results of the analysis. Moreover, scholars who have used this dataset do not seem to have noticed it or have not discussed these limitations (Ribeiro et al. 2018; Howard et al. 2019). It might be because it requires more qualitative analysis to notice these aspects of the dataset.

The limitations of the dataset were evident after the dataset for 2016 has been categorized into three categories. There were 1070 standard posts in the dataset for 2016, which has been reduced to 754 during the coding process. The reason for this is the presence of multiple copies of the same entry, which have exactly the same landing pages and images with the exact number of measurements that were captured on the image. Assumedly, the reason for this lies in the way Facebook handled its data recording as either files have been corrupted or/and the two sets of statistics for each entry have been captured at different time periods. In some cases, these copies have 0 for all measurements, which can be attributed to a flawed recording process used by Facebook. Sometimes, the data has discrepancies in the time of capture, which might differ from entry to entry. Nevertheless, when it was possible to compare the time of capture of the ad with the events it discussed and the time for rallies the IRA has set, these discrepancies seem to be rare and when present, the discrepancies seem to be insubstantial when it comes to the time of ad publishing.

Furthermore, some of the posts were either empty, corrupted, or are censored by either HPSCI or Facebook, which made its contents inaccessible. All such entries have been excluded from all content analyses. Moreover, for an unknown reason, not explained by the HPSCI on their website, the dataset also contained 80 Instagram entries, which have been also excluded from the analysis. Apart from technical drawbacks, one of the major limitations of the HPSCI dataset is the absence of comments sections. Contents of the comments are not present in any of the data entries, and usually, only the number of comments is present and even that is not consistent, as only 483 data entries out of 754 that have been analyzed have comments counter. The main cause of this problem is that the image that is attached on the second page, which also has the counter of reactions, comments, and shares recorded on it, is present only in the 568 entries out of 754 standard posts.

These limitations of the data make certain claims about the dataset and analysis of the data somewhat unreliable. From Table 2 below, we can see that only 14 out of 37 Facebook groups target African Americans, while 60.6 entries have targeted African Americans for standard posts. This might be an indication that data on a Facebook advertisement provided by HPSCI has not captured all the IRA advertisements.

Moreover, in few cases, the number of clicks, reactions, comments, and shares exceeded the number of impressions, which is technically not possible. These inconsistencies in the measurements were only in the small portion of the dataset, and they have been excluded when conducting linear regression analysis. Unfortunately, there is no way to know the extent of these inconsistencies since the cause of this problem is unknown as well as the effects of the cause of this problem on the measurements. Despite this, it is possible to assume that since this has been only in a small portion of the dataset, which has been excluded from hypothesis testing, the negative effects of these inconsistencies should be minimal on the outcome of the analyses. While such cases have been excluded from the measurements, in order to minimize the effects of these limitations in the hypothesis testing, I will only consider my hypothesis confirmed at the p>0.01 significance level.

The Results of Thematic Descriptive Content Analysis

This section discusses the results of thematic descriptive content analysis and discusses thematic patterns observed in the dataset. All the themes observed are presented in the tables below.

Objectives of the IRA Propaganda Campaign

The IRA seems to have pursued two main objectives: the polarization of the American society, which seems to be their main objective, and the influencing the outcome of the elections. The reason to consider that the IRA pursued polarization of society mostly comes from two reasons. The first reason is that the post that attempted to polarize the society takes around 60 percent of the dataset while the attempt to influence the elections only 32 percent. Among the topics such as immigration and conservative or liberal values, only a small portion of advertisements cover the elections and the image of the candidates, aiming to either boost the reputation and popularity of Donald Trump or to decrease the popularity of Hillary Clinton. They also pursued a specific aim to deter from voting groups that, expectedly, would vote for Clinton, such as African Americans and liberals. One important point to make about the 60 to 32 percent distribution of posts in favor of polarization over elections is that the IRA also has promoted ideas that the Donald Trump campaign has been promoting, such as the fight against illegal immigration, which is not included in the aforementioned measurement of the distribution. Despite this, still, the number of posts that attempted to polarize exceeds the number of posts that attempted to influence the outcome of the elections.

The second reason comes from their activity when the elections were over and Donald Trump was elected. The IRA became more active at the time when the elections began, but they kept their momentum when the elections ended in order to use the electoral win of Donald Trump as a source of further polarization and organize rallies that were against the president-elect. Moreover, the IRA continued its activity in 2017 as well. One of the most successful rallies the IRA has attempted in terms of popularity present in the dataset was a rally that gathered African Americans against Donald Trump. The popularity of this rally will be discussed in the paragraph dedicated to mobilization below in this chapter.

The following tables show all the results of the thematic content analysis.

Main Objective	Ramifications of the Main Objective
Polarization of Society	Alienation of African Americans from society.
	Conflicts between African Americans and the police.
	Greater polarization between liberals and conservatives.
	Developing public distrust in the government.
	Developing public distrust in the traditional media.
	Polarization between conservatives and Muslims.
	Polarization between LGBT and conservatives.
	Polarization between conservatives and immigrants.
Outcome of the Elections	Stronger support for Donald Trump among conservatives.
	Liberals voting for Bernie Sanders and Jill Stein instead of
	Hillary Clinton.
	Dissuade African Americans from voting for Hillary
	Clinton.
Mobilization	Mobilization of the members of the targeted audience.
	Incitement of clashes between mobilized social groups.

Table 2. Objectives of the IRA observed in the HPSCI dataset

Table 3. The number of the IRA Facebook groups observed in the entirety of the

dataset

N⁰	Group	Audience	Number of Likes	Ad Creation Date
1	Blacktivist	African Americans	388,476	10.05.2016
2	United Muslims of	Muslims	328,010	02.12.2016
Z	America			
3	Heart of Texas	Conservatives	253,862	10.11.2016
4	Don't Shoot	African Americans*	250,351	05.05.2016
5	Being Patriotic	Conservatives	219,810	09.15.2016

6	Army of Jesus	Christians	217,226	10.17.2016
7	Brown Power	Unknown	203,148	12.09.2016
8	Stop A.I.	Conservatives	193,813	05.05.2016
9	LGBT United	LGBT	141,523	08.04.2016
10	South United	Conservatives	137,138	10.14.2016
11	Secured Borders	Conservatives	135,301	02.09.2016
12	Back the Badge	Conservatives	111,113	10.19.2016
13	BM	African Americans	102,018	08.30.2016
14	Defend the 2nd	Conservatives	96,954	10.21.2016
15	Woke Blacks	African Americans	82,612	12.01.2016
16	Williams&Kalvin	African Americans	48,419	04.13.2016
17	Veterans Come First	Conservatives	48,378	10.14.2016
18	Pan-African Roots MOVE	African Americans	30,508	11.11.2016
19	Memopolis	African American*	13,266	06.17.2016
20	Born Liberal	Liberals	10,602	10.11.2016
21	Black4Black	African Americans	10,361	12.11.2016
22	Black Excellence	African Americans	9,774	12.27.2016
23	Nefertiti's Community	African Americans	8,236	12.09.2016
24	StandForFreedom	Conservatives	8,148	10.14.2016
25	Black Guns Matter	African Americans	4,185	12.26.2016
26	Angry Eagle	Conservatives	4,157	10.14.2016
27	Watch the Police	African Americans*	4,131	10.21.2016
28	Black Edification	African Americans	1,225	06.28.2016
29	Black Baptist Church	African Americans	578	12.29.2016
30	Clinton FRAUDation	Conservatives*	517	10.25.2016
31	Hell and Back	African Americans	230	12.29.2016
32	Justice for Ezell Ford and Donnell Thompson	African Americans*	Unknown	Unknown
33	Trumpsters United	Conservatives	Unknown	Unknown
34	Make America Great Again Donald J Trump for President	Conservatives	Unknown	Unknown
35	Bernie Sanders for President	Liberals	Unknown	Unknown
36	Donald Trump America	Conservatives	Unknown	Unknown
37	Yoyoyoyoyoy	African Americans*	Unknown	Unknown
* 41-	e audience was establish		4 - f (1	and alf and in the

 \ast the audience was established through the content of the message, not specified in the dataset itself

Note: The number of likes is taken from the self-promotion ads of these groups, which present the number of likes while it is absent in other types of data entries, such as standard posts.

An example of such data entries is presented in Figure 1

The following tables show the results of the thematic content analysis across all the coded variables with exception of codes for regression analysis. I coded all entries manually, both inductively and deductively.

Table 4. The main targeted audiences in the HPSCI dataset and its percentage out of all
coded data entries

Audience	Code Description	Number of entries	Percentage
African American	Posts that target African	459	60.8%
	Americans		
Conservatives	Posts that target conservatives	75	10%
Liberals	Posts that target liberals	15	2%
LGBT	Posts that target LGBT	9	1.2 %
	communities		
Christians	Posts that target Christians	2	0.3%
Muslims	Posts that target Muslims	15	2%
NA	The audience is unknown or	180	23.9%
	cannot be specified		
Note: Percentage = p	ercentage of the audience that was ta	argeted out of the entirety	of the dataset.

For more information on the description of the coded variables, please see Appendix 1.

Table 5. Objectives observed for all entries in the HPSCI dataset for standard posts
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presented in proportion to the entirety of the dataset

Purpose	Description of the coded variable	Number of Posts	Percentage
		of Posts	
Division	Purpose of the message is polarization, that is.,	465	62%
	pitting conservatives and liberals against each		
	other or against the government and other		
	groups and institutions.		
Election	Purpose of the message is to affect the outcome	239	32%
	of elections.		

Unknown	Purpose of the message is unknown. Possibly,	50	6.6 %
	diversion of attention.		
For more information on the description of the coded variables, please see Appendix 1.			

Table 6. The table of the coded variables related to elections

Description of the coded variable	Keyword	Number
Posts that support Hillary Clinton	proClinton	0
Posts that criticize Hillary Clinton	aClinton (against)	45
Posts that support Donald Trump	proTrump	15
Posts that criticize Donald Trump	aTrump (against)	19
Posts that support Bernie Sanders	proSanders	8
Posts that support Jill Stein	proStein	1
Posts that criticize Barack Obama	aObama (against)	13

Note: Number = number of times each coded variable has been encountered in the data. For more information on the description of the coded variables, please see Appendix 1. Variables are non-exclusive of each other.

Table 7. The table of coded variables related to polarization

Description of the coded variable	Keyword	Number
Posts targeting African-Americans that promote	Prorace	148
businesses and cover congratulations, everyday		
activities, and family-related topics.		
Posts that cover the concept or cases of racism in	racism	243
the US, excluding police racism and brutality.		
Posts that cover police injustice towards African-	policeracism	132
Americans.		
Post that cover systematic injustice, including the	systeminjustice	103
ones stemming from the government, police, and		
courts.		
Posts that cover cases of police brutality.	policebrutality	162
Posts that defend ownership of firearms and the	proguns	14
second amendment.		
Posts that appeal to the importance of veterans and	proveterans	8
their livelihood.		
Posts that defend police from public criticism and	propolice	10
BLM (Black Lives Matter).		
Posts that criticize illegal immigration.	illegalimmigration	24
Posts that appeal to the patriotic sense.	patriotism	6

Posts that write about the protection of LGBT	LGBT	9
communities and defense of their rights.		,
		101
Posts that contain memes and jokes.	humor	131
Posts that refer to historical figures, writers,	celebrity	36
freedom fighters, celebrities, athletes, and actors.		
Posts that call for protests, meetings, rallies, and	mobilization	22
gatherings. (Excluding posts that officially promote		
rallies).		
Posts that introduce false (not encountered in the	twisted	21
US media coverage) information and interpretation		
of facts.		
Posts that cover cases of murder, mass shootings,	crime	31
rape, and theft.		
Posts that repeat previous posts (not copies).	repeat	3
Posts that write about Muslims.	muslim	14
Posts that write about Texas or refer to people from	texas	11
Texas.		
Posts that argue for the secession of Texas from the	secession	3
US.		
Note: Number – number of times each coded variable has	been encountered in	the data

Note: Number = number of times each coded variable has been encountered in the data. For more information on the description of the coded variables, please see Appendix 1. Variables are non-exclusive of each other.

IRA Groups on Facebook and their patterns

The IRA has used groups on Facebook to spread all of their advertisements. The Facebook groups most often encountered in the HPSCI dataset are William&Kalvin (audience: African American), Don'tShoot (audience: mostly African American), Blacktivist (audience: African American), Memopolis (audience: unknown, possibly African American), Black Matters (audience: African American), Woke Blacks (audience: African American), and Being Patriotic (audience: conservatives). There are many other groups apart from these, but they are encountered much less frequently on Facebook than the seven groups outlined above. All groups can be seen in Table 3 above.

Most of these seven groups, especially groups that targeted African Americans,

operated in a very similar fashion, yet all of them had some differences among them.

Williams&Kalvin was the only group that presented custom-made videos featuring two black males, hence the name of the group. Nevertheless, all of the groups, which targeted African

Americans, posted similar content. These included posts containing news about murder, rape, shootings of black people by the police, and cases of police misconduct against black people. These messages included calls for standing up against systematic injustice and racism in the US. Criticism of the government policies was also part of these posts.

On the other hand, the IRA showed conservatives messages that have criticized the Black Lives Matter (BLM) community. They have created Facebook communities, such as the Back the Badge group that targeted conservatives with the content that seemingly supported the police, claiming that the BLM movement is unjust and that people should defend the police from this movement. Moreover, the IRA have organized rallies for the victims of police brutality and rallies among conservatives to protect the police from the member of BLM.

The IRA activity in terms of elections has been multifaceted. The IRA has promoted Bernie Sanders and Jill Stein for the presidency among liberals, in some cases, pitting Bernie Sanders against Hillary Clinton. These posts were based on the actions of the presidential candidates against each other as observed during content analysis, for instance, since Bernie Sanders has criticized Hillary Clinton in one of his speeches, the IRA has used that speech as a basis for their message. They have also promoted Bernie Sanders among African Americans. After the electoral win of Trump, Black Matters and Blacktivist were organizing rallies against Donald Trump. On the other hand, Woke Blacks and Williams&Kalvin were against rallying against Trump as they argued that black people could achieve nothing in an unjust society. The purpose of these ads seems to be dividing African Americans along the political spectrum as well, not only alienating them from the American society or putting them against the police.

Interestingly, some groups supported Donald Trump indirectly, by promoting policies that would be in line with the policies that he has claimed to implement. For example, groups

that promoted anti-immigrant narratives such as Stop A.I (Stop Alien Invasion) have posts that support the policies of Donald Trump but do not necessarily mention his name or the elections. There is ample evidence that the polarization also intended to pit the American society against the government, which has not been coded during the content analysis; as such cases have been part of the "systematic injustice" variable, but in hindsight, should have had a separate variable.

The IRA also attempted to disparage the well-recognized media outlets, just like Trump did. The IRA had even promoted its own merchandise, mimicking the US fashion political culture (See in Figure 6 below). While the purchase of merchandise could be the sign of effectiveness as the group takes on the symbolic language of the propagandist (Jowett and O'Donnell, 2005), there is no indication that the IRA merchandise was sold successfully or was sold at all.

One of the interesting cases is how the group Memopolis became popular over time. This group has published generic memes for most of its existence. At the beginning of its activity in April of 2016, the group did not have a considerably large audience, but as time went on, they began to accumulate an audience. The group showed a steady increase in the CTR, but the average number of impressions the group had increased several times by July of 2016. This increase in the audience coincides with the time when the group has also attempted to posts negative opinions about the presidential candidates. Trends across CTR and CPM for Memopolis are presented in Appendix 3 in graphs 10 and 11 respectively.

Figure 6. The IRA merchandise



181 Reactions 3 Comments 31 Shares

How has the IRA used American News Outlets?

As part of the content analysis, I have coded whether information that was used by the IRA has been consistent with the US news or they have provided disinformation that they made up. The literature has not provided a systematic analysis on the sources of information that the IRA had used based on the HPSCI dataset (Ribeiro et al. 2017 and Howard et al. 2019).

Since this has not been the focus of the research, the code for this aspect of data has been inductive, and I had to go back and recode a portion of the dataset. As such, I have not recorded nor searched for the exact source (sometimes, the exact source has been found), since that would at best be imprecise and would require more time. The content analysis, in this case, is only able to confirm whether the IRA ads used news and information that was present at the time of the ad publishing, that is, whether they have used already existing information or made news and events up themselves. The results of the analysis have shed light on a few methods that the IRA has employed. Interestingly, the IRA ads used or referred to the news that circulated in American media for the most part. The outcome suggests the following, 2 percent of standard posts (15 out of 754) consisted of disinformation that included either made-up facts and events or the addition of false information to the news. For the 458 out of 754 entries, the fact checking did not apply, that is, either the posts have not contained information that would be fit to check or the nature of the facts presented was not possible to ascertain. 279 entries out of 754 have been fact-checked and have been recognized as being correct, that is, being consistent with the information that was present in American media. While blatant disinformation might not be present, consistent misinterpretation and exaggeration of the events and the meaning behind them have been observed throughout the dataset. When such cases were encountered, these have been coded as "twisted", and the dataset contained 2.7 percent of all standard posts (21 entries out of 754) that have been coded as twisted, which points to the distortion of the interpretation of the news and events the IRA had covered. This means that these entries have not spread disinformation that is, made events and facts up, but have manipulated and interpreted them differently than it has been interpreted in the source material/materials.

The fact-checking aspect of content analysis has shown that the IRA had used news, and events that have been derived from American media, from the Internet, and popular news outlets. Moreover, I also used google trends to see whether they have picked up on trends or not, but I abandoned google trends since it was hard to be certain whether IRA has joined a trend or themselves created trends. This comes from the limitation of the data where it is hard to trust whether the ad creation date in the HPSCI dataset is exact or not. Since the majority of the news that they covered was about the cases of police brutality and misconduct, the majority of information pertaining to these has been correct, including the place, the victims, and the description of the crimes.

While in the majority of cases it is not possible to ascertain the exact source that has been used, sometimes they have copied the exact titles of the news coverage of an event from a news outlet, while rarely referring to the source material. As I mentioned before, the record of the news sources that they used was not part of this thesis research, and as such, this has not been recorded during the content analysis. This makes it impossible to provide the exact number of cases when the titles have been copied, but it has been encountered several times during the content analysis. Nonetheless, for the most part, the titles have been changed and presented differently. It is important to point out that it would be wrong for me to conjecture the extent of this tactic, as I may have missed the news articles that they have used for their campaign or they might have been lost on the web. Nevertheless, they used websites affiliated with the Black Lives Matter movement and other news outlets and websites dedicated to African Americans and have shared the contents of their posts. For instance, www.atlantablackstar.com has come up several times when I was searching for sources. Moreover, the IRA has not used only news outlets but also featured events and incidents that have not been covered by the mainstream media but posted by individuals on YouTube. There have been three such cases when the IRA has shared, some of them still present on YouTube, about cases of police misconduct or brutality recorded by Americans and posted on YouTube. This might also suggest that they may have used other social media in search of

their news and events to cover, which they used as templates or copied from them. In some instances, there was a thin line between what I have conceptualized as *mimicking* and downright *copying* that the IRA has employed. In Figure 8 and Figure 9 below, there are two cases of petitions against Hillary Clinton shared by multiple IRA groups, which have been launched by Americans, and the IRA has reposted them. This petition is still present on the original Facebook page from which the IRA has reposted if one scrolls down to the posts in 2016 from the link shown on the image of the petition.

This is not the only case when they just reposted messages that were in line with the narrative they wanted to develop. They have reposted comics and posters about police brutality on their groups that targeted African Americans. While this has not been coded, instances of direct copies or reposts with few changes in the title or some additional comments in the main text have been encountered quite often.

One of the implications of these findings is that the activity of IRA in 2016 is often dubbed as a 2016 Russian disinformation campaign. While it is not certain to what extent they have used similar tactics in their Twitter campaign as well as the organic content (content that the IRA posted on Facebook, but did not advertise) on Facebook, in the case of the HPSCI Facebook advertisements dataset, disinformation was rare. The other implication of this approach that the IRA has taken, that is, heavy reliance on already existing sources of information, citation of celebrities, and coverage of American news and events for their propaganda campaign will be discussed in chapter 5.

Figure 7. American-launched petition reposted by the IRA



Bernie Sanders for President Sponsored · @

We call for disqualification and removal of Hillary Clinton from the presidential ballot as dynastic succession of the Clinton family in American politics breaches the core democratic principles laid out by our Founding Fathers. Sign the petition!



Presidential Ballot | We the People: Your Voice in Our...

PETITIONS.WHITEHOUSE.GOV

217 Reactions 194 Comments 49 Shares

Like Page

Figure 8. American-launched petition reposted by the IRA



Sponsored · 🚱

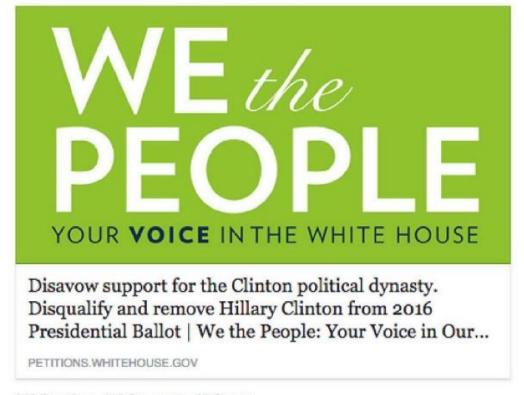
Make America Great Again Donald J Trump for President

Like Page

Thousands of Americans have already signed a petition to ban Clinton dynasty from owning the White House. Thousands of people demand to disavow support for Hillary Clinton and to disqualify her from participating in 2016 presidential race.

Dynastic succession of the Clinton family in American politics breaches the core democratic principles laid out by our Founding Fathers.

Corrupt corporations and Clinton foundation have already helped Hillary evade imprisonment for her wron... See More



242 Reactions 115 Comments 37 Shares

Mobilization through Rallying

The IRA has posted on nearly all of their groups, call for rallies with indicated places

and specific dates for people to gather and protest on certain policies and social issues. These

posts in the dataset have indications of how many people are going or interested,

nevertheless, the indications might be inflated through trolls and bot accounts.

There is recorded evidence that these rallies have taken place and people have gathered to the appointed place. Howard et al. (2019) point out how in May 2016, the IRA has organized two protests on the same street in Texas of audiences of Facebook groups "Heart of Texas" and "United Muslims of America", which were previously shown posts that criticized the audience of the other group. This is not the only case when people have been gathered by the IRA, as the LGBT community has also rallied against a Baptist church that was considered homophobic, as was observed during the coding of sources during the content analysis. Table 6 below shows the most prominent rallies, organized by the IRA. It appears that the IRA managed to mimic the popular in the US calls for rallies and local events and used this tendency present in the American society in hopes of provoking violent encounters and exacerbate polarization among participants.

In Table 8 below on the fourth line, the most successful rally in terms of popularity can be seen. This was a rally organized among African Americans against Trump after his electoral win, which is the most successful rally in the dataset in terms of the number of people who are interested and going for a particular rally.

Title of the Rally	Facebook	Date of the	People Who	People Who
	Group	Rally	Are Interested	Are Going
April 21 Student Day of	Don't Shoot	04.20.2016	187	106
Action to				
#StopPoliceTerror				
Florida Goes Trump	Being Patriotic	08.20.2016	1,617	339
Black Panther Party 50th	Blacktivist	10.15.2016	2,748	701
Anniversary				
Trump is NOT my	BM (Black	11.12.2016	33,151	16,762
President	Matters)			
Get Ready to Secede!	Heart of Texas	11.05.2016	517	97
Justice For Ezell Ford,	Justice For	09.04.2016	117	32
Jesse Romero and	Ezell Ford and			
Donnell Thompson	Donnell			
	Thompson			
Orlando Memorial Rally	LGBT United	07.25.2016	716	200

Table 8. The most popular rally for each available group in the HPSCI dataset

Unknown	Trumpsters	Unknown	184	41
	United	(Potentially in		
		September)		
Safe Space for Muslim	United Muslims	09.03.2016	195	59
Neighborhood	of America			
April 21 Student Day of	Don't Shoot	04.20.2016	187	106
Action to				
#StopPoliceTerror				

Association Method

One of the interesting methods of the IRA observed in the dataset when it comes to the specific methods that the IRA uses is the wordplay on someone's name, which is reinforced by repetition, which attempts to create some sort of negative association about a certain phenomenon or person. This method is often used by the IRA (Radio Svoboda, 2021), mainly, to create negative associations with a person. Similarly, there are multiple instances when this association method was encountered in the dataset. For instance, the name-calling of Hillary Clinton was the most frequent one, the most popular one being "Killary". This tactic is also part of the IRA mimicking, as it mimics the ability of native speakers of English to produce emotionally charged wordplay.

Lapsus Linguae

The common conjecture about the source of the IRA propaganda is that the propaganda campaign was conducted and carried out by Russians themselves, that is, they have not used Americans or people whose native language is English. This may not be entirely correct, as Williams&Kalvin seem to have posted custom-made videos with two black males.

Custom-made videos aside, it may be safe to assume that the majority of posts on Facebook have been written by Russians, which is also supported by the investigation into the activities of the IRA (Pomerantsev 2019; Radio Svoboda 2021). Content analysis has shown that quite often, the IRA posts contained unnatural sentences and word structures. This has been coded in the content analysis; unfortunately, the results are not reliable or applicable for analysis. The first problem of this code in the content analysis is that English is not my native language and I cannot be a reliable coder for finding grammar or/and lexical mistakes as well as identifying if the IRA has used unnatural language. Consequently, this aspect of content analysis is best to be coded by an American, who would be able to do this more reliably. An even better strategy would be the employment of machine learning to identify linguistic patterns in the dataset. For instance, Im et al. (2019) have explored the IRA activity on Twitter, and they found that it was possible to differentiate the non-native and native speakers through machine learning by identifying linguistic patterns.

Despite these limitations, I have coded this aspect in the content analysis, by identifying an entry as an omission if it contained more than two grammar or/and lexical mistakes. In hindsight, a better alternative would be coding an entry as an omission if there was one mistake. Definition of mistake excluded typos, nevertheless, identifying a mistake is tricky, since it might be a typo or a mistake and there is no reliable way to tell these apart. Eventually, only 12 out of 754 entries have been coded as having this kind of grammar or lexical omission. Because the requirement for this code was two and more mistakes, when there was one unnatural word usage or sentence, it was not captured. The posts sometimes had unnatural sentences and the use of words that sometimes was incoherent. For instance, the word "useless" was used incorrectly and unnaturally several times in several separate entries. Sometimes, during the source identification, it has been challenging to find the source material because they have misspelled the names of people the news were about: for instance, names of African Americans such as "Lashintae" was spelled as "Lushantae" and the name "Ruffin" was spelled as "Ruffins". It might also be important to point out the difference in the quality of posts in the dataset. The content analysis did not take into account the quality of posts, but there is a considerable difference in them, which is usually independent of the level of mimicking and text density. The quality differs quite considerably, as some posts might be

littered with grammar mistakes, incorrect use of words, and typos, and sometimes, even do not make much sense, as in some other cases, the use of jargon and argumentation is impressive.

In one of the entries, the word "standard" was misspelled as "standart". Interestingly, this mistake might stem from the writer being a Russian speaker, since in Russian, "standard" ends with a letter "t". Similar mistakes have been observed throughout the dataset, but not as often as it was anticipated, and due to my preconceived bias that such mistakes would be encountered often, the code was employed for two mistakes and more. Moreover, because I am not a native speaker myself, I also might have missed certain cases, so the reliability of this code is low.

Nevertheless, it might be useful in a qualitative sense to see that there is such an aspect to the dataset. Further research of this might allow the creation of tools in the future that would allow identifying foreign propaganda on social media.

The Results of Statistical Descriptive Content Analysis

The following section discusses the statistical patterns observed in the dataset.

Trend Analysis

I have carried out a trend analysis of all posts from the beginning of 2016 to the end of 2016, to see whether the click-through rates (CTR) of the IRA ads have increased, which would indicate an increase or fall in popularity of the IRA advertisements. Moreover, I also conducted trend analysis for cost per impression (CPM), which indicates the level of precision of parameters of the targeted audience set in the Facebook ad targeting system. The lower the CPM the better, which indicates that the ad has been successful on the ad market, that is, there is a higher demand for this type of advertisement among the targeted audience, which is achieved by setting the correct parameters for the audience in the Facebook ad

targeting system. The results of trend analysis for the most often encountered Facebook groups in the dataset are shown in Table 9 below.

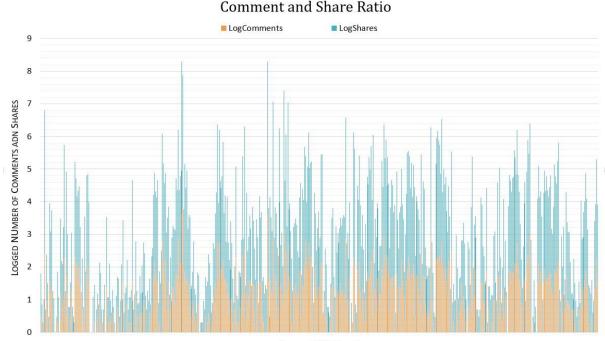
Facebook Groups	CTR Trend	CPM Trend
Being Patriotic	Downward Trend	Downward Trend
Blacktivist	Downward Trend	Downward Trend
BM	Upward Trend	Downward Trend
Don't Shoot	Downward Trend	Trend Absent
Williams&Kalvin	Upward Trend	Downward Trend
Memopolis	Upward Trend	Downward Trend
WokeBlacks	Upward Trend	Downward Trend

Table 9. Trend analysis across the most frequently encountered groups for 2016

The results of trend analysis are inconclusive when it comes to click-through rate (CTR), since the CTR has increased for some groups, but has decreased for others. On the other hand, cost per impression (CTR) – have decreased for all groups, which might be an indication that the IRA through experimentation with the parameters of the Facebook ad targeting system, were able to decrease the costs of their ads over time by targeting the audiences that would prefer content that was posted by the IRA more.

Comments and Shares Ratio Analysis

This is an imperfect measurement of potential discontent with the posts. While this is not a constant and people do share what they dislike (Independent 2021), it can be assumed that people on social media share more what they like. Comments are more neutral, as they can be an indication of both positive and negative reception of a post. However, we can assume that if the number of comments is consistently higher than the number of shares in large sample size, the audience may have disliked the posts and they have shown their dissatisfaction in the comments section. No such posts have been found in the data. The audience consistently shared more than they commented, with substantial differences in numbers in most cases. For instance, the average mean number of comments is 77 while the average mean number of shares is 770,9. This might indicate that the IRA audience has not been dissatisfied with the Facebook posts for the most part. This pattern can be observed in more detail in graph 1 below, which shows the difference between the logged number of shares and comments at base 10. The measurements have been logged so they would fit in the graph.



Graph 1. Comments and share ratio pattern across 569 data entries

ACROSS 569 DATA ENTRIES

High IRA CTR for an average Facebook advertisement

Ribeiro et al. (2018) point out that the average CTR in Facebook ads of the IRA campaign in the HPSCI dataset has been 10 times higher than of an average Facebook advertisement. The scholars found that the average CTR for HPSCI dataset for 2015-2017 was 10.8 percent, while the average CTR across all industries on Facebook was equal to 0.9 percent in 2017.

My analysis confirms this, as the average CTR for 697 data entries in 2016 was 13.2 percent. The highest CTR among all industries in 2019, according to WordStream (2019), was for Pets & Animals with a CTR of 1.68%, while CTR for People & Society was only 0.85%. It is important to point out, that this does not necessarily mean that the IRA ads have been wildly successful, as there are several potential causes for this. First, it might have been due to the issues with the dataset itself that may have skewed the data in such a manner. Second, the content that the IRA has shown has been substantially different from the average advertisement that is shown on Facebook, which might have garnered more attention. Nevertheless, this might be an indication that the IRA has targeted their audiences effectively and has produced posts that piqued the interest of their audience.

Chapter 4. Statistical Analysis of Effects of Advanced Mimicking

This chapter presents the results of the linear regression analysis of the level of mimicking with the attention and engagement rates. To measure the effectiveness of mimicking, I coded the HPSCI dataset into two types of propaganda messages based on the complexity of rhetoric the IRA used in an advertisement: basic and advanced mimicking.

I use Aristotle's theory of persuasion as my theoretical framework for the operationalization of the mimicking in the IRA advertisements into basic and advanced.

To remind my hypotheses about the effects of advanced mimicking:

Hypothesis 1: *Messages with advanced mimicking of rhetoric garner more attention than messages with basic mimicking of rhetoric, i.e., produce more click-through rates.*

Hypothesis 2: Messages with advanced mimicking of rhetoric lead to higher engagement than messages with basic mimicking of rhetoric, i.e., produce more comments and shares.

Operationalization of Variables

Operationalization of Independent Variables: Basic and Advanced Mimicking

I coded the data by identifying the presence of rhetoric in the propaganda messages based on Aristotle's theory of persuasion across *pathos, ethos, logos,* and *kairos.* According to my operationalization, basic mimicking has one or no modes of persuasion present in the message, while advanced mimicking would have two or more modes of persuasion present in the propaganda message. The modes of persuasion in one data entry are exclusive of each other.

When categorized, if the advanced mimicking will be more impactful than basic mimicking across measurements, it would be an indicator of the following:

1. Direct indicator of effectiveness of advanced mimicking of rhetoric to better attract attention and generate engagement.

2. Indirect indicator of effectiveness of mimicking in a function of concealment.

Criteria for the Coding of Rhetoric

Ethos (Mimicking of credibility) – posts that reference famous historical figures and modern celebrities to support their message. In advanced mimicking, for a post to be considered as such, a post that is considered to have ethos has the necessary criteria to contain a clear argument that is based on ethos. Important point is that the events (accidents) that happened to celebrities were not coded as ethos if, for instance, the celebrity has not voiced their opinions on a particular topic or has given an example to follow.

Kairos (Mimicking of trends) - posts that follow the media news and capitulate on the events that happened at the time of the posting of the ad. These include both the immediate news and events that happened in recent years that are relevant to the particular context of the Facebook group. Also includes engagement with the audience: provision of content that was requested by the members of the audience, or claiming to do so. Messages that had capitulated on the outcome of the 2016 presidential elections also are considered kairos.

Pathos (Mimicking of emotions) – posts that use emotions as calls for justice, fight with injustice, and call for fellowship. Examples include calls for the protection of the rights of a social group and defense of the interests of the US and a call for patriotism. The use of petitions, selling of merchandise, calls for rallies, and surveys are considered pathos since they capitalize on emotions and the habits of Americans to participate in such social activities. Two criteria should also be present for a message to be considered containing pathos if a message is advanced. The first criterion is the necessity for the message to contain a clause that has a clear argument that relies on pathos. Second is the presence of language that uses pathos, just retelling an event where the police have shot a person or some crime has been carried out is not considered pathos, if the language does not mention how unjust and

cruel the crime was. While retelling a crime does inherently contain pathos, it was not sufficient to code as pathos in this research.

Logos (Mimicking of rationality) - Using logic and reason to make a point and make a message persuasive. This includes the provision of evidence to back up the claim such as reference to scientific journals or other well-established sources of information, not excluding cases when the facts are distorted. Reference to numbers to establish an argument, statistics, and referencing law and rules were also coded as logos.

Control Variables

I also identified the following control variables from the literature review. The first control variable:

Sentiment: Scholars argue that propaganda that used negative sentiments will be more successful than propaganda with positive sentiment (Bastos and Farkas, 2019; Ellul, 1965; Persily, 2017). Consequently, I used the sentiment that the IRA propaganda has used as a control variable. I delineated the sentiment into positive and negative sentiment and coded the dataset using the following criteria:

Positive – Entries were coded as positive if posts contained good news, a joke, or a meme, and had a generally positive mood. They do not contain criticism and do not mention cases of racism and police brutality or the violation of human rights of any particular group. There are entries that may not necessarily fit into either category, where it can be considered as a neutral post. In those instances, if the entry is talking about a social problem, however minor, it is coded as a negative. Entries, with memes, were mostly coded as positive, with an exception of entries where the joke involved suicide or death. Overall, in some cases, the choices were guided by the context of a message, and in the cases where the jokes involved dark humor, they were coded as positive, except the ones noted above. A considerable portion of the data with this code comes from the "Memopolis" group, which has mostly

posted memes. Most of the posts of Memopolis have been coded as positive. When the Memopolis was excluded from the dataset, the positive code was assigned to 147 entries out of 628.

Negative – Entries were coded as negative if they contained negative news or covered negative events, such as cases of police brutality or cases of system injustice, racism, social issues. Moreover, criticisms towards an individual, a social practice or policy, and violation of human rights were also coded as negative. Meme posts that joked about suicide and death were coded as negative.

The second control variable:

Text Density: This is a contextual condition of effectiveness on social media, as scholars have found that shorter word counts and videos with shorter durations perform better on social media (Pancer and Poole, 2016).

Low Density – Posts are coded as low density when the word count for that particular message did not exceed 100 words as well as if the message did not contain custom-made videos. The 100-word count criterion was based on the average length of the text of the dataset, so it would be possible to delineate between texts that are longer and shorter based on the average parameters of the dataset.

High Density – Posts are considered high density when the messages contain complex text 100+ words and custom-made videos. It should be noted that the coding of the density is not an exact measurement because of the inherent problems with the dataset, as some of the entries seem to not have captured the contents of the messages fully. Moreover, the inclusion of the entries with custom-made videos into this code might require further analysis, as it might be more plausible to develop separate code for custom-made videos.

Operationalization of Dependent Variables:

Attention: I measure attention using the click-through rate measurement derived from the dataset by dividing the number of impressions by the number of clicks. *Click-through Rate*, also known as (CTR), shows how many clicks an advertisement has received per impression. It is also the best measurement of attention that could be derived from the measurements present in the dataset. This is a popular measurement used in social media and on Facebook, and as Ribeiro et al. (2018) note; CTR is the most actively used measurement of the effectiveness of targeting on Facebook.

Engagement: I measure engagement using the number of comments and shares. *Comments* show how many people have interacted with the comment section of an advertisement. This shows whether the propagandists were able to make their audience want to express their opinion on the matter of the propaganda message, irrespective, if the audience disliked or liked the contents of the audience. *Shares* show how many people have shared an advertisement with other users of Facebook. This demonstrates whether the propaganda message was able to make their audience share it with other people, gaining more audience in this manner, as the number of shares of a post is important since it shows the potential exposure of people to the ads (Howard et al. 2019).

Distribution of the Variables in the Dataset

Before I will discuss the results of linear regression analysis, the following tables show the distribution of the variables in the regression analysis in the HPSCI dataset.

 Table 10. The number of times each mode and combination of modes of persuasion

 were encountered in the dataset

Modes	Number	Mode Combinations	Number
Ethos	8	Ethos&Logos	3

Logos	31	Ethos&Pathos	13
Kairos	161	Ethos&Kairos	8
Pathos	334	Pathos\$Logos	50
		Pathos&Kairos	121
		Kairos&Logos	27

 Table 11. The number of times the coded variables for regression analysis have been

 encountered in the dataset

Code	Basic	Advanced	Positive	Negative	Low	High	Out of
Level	543	211					754
Sentiment			258/147	496			754
Density					650	104	754

Were the IRA aware of the level of mimicking, density, and sentiment?

I have divided the data in half based on the number of entries, which also divided the data equally in terms of its duration in 2016. In the second half of 2016, the IRA has used more advanced mimicking and decreased the density of the propaganda, but has increased the number of posts with positive sentiment. The increased positive sentiment might be because they have tried to divert attention from their usual posts, as Howard et al. (2019) point out that the reason the IRA published posts with positive sentiment is to divert the attention of Facebook moderators. In terms of results which are shown in Table 12 below, this is not an indication that the IRA have tracked their activity across these exact variables, but this might be an indication that they have changed the contents of their messages over time, which just might have coincided with the variables that I have used.

Table 12. Percentages of each coded variable for regression analysis that has been encountered in the first and second half of 2016

Variables	First Half of 2016	Percentage	Second Half of 2016	Percentage
Advanced	94 out of 376	25%	116 out of 376	31%
High Density	65 out of 376	17%	41 out of 376	11%
Positive	123 out of 376	33%	136 out of 376	36%

The Results of Linear Regression Analysis

To investigate the effectiveness of IRA propaganda in 2016, I have asked two empirical questions and have proposed two respective hypotheses. I have tested the hypotheses through categorical linear regression analysis of the data that was provided by the HPSCI dataset on Facebook ads. The results of the tests are presented in Table 13 below.

During the regression analysis, another issue with the dataset was revealed. In some cases, the number of clicks, reactions, shares, or comments has exceeded the number of impressions, which is not technically possible, since impressions show how many people have been exposed to the ad overall. Data entries with such discrepancies in the measurements were excluded from regression analysis. Overall, such cases were rare; this nevertheless does not guarantee that other measurements do not contain a similar problem but were not observed in other cases because the measurements did not exceed the number of impressions. To mitigate the effects of this data deficiency, I will rely upon p < 0.01 statistical significance and lower. Furthermore, since the data has contained some large numbers and many small numbers, it has been logged with a base of 0.5.

I base my analysis on the regression presented below. The table of regressions with original dependent variables that were not logged can be seen in Appendix 2.

Impressions Click-through Rate Reactions Comments Shares 7.572 *** -2.194 *** -3.074 *** Intercept -1.753 *** -4.029 *** (0.122)(0.304)(0.308)(0.346)(0.112)0.220 ** 0.366 * 0.514 *** 0.399 * Advanced 0.332 Mimicking (0.148)(0.150)(0.202)(0.073)(0.168)-0.352 ** 0.675 *** Negative -0.120 -0.101 0.641 *** Sentiment (0.176)(0.064)(0.129)(0.131)(0.147)Low Density 0.362 0.232 * 1.485 *** 1.148 *** 1.368 (0.254)(0.092)(0.180)(0.182)(0.204)0.826 *** 0.963 *** 0.900 *** Impressions 0.989 (Logged) (0.014)(0.036)(0.036)(0.041)R^2 0.005 0.883 0.593 0.555 0.567 Adj. R^2 0.001 0.883 0.590 0.551 0.564 Num. obs. 716 716 486 486 486 Standard error in parentheses *** p < 0.001; ** p < 0.01; * p < 0.05Note: Logged dependent variables, all measurements are controlled for the number of impressions.

Table 13. The results of regression analysis of the dataset across the level of mimicking,

sentiment, and text density

Hypothesis 1: *Messages with advanced mimicking garner more attention than* messages with basic mimicking, i.e., produce more click-through rate.

The first hypothesis has been supported, messages with advanced mimicking do seem to attract more attention than the messages with basic mimicking, i.e., produce more clickthrough rates (CTR). As can be seen from clicks when controlled for impressions, the dependent variable shows a statistically significant correlation between advanced mimicking and click-through rates. When it comes to control variables, the expectations were not met. Negative sentiment did not positively affect the CTR but affected it negatively with no statistically significant correlation. Low density seems to positively affect the CTR as expected, but the p < 0.05 statistical significance might not be sufficient to claim so with confidence.

Hypothesis 2: Messages with advanced mimicking lead to higher engagement than messages with basic mimicking, i.e., produce more reactions, comments, and shares.

The second hypothesis has also been supported; messages with advanced mimicking seem to have an impact on the number of comments, showing strong evidence against the null hypothesis at a p < 0.001 statistical significance. There is also an indication that reactions and shares also have a correlation with advanced mimicking, but since it does not meet the p < 0.01, it might not be sufficient to claim that these are reliable results. Negative sentiment seems to have a positive impact on comments and shares as expected with high statistical significance at p < 0.001 but had a negative impact on the number of reactions. This might be explained by the potential behavior of the audience members that might have seen a meme or some celebratory post and have clicked the reactions button and moved on. Low density, once again, seems to have a positive impact on all three engagement measurements at a p < 0.001 statistical significance, as was expected.

Findings and Contribution to Existing Research

1. Based on the findings of the regression analysis, I argue that foreign political propaganda on social media in order to attract more attention and generate more engagement prefers messages based on negative sentiments and complex rhetoric. Moreover, shorter but weightier pieces of propaganda seem to do better than longer pieces of propaganda. This condition might be different in terms of length variation depending on the communication channel.

2. Based on the findings of regression analysis and comments and share ratio analysis, I argue that the mimicking used by the IRA was effective at concealing the origin of the IRA propaganda. First, the hypotheses were confirmed, which would not be possible if the targeted audience figured out that the advertisements on Facebook they were exposed to were the product of Russian propagandists posing as American political activists and members of the audiences the IRA was targeting. Moreover, from the results of comment and shares ratio analysis, there is no evidence that the targeted audiences of the IRA on Facebook were

consistently discontent by the content posted by the IRA, which is another indirect indication that the audiences that the IRA targeted were unaware of the foreign source of their advertisements.

Furthermore, there are no recorded cases when the members of the IRA audience have found out that the ads they are seeing were the product of the Russian propaganda campaign. The reason that the IRA activity has been uncovered is that Facebook and other social media companies found out that many ads on their platforms have originated from one IP address in Saint Petersburg, Russia (Prier 2017; Howard et al. 2019). While the IRA have not thought through how to hide their traces on the web, the concealment function of their mimicking has been effective, as their targeted audience, at least on a consistent basis, has not identified the origin of the IRA Facebook ads.

3. From the regression analysis, it can be seen that propaganda messages with negative sentiment are less likely to be clicked but more likely to spread since there is a positive statistically significant correlation between the number of shares and negative sentiment, which might also indicate that propaganda messages with negative sentiment may have higher potential for amplifying polarization.

4. From the regression analysis, it can be seen that advanced mimicking of rhetoric is most likely to be clicked and may generate more discussion in the comments sections but does not spread as much as messages with negative sentiment. This ability of advanced mimicking of rhetoric to generate discussion in the comments sections also may result in the Facebook users conversing with trolls and automated bot accounts present in the comments sections more often. The effects of social media users engaging with trolls and bot accounts that use mimicking require further research.

5. From the content analysis, it was evident that the IRA Facebook Advertisement campaign spread very little disinformation: more of a propaganda campaign than a

disinformation campaign on Facebook. The absence of use of disinformation might be the effect of mimicking used by the propagandists, since coming up with made-up facts and events may sabotage the precision of mimicking of the propaganda campaign.

6. From the content analysis, I identified problems with the HPSCI dataset, which has not been identified by scholars who engaged with this dataset previously (Ribeiro et al. 2018; Howard et al. 2019).

Limitations of the Research

1. One of the major limitations of this research is the inherent problems and limitations of the HPSCI dataset.

2. The categorization of mimicking as advanced and basic mimicking is not a direct measurement of the quality of mimicking, as they serve as an indirect measurement of it rather than a direct measurement of quality.

3. All the data measurements are based on the results content analysis, which is a method that has a subjective element.

4. The measurements do not account for the activity of trolls.

5. Custom-made videos that were coded have not been taken into account when I was coding the level of mimicking, but they may have been advanced.

6. In this research, I have only focused on Facebook, while IRA has been active on Twitter and other social media, although, their activity on other social media has been captured in a different format and is not fit for the research design of this work.

7. The complexity of mimicking in terms of word count was not based on the research conducted on Facebook, as such; there might have been different ways to code this variable.

8. I did not account for the language complexity of the IRA propaganda based on the level of education of the audience and the propagandist as a control variable.

9. The attempt of the IRA propaganda to discredit the government and mainstream media has not been coded in the descriptive content analysis.

Chapter 5. Discussing the Implications of Effective Mimicking

Potential of the IRA Propaganda to Amplify Polarization

One of the potential implications of the findings that the mimicking in the 2016 IRA propaganda exclusive to the IRA Facebook advertisement campaign has been effective in concealing its origins as well as able to garner attention and generate engagement, is the potential of the campaign to amplify the polarization in the US. This might have been possible since their strategy was the creation of groups on Facebook that were able to accumulate different audiences and show these audiences polarizing content that has already been circulating in the American media. They have also added their own spin and interpretation to most of the content they have posted. However, the potential for amplifying polarization does not mean that there were real-world effects in terms of polarization. Whether the IRA propaganda was able to amplify polarization and the extent of it requires further research.

When it comes to existing research, the literature seems to support the idea about the potential of the IRA propaganda to amplify polarization. For instance, Peisakhin and Rozenas (2018) have found that the introduction of deeply polarized society to biased media, like Russian television in Ukraine, results in even deepen polarization of the targeted society. They found that the Russian propaganda has been successful in Ukraine, as the propaganda seems to have increased the pro-Russian sentiments of people with prior pro-Russian sentiments, but has been dissuasive when targeted people with pro-Western sentiments or even resulted in a backlash. Similarly, the IRA Facebook advertisement campaign in 2016 targeted audiences that were already predisposed to the content they posted on Facebook.

Pomerantsev (2019) notes that the US polarization across the ideological spectrum has greatly deepened since 2010. The IRA may use this deepening divide in American society and mimic the cultural and ideological views of their foreign audiences to catalyze this polarization. This potential for amplification, however, may be offset by the limitations the strategy of mimicking may impose on the propaganda campaign, which will be discussed further.

Limitations Imposed by the Mimicking on the Reach of Propaganda

There is a debate in the literature about the effectiveness of the IRA propaganda campaign in 2016, as, for instance, Bail et al. (2020) argue that the IRA propaganda is unlikely to be successful due to its selective exposure. On the other hand, Jamieson (2020) argues that the Russian activity in 2016, including the actions of Russian hackers, might have affected the outcome of the 2016 presidential elections.

There is no way to establish the effects of the IRA activity on the presidential elections in 2016 with certainty now because of the limited data that is currently present on the IRA propaganda campaign across all social platforms. Nevertheless, it might be important to point out the potential limitations imposed by mimicking on the IRA propaganda campaign on Facebook as well as the discussion of these limitations in light of existing research.

While the complexity of mimicking seems to work as a strategy to attract more attention of the targeted audience and generate engagement as well as effective measure to conceal the origin of the propaganda message, mimicking may impose limitations on the reach of propaganda.

I argue that mimicking as the strategy for foreign political propaganda may limit the reach of the propaganda message. For instance, from the descriptive content analysis, the main strategy of the IRA was the creation of groups on Facebook, which have garnered an audience because of effective mimicking, and was to show these audiences of these groups polarizing content that was already circulating in the American media or was similar or based on such content. This strategy seems to have a downside, as the polarizing content was shown to people who were already predisposed to such content and have, assumedly, held these

opinions prior to their exposure to the IRA propaganda. For instance, the IRA seems was unable to *target swing states in their Facebook advertisement campaign* when attempting to affect the outcome of the elections in 2016. From the descriptive content analysis of the HPSCI dataset, it is evident that the IRA consistently targeted only Texas, as they have created a Facebook group called "Heart of Texas" that targeted conservatives in Texas, and Texas has a mostly conservative population. The IRA has targeted other states as well as it was observed in the ad targeting section of the dataset, but these have not been systematic, as they targeted different states if the news they shared concerned those states. Howard et al. (2019), who have discovered that the IRA propaganda on Facebook has not targeted swing states, have confirmed this in the previous studies of the IRA advertisement campaign on Facebook. Moreover, Badawy et al. (2018) have found that the IRA on Twitter targeted mostly Tennessee and Texas, states with mostly conservative populations.

While the IRA did not target swing states, they also *only amplified already existing narratives present in the US media, but rarely introduced new narratives*. The IRA propaganda on Facebook for the most part served as an echo of already existing narratives present in American society on social media. They have promoted petitions that they have not launched themselves, but are in line with their objectives. They have attempted to persuade African Americans to not vote for Hillary Clinton by referring to African American celebrities that held such opinions at the time. They often just reposted messages that supported their goals. As Prier (2017) notes, propaganda cannot create a new narrative, it can only build upon existing ones. This seems especially relevant when the propaganda relies on mimicking.

Alcott and Gentzkow (2017, 232) argue that the impact of fake news on vote shares in the 2016 presidential elections depended on the size of selective exposure since it would be hard to expect a high impact on vote shares of pro-Trump fake news that targeted people who were already pro-Trump. Since, the IRA has mostly shown propaganda messages to audiences who were already predisposed to such content, which means that the effectiveness of such propaganda messages might be limited. Nevertheless, Black voter turnout has declined significantly in 2016 compared to 2012 and 2020 (Pew Research Center 2017). Still, the IRA propaganda may not necessarily be the cause of it, as Sides (2018) argues that famous African Americans have criticized the elections in the US in 2016 and boycotted it. The most prominent example would be Colin Kaepernick (Sides et al. 2018: 180), who had refused to vote in the elections. The IRA, interestingly, cited Kaepernick multiple times to persuade African-Americans to not vote in the elections, as was observed in the content analysis. Moreover, the IRA was not the only one that has targeted African Americans, as Donald Trump also has targeted black people in 2016 to deter them from voting (The Guardian 2020).

While the IRA propaganda was impressive in scale when one counts all social media platforms they attempted to exploit, the reach of their Facebook advertisement campaign seems to be limited. From the analysis of the dataset for 2016, *the IRA propaganda on Facebook seems to lack sufficient reach* to have substantial real-world effects, especially related to the outcome of the elections. For instance, all the coded entries in HPSCI dataset have 5 767 945 impressions. It is important to keep in mind that impressions are not unique cases of exposure; a lot of these may come from one person seeing multiple ads. Moreover, the majority of the dataset aims at polarization, while only 32 percent of the dataset for 2016 attempts to directly shape the perception of the presidential candidates. If we count the impressions for only IRA messages that attempt to affect the elections, we will have only 302 378 impressions.

Alcott and Gentzkow (2017: 223) point out that for the majority of Americans television is still a more dominant news source compared to social media. Moreover, they

also have found that while social media is a popular source of news among Americans, only 14 percent consider social media their main source of electoral news.

Nevertheless, this does not mean that Russia has not affected the outcome of the elections or has failed to amplify the polarization in 2016, but this means that *the IRA advertisement campaign on Facebook* in 2016 had inherent limitations, especially because they formed their propaganda campaign around the use of mimicking.

Avenues for Future Research

1. One of the potential avenues for future research is to study the effects of advanced mimicking in foreign political propaganda on specific foreign audiences within political communities. It is also possible to research this by using relational content analysis on the HPSCI dataset for 2016. While this research was based on thematic content analysis, it also would be beneficial to understand what kind of arguments have been more successful among the different audiences. The current dataset can be expanded by incorporating the HPSCI dataset for 2015 and 2017 as well. This could show what audiences might have been more susceptible to the IRA propaganda.

2. The effects of advanced mimicking on the mobilization of foreign audiences as well as the ability of the IRA to mobilize the members of its audience can be studied more indepth, using case studies from the records of rallies present on the Internet or recorded in Internet archives.

3. The precision of the IRA mimicking at copying the other features of their targeted audiences, besides the rhetoric, as well as the effectiveness of their mimicking to conceal the origin of their propaganda messages requires further more in-depth research. This research can be conducted not only through content analysis of the existing data on the IRA activity; it would be possible to conduct a survey among the American population by presenting examples of IRA posts. The survey may also include examples of American posts

that have been mimicked or are similar to posts that have been mimicked by the IRA, which would test whether Americans will be able to discern the Russian-made posts from American-made posts.

4. Further research also can be directed at studying the complexity of language based on the level of education to find linguistic patterns for identifying foreign propaganda in the future. The text of propaganda can be analyzed through machine learning to find linguistic patterns, which might be helpful when creating tools for the detection of foreign propaganda.

5. Last but not least, the extent of potential polarization, as well as the effect of the IRA propaganda on vote shares in 2016, requires more research to assess the potential real-world outcomes of the IRA propaganda.

Conclusion

The findings of the research suggest that the IRA propaganda advertisement campaign on Facebook in 2016 in the US had the following effects: the complexity of mimicking positively impacted the attention and engagement rates. Moreover, the IRA propaganda does not seem to have caused discontent among the targeted audience and the IRA seems to have been able to improve the precision of their use of the Facebook ad targeting system as well. These findings suggest that the mimicking was effective at concealing the origin of the propaganda messages and contributed to the IRA social media content generating interest among the audiences it targeted. These findings are relevant today since the IRA is still active in the US, as the report by the US Department of State (2020) shows that the IRA is still using mimicking and attempting to amplify polarization in the US. While there is limited evidence that propaganda campaigns that use mimicking can affect real-world outcomes, the low costs of these campaigns may attract other states to use similar strategies. Prier (2017) points out that the information warfare on social media seems to be an efficient means of influence on the international arena, that will only grow in use and sophistication as the advancement of technology continues. Furthermore, Prier (2017: 77) notes that other countries are attempting to emulate Russia's cyberspace capabilities. These potential developments render the research of potential effects of foreign political propaganda on social media more urgent in order to understand how they function and how to develop strategies to combat them. While both Facebook and Twitter have taken steps after the events of 2016 to combat the disinformation on their platforms (Prier 2017), these organizations have to balance their business interests and the objectiveness in the public discourse, this might be a challenging endeavor (Persily 2017). Moreover, since young people may develop their political identities on social media (Woolley and Howard 2017; Bradshaw and Howard

2017), the potential effects of online foreign propaganda may require more extensive research in the future as the technology and means of spreading propaganda continue to develop.

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Appendices

Appendix 1

Codebook

Targeted Audience with Lack of Predisposition:

Standard – Posts that present ideas that the audience is already are predisposed to. For instance, promoting Donald Trump among conservatives.

Ambitious – Posts that attempt to affect the audience by presenting ideas that they are not predisposed to. For example, promoting Trump among liberals.

Presence of Omission:

Yes – Posts that contain two and more lexical and grammar mistakes, excluding typos. Unreliable code since I am not a native speaker and the differentiation between typos and genuine mistakes is unreliable.

No – Posts that contain no or 1 lexical or grammar mistake.

Presence of Falsehood:

True – Posts contents of which are true, that is., fall in line with the same information on the topic that is circulating in American media. The code does not consider interpretation.

False – Posts content of which are false, that is., they contain made-up events or stories, factual changes to events, general misinformation, and original IRA-made fake news.

Purpose of a Post:

Division: When the purpose of the message is to polarize the society further by discrediting the opposite view or an ideology, for instance, conservatives criticizing liberals or vice versa.

Elections: When the purpose of the message is either to boost the popularity of Donald Trump or discredit Hillary Clinton. Posts that support Trump indirectly by supporting his ideas are not coded as elections.

Unknown: When the purpose of the message does not fit any of the above.

Coded variables across Elections and Polarization:

proSanders (negative references to Bernie Sanders were not observed) - Appeal to Bernie Sanders as a support of his candidature as an alternative to Hillary Clinton. Posts on Bernie Sanders have come across few times.

proStein – one message has appealed to Jill Stein, as a fitting presidential candidate. This was coded, despite the fact that the database has only one such entry.

aObama – some messages that have referenced Barack Obama in a negative light, mostly aimed at conservatives, in some cases, they are aimed at Afro-Americans. One message that was aimed at Afro-Americans has referenced Barack Obama in a positive light, but as the reference was not the point of the message and a single case, this was not coded.

(prorace) – Appeal to positive posts about race, particularly, Afro-American race. These do not include posts about racism, police injustice, and brutality, but are about blackowned businesses, congratulations, everyday activities, and family-related topics.

(*racism*) – Appeal to racism either coming from a person, an organization, or in the context of the whole US, excluding police racism and brutality.

(*policeracism*) – Entries that cover police injustice towards Afro-American communities. This code includes police racism, discrimination, and unjust fares, arrests, and inspections. Does not exclude police brutality.

(systeminjustice) – Appeal to any systematic injustice, including the ones that are perpetrated by the government, police, and courts. These include unfair government

decisions, government ignoring certain issues, court injustice, specifically unjust cases, court decisions, and unfair imprisonment.

(*proguns*) - Appeal to the ownership of firearms, defense of the second amendment, the benefits of owning a gun, its importance as a part of the US citizenship, and individual freedom. Also includes posts that put an image of a gun and its name as a depiction of the aesthetics of a weapon.

(*proveterans*) – Appeal to the role and importance of veterans and their livelihood. Used as a criticism of Hillary Clinton or/and liberals as they do not pay attention or ignore veterans.

(propolice) – Appeal to defending police from public criticism and BLM (Black Lives Matter).

(illegalimmigration) - Appeal to the cases of illegal immigration and its criticism. Includes the economic and patriotic arguments as well as the usage of a specific language. Also includes criticism of refugees and policies concerning refugees.

(*patriotism*) - Appeal to the patriotic sense. Invoked by celebrating conservative values, followed by the specific symbolism that includes images of eagles, the Constitution, Founding Fathers, and the confederate flag. Linked to the posts about illegal immigration.

(*LGBT*) - Appeal to LGBT communities and defense of their rights, coming from mainly one community on Facebook – 'LGBT United'.

(humor) – Jokes about different topics, but mainly memes coming from a community "Memopolis". This community seems to target Afro-American communities, although were not coded as such as there is no concrete evidence, except that the images of memes featured exclusively black people.

(celebrity) – Entries that discuss or mention historical figures, writers, freedom fighters, celebrities, athletes, and actors.

(mobilization) – Entries were coded as mobilization when they either have called for mobilization such as protests, meetings, rallies, and gatherings of any sorts or have supported such activities. When the purpose of the message is to rally and gather for public demonstrations and protests.

(*twisted*) – Entries were coded as twisted when the facts in the news the IRA have used have been exaggerated, misinterpreted, or have been tampered with in any way. This serves as a middle ground between true and false entries, as the facts do not necessarily have disinformation but are presented in a manner that can be interpreted differently.

(crime) – The code for cases that do not fit the police brutality. Includes news coverage of murder, mass shootings, rape, and theft.

(*repeat*) – When the content of the message repeats from the previous entry. This means when the old messages are reposted identically to previous posts or with a new coat of paint.

(*muslim*) – This code was applied to entries that either criticize Muslims or address them. These two functions can be distinguished by their placement in the spreadsheet.

(*texas*) - Posts that mention Texas in any way, mostly posts that refer to people from Texas. The topics related and linked are the secession of Texas from the US and the election of Donald Trump as a preferred candidate. The main Facebook group that is responsible for these posts is 'Heart of Texas'.

(secession) - This code goes together with the code for Texas as it denotes the cases when the Texas secession was called or mentioned.

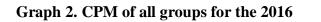
Appendix 2

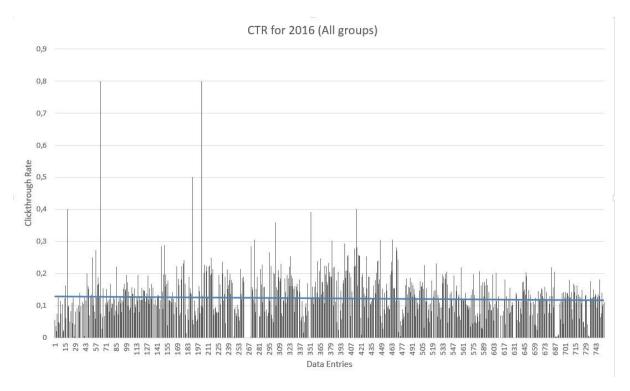
Table 14. The results of regression analysis with original dependent variables, all

measurements are controlled for the number of impressions

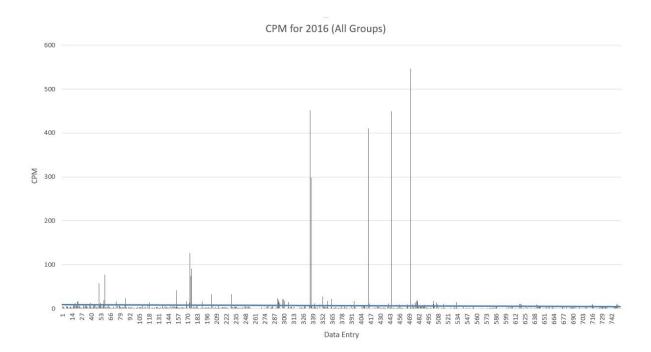
	Impressions	Click-through Rate	Reactions	Comments	Shares
Intercept	7.723.028	38.348 (50.367)	177.774	24.083	130.385
-	***		(121.983)	(7.469)	(118.457)
	(846.027)				
Advanced	585.076	267.346 ***	284.143	39.187 ***	184.829
Mimicking	(1402.211)	(78.994)	(168.611)	(10.324)	(163.738)
Negative	-1107.001	-195.715 **	-394.754	15.107	71.533
Sentiment	(1225.643)	(69.078)	**	(8.997)	(142.700)
			(146.947)		
Low Density	1503.064	219.980 *	726.417	39.106 ***	483.261*
	(1763.618)	(99.392)	***	(12.501)	(198.271)
			(204.172)		
Impressions		0.111 ***	0.093 ***	0.003 ***	0.051 ***
(Logged)		(0.002)	(0.004)	(0.000)	(0.004)
R^2	0.002	0.799	0.529	0.220	0.264
Adj. R^2	-0.002	0.798	0.526	0.213	0.258
Num. obs.	716	716	486	486	486
Standard error in parentheses *** p < 0.001; ** p < 0.01; * p < 0.05					

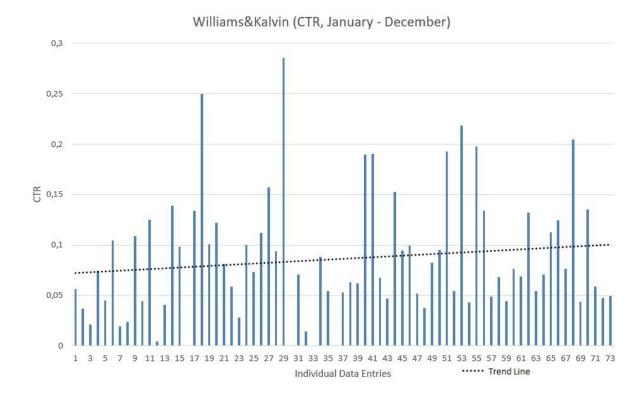
Appendix 3



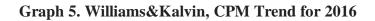


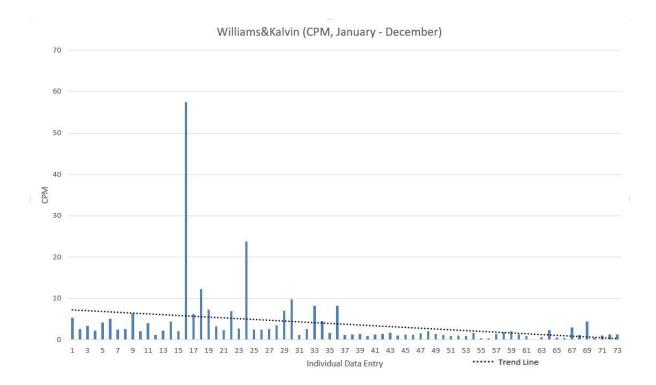
Graph 3. CPM of all groups for the 2016

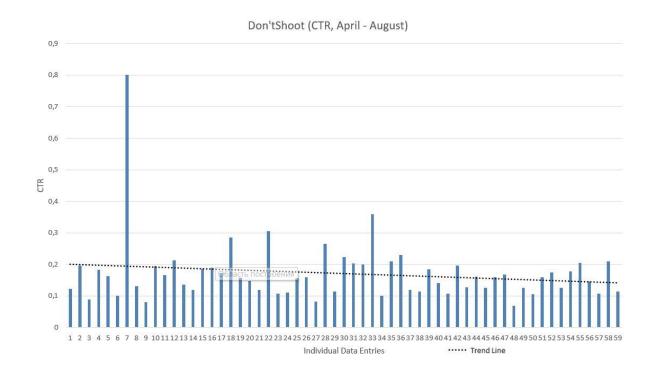




Graph 4. Williams&Kalvin, CTR Trend for 2016

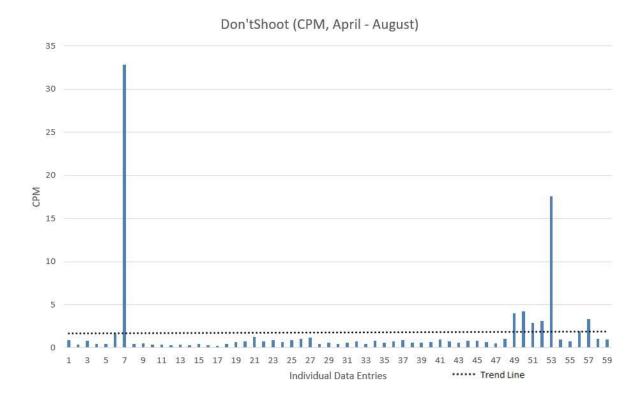


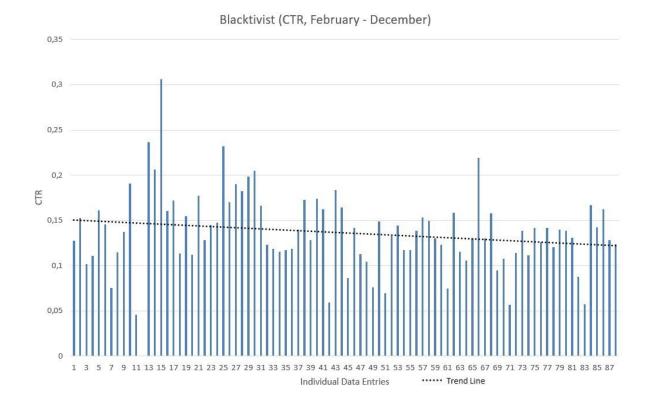




Graph 6. Don'tShoot, CPM Trend for 2016

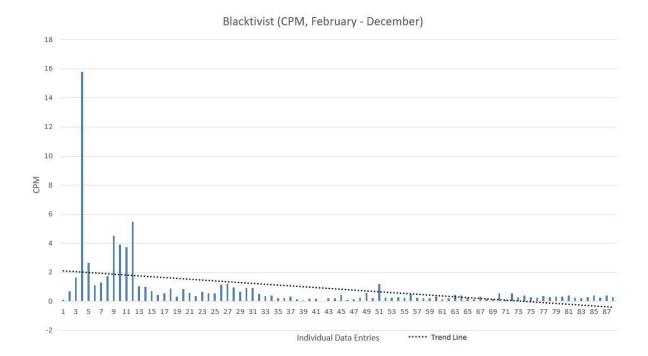
Graph 7. Don'tShoot, CPM Trend for 2016



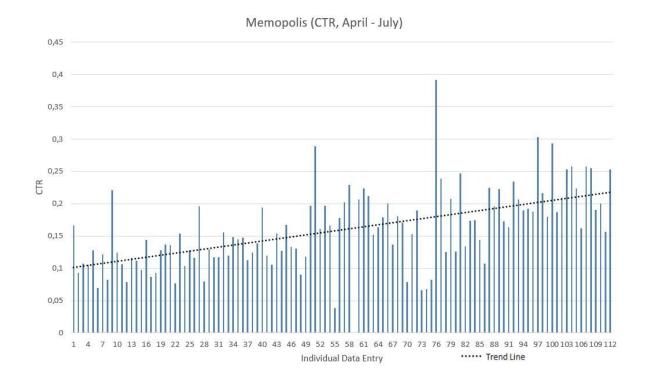


Graph 8. Blacktivist, CTR Trend for 2016



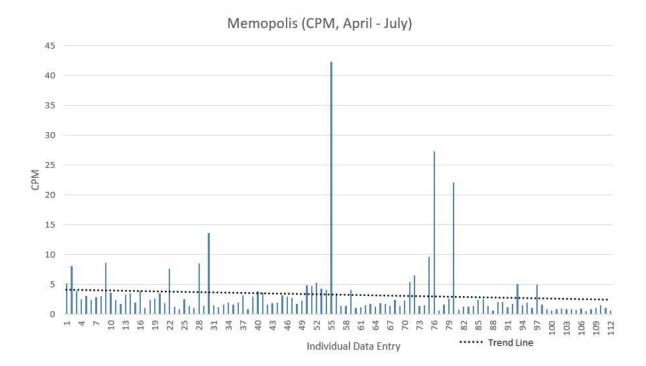


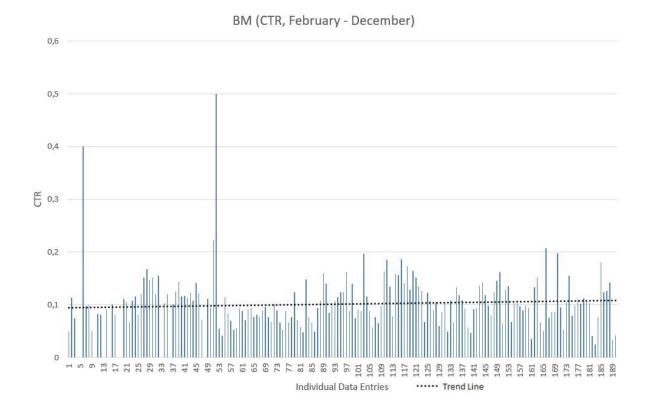
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Graph 10. Memopolis, CTR Trend for 2016

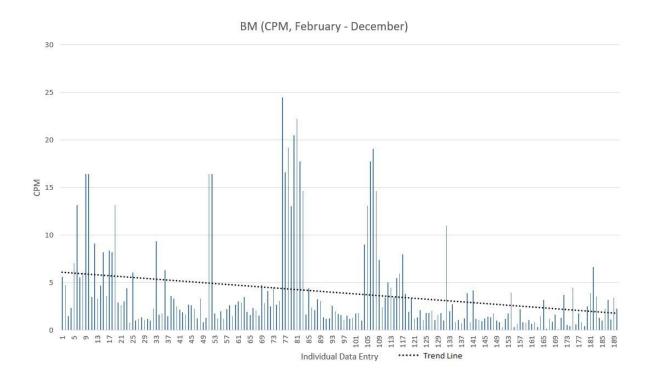
Graph 11. Memopolis, CPM Trend for 2016

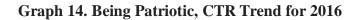


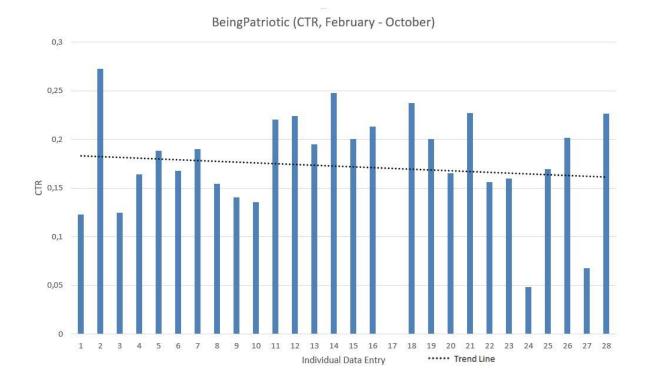


Graph 12. BM (Black Matters), CTR Trend for 2016

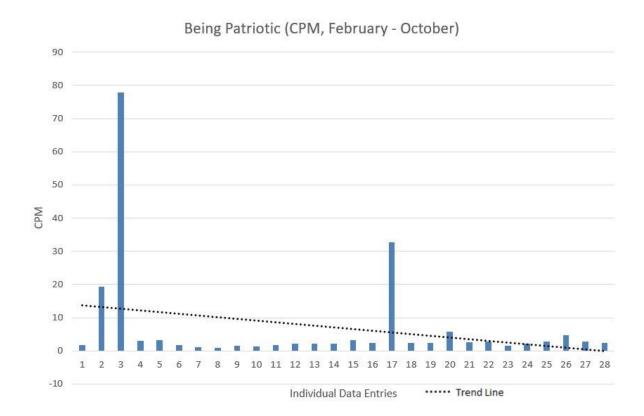
Graph 13. BM (Black Matters), CPM Trend for 2016

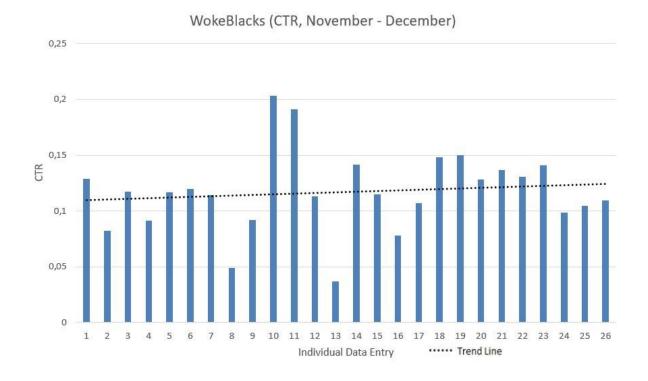






Graph 15. Being Patriotic, CPM Trend for 2016





Graph 16. WokeBlacks, CTR Trend for 2016

Graph 17. WokeBlacks, CTR Trend for 2016

