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Using Trolls and Bots in Social Media: Propagandistic Influence on Public Opinion: A Literature Review

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Abstract

In recent years, the spread of various forms of misinformation, including fake news, rumors, and conspiracy theories, has increased. One of the primary ways misinformation spreads is through trolls and bots. Trolls are real users, while bots are automated, but both influence society in similar ways. However, they differ in the degree of harm they cause-some are highly damaging, while others have a lesser impact. One significant use of these entities is in propaganda. This paper focuses on analyzing propaganda theories in relation to society and its behaviors. Media has become a focal point in propaganda theories, as theorists have examined the influence of media content on society. The study aims to determine the impact of fake accounts on social media and explore strategies for managing trolls and bots. Key research areas include understanding how misinformation spreads, how people perceive it, and how detection methods can be improved. The relevance of this research stems from the expansive nature of social media, which serves as a vehicle for propagandistic tactics employed by trolls and bots. The study adopts a qualitative research approach, relying primarily on literature review and theoretical analysis. It draws upon existing research, theories, and findings to build its argument, referencing various studies on misinformation, fake accounts, propaganda theories, and the role of bots and trolls in media manipulation. To provide a strong theoretical framework, the study

incorporates theories such as Lasswell's propaganda theory, modern propaganda theories, and the theory of informational autocracy. Additionally, it discusses previous studies on misinformation, including research on disinformation detection, cognitive biases, and propaganda's effects on public opinion.

Keywords: Trolls and Bots, Propaganda Theories, Social Media

Introduction

Social media platforms are used worldwide, and most fake news spread through them. Some people share misinformation even when they know it is not true. The media plays a significant role in shaping public perception, often manipulating and influencing society. Government cyber troops also impact society, using strategies that violate democratic norms-yet this issue remains unresolved.

This paper applies Lasswell's propaganda theory to examine the research methods used by the media in political processes and government affairs. Additionally, it highlights modern propagandists' perspectives on these issues.

The literature review addresses key topics such as the definitions of trolls and bots, propaganda theories, their influence on social media, and strategies for managing misinformation.

The paper is structured as follows:

The first chapter defines misinformation and examines how it spreads. It explores different scientific perspective on the field and their focal points. The second chapter discusses propaganda theories, explaining how trolls and bots influence social media.

The third chapter examines current strategies for combating fake accounts and explores future developments aimed at strengthening this field. Through an analysis of these topics, this paper seeks to address its broader goal: identifying the key issues arising from media propaganda. The literature review also provides real-world examples of how trolls and bots impact society, particularly in political campaigns and the spread of misinformation. Additionally, it references specific geographical examples (e.g., the region of Georgia) to illustrate the tangible effects of fake accounts and propaganda.

Influence of Trolls and Bots in Social Media and Their Connection in Propaganda

The media has a significant influence on public opinion and is sometimes used manipulatively. In many cases, propaganda in the media is driven by government influence. According to Lasswell, propaganda is more than just using media to deceive people; it can also be employed by governments in a way that does not negatively impact society. He argued that the power of propaganda lies in shaping people's state of mind (Stanley & Davis, 2011).

Using trolls and bots is one of the most important issues, which is wellknown in many countries. Studying the ways the government uses media is important for several reasons:

- 1) To understand the connection between Lasswell's propaganda theory and the situation according to modern propaganda and manipulation in the country.
- 2) Studying trolls and bots and their effect on society.
- 3) Understanding the importance of media for the government and how it affects society (Stanley & Davis, 2011).

Using trolls and bots on social media has implications for politics and public discourse. Bots can spread false information very fast, and trolls can create content to confirm public opinion. The behavior of trolls can affect the mental health and well-being of people and lead people on social media to accept aggressive comments as the norm (Frischmilch & Larsen, 2020).

There are some fake accounts on social media, which are automated as human-driven trolls or social bots. Campaigns that are managed by fake accounts can be considered a threat to societies. Social media is a way to manipulate public opinion, which includes political propaganda, targeting communities, disinformation, and so on (Mazza & Avvenuti, 2022).

While misinformation, such as satire and clickbait, often aims to entertain or provoke, disinformation is intentionally misleading. Despite ongoing efforts from researchers, developing technology to detect disinformation remains a challenging task due to factors like cognitive biases and social pressures that prevent people from recognizing unreliable information. Fake news, in particular, is designed to confuse and spread false content (Wang & Zhang, 2022).

The development of disinformation research is still in its early stages, focusing on tasks like detecting false information, identifying automated spreaders, and understanding the dynamics of misinformation. Emphasis is placed on defining fake news and preserving critical thinking against political manipulation, with fact-checkers playing a vital role in counteracting disinformation (Bastos & Mercea, 2019).

Using trolls and bots is usually connected to bullying. The problem of bullying was first addressed by Norwegian psychologist Dan Olweus. He is considered a pioneer in this field. Working on cases of bullying by troll-bots can be divided into several stages: prevention of bullying, implementation of anti-bullying programs, and intervention in cases of bullying (crisis intervention and secondary prevention). However, it is crucial to understand the systemic nature of the issue, as this will make it possible to plan and implement different strategies for addressing bullying cases at the level of state institutions (Tsiramua & Koridze, 2018).

Social bullying is one form of bullying, and it is often hidden because it is difficult to recognize in some cases. The purpose of social bullying is to damage or humiliate someone's social reputation. It includes spreading lies and rumors, negative facial gestures, threatening looks, unpleasant jokes to humiliate someone, cynical imitation, encouraging others to ostracize someone, and damaging social reputation. It is a form of emotionally aggressive bullying behavior, which often does not involve direct aggression but manifests itself in covert intimidation. According to research, people who experience social bullying suffer negative effects, including depression, social exhaustion, and low self-esteem (Tsiramua & Koridze, 2018).

Connection Between Trolls/Bots and Propaganda Theories

The origin of the term propaganda comes from the Roman church. The meaning of propaganda was debated in the first half of the 20th century. Propagandists sometimes rely on disinformation. Mass media often uses propaganda to control the population. Political campaigns are closely connected to political propaganda theory because they rely on it to influence people, often using trolls and bots. Sometimes, the effect is so significant that people begin thinking according to the views presented in the media (Stanley & Davis, 2011).

Manipulation can alter many aspects of society, particularly in politics, where politicians attempt to influence public opinion during elections. They try to change the people's perceptions and persuade them that certain behaviors are preferable (Chiluwa & Samoilenko, 2019).

Trolling is associated with provocative posts, often involving abusive language and personal insults. It is primarily used in politics to manipulate opinions. A key technique of social media manipulation by governments is the use of trolls and bots. These entities engage in conversations, attempting to shift public opinion (Chiluwa & Samoilenko, 2019).

Various websites, blogs, and news platforms contain misleading information. Governments and political parties employ different strategies when interacting with real users spreading pro-government propaganda while discrediting the opposition. Trolls frequently use hate speech and are often linked to individuals or organizations. This tactic is used to exert social control over minorities, and opposition members also employ similar methods (Bradshaw & Howard, 2018, p. 11).

Automated accounts, known as bots, employ manipulative techniques, particularly in elections and referendums. Bots can like and share content, as

well as participate in political discussions online. Additionally, humanoperated accounts pursue specific goals using various strategies, making them more difficult to shut down. Government officials create their own platforms and pages, and while some citizens can report fake news, fact-checking remains a challenge. Political parties also use propaganda in advertisements (Bradshaw & Howard, 2018).

Social media manipulation occurs constantly, particularly in politics, through the use of trolls and bots. Some political parties hire companies to spread disinformation, launching political bot or trolling campaigns. Some teams work for a short period, especially during elections, while others operate long term, depending on budget and resources (Bradshaw & Howard, 2018, p. 16).

Governments use media in various ways, including television, radio, and newspapers. The information found online influences people's reading and listening choices, shaping their beliefs. As a result, individuals may be manipulated into believing false or exaggerated claims. Fake news used for manipulation often resembles real news, but careful reading can reveal inconsistencies, making readers partially responsible for discernment (Bradshaw & Howard, 2018).

Many American leaders believed that political propaganda and democracy could coexist. According to Fritz Hippler, head of Nazi Germany's film propaganda division, "the secret of effective propaganda is to simplify a complex issue and repeat that simplification over and over again" (World War II, 1982). Snowball and Becker, U.S. theorists, categorized propaganda into black, white, and gray types (Stanley & Davis, 2011, pp. 75-76).

In columns published in the Atlantic Monthly in November and December 2019, Lippmann discussed the challenges propaganda poses to modern society. He argued that "the basic problem of democracy is to protect news from the taint of propaganda" (Sproule, 1997, p. 19).

According to Todd Gitlin, totalitarian propagandists believed mass media was a tool for manipulating and controlling populations. People abandoned old views in favor of new ones promoted through propaganda. Propagandists justified deception and manipulation as necessary (Stanley & Davis, 2011, pp. 77-78).

Lasswell recognized the limitations of psychological theories and sought to apply them to politics. He argued that multiple forms of media contribute to propaganda efforts (Stanley & Davis, 2011, p. 84).

A critical perspective on propaganda is provided by behaviorists Richard Laitinen and Richard Rakos (1997), who describe modern propaganda as "the control of behavior by media manipulation" (Stanley & Davis, 2011, p. 93). According to the theory of informational autocracy, leaders manipulate public opinion to maintain power. Through media censorship, political leaders ensure that citizens perceive them as competent. Politicians communicate their messages through media, using propaganda and censoring private outlets as strategic tools. This theory suggests that media is essential for executing political strategies (Guriev & Treisman, A theory of informational autocracy, 2019).

A central aspect of this theory is the relationship between the "informed elite" and the general public. Highly educated individuals are more aware of media censorship (Guriev & Treisman, Informational Autocrats, 2019).

Media plays a significant role in government operations, and trolls and bots are frequently used for propaganda. Different political parties employ propaganda to achieve their objectives. While political misinformation has existed for years, the internet has facilitated its rapid spread (Bradshaw & Howard, 2018).

Bots can spread propaganda on social media without direct human involvement. The issue becomes particularly evident during elections, with bots frequently used on platforms like Twitter (Bradshaw & Howard, 2018).

The role of media in governance is expanding, as governments can shape narratives to suit their objectives. They control how information is presented, often making it appear as if propaganda serves their interests (Katina Michael, 2017).

Strategies for Managing Trolls and Bots on Social Media

Trolls use nonsensical comments and engage in discussions to provoke emotional reactions. Bots, on the other hand, post repetitive comments and often exhibit unnatural language patterns. When people react emotionally to trolls, it encourages further engagement. Bots, however, do not participate in real conversations as they are programmed responses, making meaningful interaction with them impossible (Buckels & Trapnell, 2014).

Social media platforms provide muting tools that allows users to avoid trolls and bots comments. Additionally, users can report accounts that engage in hate speech or harassment, helping to mitigate harmful interactions (Buckels & Trapnell, 2014).

Many platforms have developed tools and features to combat trolls and bots. Twitter employs bot detection algorithms that analyze patterns of repetitive and spammy activity, blocking such accounts. The platform also implements two-factor authentication to prevent bots from creating fake accounts. Twitter's verification system helps users distinguish between real and fake accounts (Zannettou, 2019). Facebook uses AI moderation tools to detect harmful content, including spam and hate speech. Meta reviews flagged content, and group moderation tools allow administrators to remove offensive comments and ban disruptive members (Ghosh & Scott, 2018).

Instagram offers comment filters that helps users block bullying and offensive remarks. These filters hide abusive comments automatically. Users can also restrict accounts that engage in trolling behavior and limit who can comment on their posts (Pater, 2021).

Governments have also implemented policies to address misinformation and harmful content. The European Union's Digital Services Act mandates transparency and accountability from platforms regarding content moderation and user safety. Similarly, the UK is introducing the Online Safety Bill to ensure that tech companies take action against harmful online behavior and protect users (European Commision, 2020).

In the United States, while comprehensive federal legislation is lacking, initiatives such as the Integrity and Innovation Act and ongoing discussions around Section 230 reform aim to enhance platform accountability and combat bot-related issues (U.S. Government Accountability Office, 2021).

Conclusion

It is evident that media plays a significant role in shaping society's perceptions and decision-making process. From Lasswell's early theory of propaganda to modern understandings of media influence, perspectives on propaganda have evolved over time. The spread of misinformation, particularly trolls and bots, had made it increasingly difficult for individuals to discern credible information from falsehood. Many cases have demonstrated how these digital entities manipulate public opinions, often with negative consequences.

Instances of inauthentic behavior, such as those observed in Georgia, where numerous deceptive pages and accounts were deleted, highlight how political opposition groups and other actors use misinformation to discredit leaders or enhance their own image. Given the vast amount of information accessible through media, individuals must exercise critical thinking in selecting which sources to trust. The public's tendency to share unverified content contributes to the spread of misinformation. A more vigilant approachsuch as scrutinizing profile details, background information, and the credibility of sources-could help mitigate the influence of trolls and bots.

The responsibility for combating misinformation does not rest solely on media platforms or governments; individual users also play a crucial role. By engaging with news more critically and being mindful of their reactions, people can reduce the impact of false narratives. Ultimately, media consumption is a choice, and individuals must take an active role in verifying information before accepting or disseminating it.

The paper examines the role of social media in spreading misinformation and evaluates strategies for countering trolls and bots through platform policies, AI-driven moderation, and legislative measures such as the Digital Services Act and the Online Safety Bill. The literature review explores various approaches, highlighting how both platforms and governments address the challenges posed by digital misinformation. Additionally, this research emphasizes the psychological and societal effects of propaganda, particularly in the context of political manipulation and media control. Drawing on insights from experts in media manipulation and propaganda, the study underscores the evolving nature of the field and the persistent difficulties in countering misinformation.

Strategies for combating misinformation differ between platforms and governments. While platforms employ technological solutions such as AI moderation and bot detection, governments implement regulatory frameworks to enforce accountability and transparency. Both approaches are necessary, but their success hinges on ongoing collaboration between technology companies, regulators, and users.

In conclusion, this research relies on a literature review and theoretical analysis, incorporating case studies and existing strategies to address misinformation. It provides a comprehensive examination of how trolls and bots contribute to media propaganda and explores the measures needed to manage their influence effectively. Continued advancements in detection techniques, policy enforcement, and public awareness will be essential in mitigating the spread of misinformation in the digital age.

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