

EMERGING THREATS AND RESILIENCE IN SOCIAL MEDIA-BASED ASYMMETRIC WARFARE: UKRAINE–RUSSIA CONFLICT CASE STUDY

Faisal Ibrahim Alfaqih

Department of Business, Innovation, Leadership and Technology

Marymount University

<https://orcid.org/0009-0005-3173-9435>

fia82659@marymount.edu

ABSTRACT. Social media has proved to be more than a tool for networking and socializing; it has been adopted as an instrument of modern information-age warfare. It has become central to propaganda campaigns that tap into existing narratives and generate alternative ones, often amplified by networks of automated “bot” accounts. Social media capability is increasingly becoming a key component in revolutionary military affairs. In an era dominated by online influence, these platforms function both as enablers of resilience and as vectors of disruption in asymmetric warfare. Using the Russia-Ukraine conflict as a case study, the paper explores how digital platforms are exploited to shape narratives, influence public perception, and mobilize action. This paper investigates how social media platforms have been weaponized in the context of modern asymmetric warfare, focusing on their role in the Russia-Ukraine conflict. It examines the exploitation of infrastructure-based vulnerabilities, the deployment of AI-driven disinformation, and the use of cross-platform bot networks on platforms such as X, TikTok, Facebook, and Telegram. The study explores how state and non-state actors manipulate social media’s technological and narrative dimensions to shape public perception, disrupt adversaries, and mobilize support. Through a comparative analysis, the paper evaluates how Russia integrates partial truths with disinformation, and how content has been used for geolocation of military targets. The paper also examines the domestic censorship and platform restrictions imposed to control dissent and shape internal narratives. The research evaluates how Ukraine’s digital strategies have influenced international opinion and support, while also addressing credibility risks from overreliance on social media narratives.

Keywords: Information Warfare; Disinformation; Propaganda; Social Media Platforms.

1. INTRODUCTION

The proliferation of social media in the social sphere has radically transformed physical and social interactions across all societies. As early as 2006, there was recognition of the revolutionary nature of social media, with Time naming “You” as the person of the year. Time recognized that Web 2.0 marked an era in which politicians and great men did not have greater influence over individuals’ perceptions since social media promoted person-to-person interaction (Prier, 2017). Social media has transformed the media landscape as individuals don’t have to wait for information from mainstream organization, and they have the freedom not only to choose the medium of their daily information, but also the freedom to choose what is important. The new medium spaces has created means through which

social media users can create news through their opinions.

Even with the adoption of social media, from the early onset, there was a recognition that there was a shift towards groupings in the new social sphere. In his work, Canetti (1960) argued that individuals tend to gravitate towards crowds because they prefer the known rather than the unknown. Popova (2015) notes that the world is essentially an ecosystem of crowds varying from fan bases, religion, nations, political ideologies, and art movements. More importantly, the author recognized that although individuals long for freedom and worship individuality, they are invariably drawn to crowds, which often results in mixed feelings of resentment toward self and others.

Although social media was touted as a tool that would transform society by connecting distant societies into a globalized village, its large-scale adoption has resulted in the further disintegration of different societies. The natural desire for human to be part of crowd and groupings was exacerbated by the development of social media algorithms that recommend users with information related to their individual's interests. This has resulted in the creation of echo chambers, where information from other social media users is relied on as insightful analysis. Prier (2017) argues that society in the pre-social media era was more united because people recognized that topics such as religion, cars, and politics were off-topic when interacting with strangers. Social media upended this by providing a more structured way for individuals to connect with like-minded individuals.

Olcott (2010) recognized that the society driven by technological innovations in the social spaces has resulted in a significant reduction in the cost of information creation, transmission, and storage. Olcott (2010) identified six challenges associated with the new information environment, which are defined as volume (information is too much), veracity (information may or may not be accurate), variability (hard to verify), vector (change in direction of flow of information), velocity (information available in real-time), and vulgarity (from ordinary people). The six challenges facing institutions in the new information environment are in essence opportunities for individuals seeking to exploit social media for propaganda. The information is presented in large volumes, and given the high volume, it's often hard to verify the accuracy of information.

Social media has revolutionized the nature and conduct of modern warfare, as it has created a scenario where battlefields are not confined to the physical terrain. Instead, there has been a creation of a digital ecosystem that seeks to utilize social media to exert influence, disseminate information, and shape the public's influence. The Russia-Ukraine war has provided a unique perspective of the conduct of modern warfare, as social media platforms such as Facebook, TikTok, Telegram, and Twitter have been utilized as weapons of war (). Both state and non-state actors have utilized social media for different purposes that include disrupting national cohesion, conducting espionage, mobilizing populations, and manipulating narratives. The Russia-Ukraine war provides a critical perspective on the role of social media in modern warfare.

2. LITERATURE REVIEW

The term information warfare emerged from military studies from the strategic recognition that the success of battlefield could be defined by the technical capability of a party to

disrupt the informational infrastructure of the opponent. Based on this understanding, the early definition of information warfare (IW) focused on the context of physical war, and to this end, IW was defined as the use of technology to disrupt, control, or intrude opponents resources. In developing a new definition of IW, Taddeo (2012) recognizes that information technology has transformed works, communication, learning, and entertainment. The author recognizes that ICT had had a significant impact on social interactions, especially with the rise of social media networks such as Facebook and Twitter.

In defining technological breakthroughs as the fourth industrial revolution, Floridi (2009), highlighted that the adoption of information technology would have an impact on the way individuals perceive themselves, and their surroundings. Taddeo (2012) recognized the importance of redefining informational warfare, redefined IW as the use of ICT based tools by a state for offensive or defensive military strategy, carried out either within the physical and non-physical domain with the aim of disrupting or controlling the resources of the opposing party. Floridi (2009) recognized the importance of information war, arguing that it can be used to manipulate moral qualities, and the spirit of a populace, all which are essential in animating governments, and armies. Researches have recognized in the current dispensation is characterized by hybrid form of war, as both physical and digital combat are critical. The effectiveness of digital combat is measured by immersion time, number of engagements, and interactions generated by a social media campaign. The Ukraine war has reflected that social media can be used to turn defeats into victories, and victories into defeats through effective utilization of both real and fabricated facts.

Although there is recognition that information warfare involves both physical and non-physical domains, countries are faced with a major challenge of addressing disinformation campaigns that seeks to destabilize societies. This is because whereas cyber operations that involve attacking computer networks of countries is recognized under Article 2(4) of the UN Charter, as use of force, the same cannot be said of social media disinformation campaigns (Walker, 2024). Although cyber operations such as the joint US-Israeli cyberattack on the Iranian nuclear program or the hacking of Ukrainian power grid by Russian operatives can be easily classified as involving the use of force, the challenge with the use of social media for military objectives is that they lack an element of force.

The situation is even more complicated by the reality that civilians are often put in charge of managing social media information and disinformation campaigns. The Russia-Ukraine war has seen the rise of a digital armies comprised of civilians and military operatives on both sides of the conflicts (Perez & Nair, 2022). The war has captured the reality that social media is a weapon of war, as government officials, and a global coalition of supporters have utilized social media to influence public consciousness. Social media has become an effective tools of messaging, which is critical, especially in a war where parties are trying to influence soldiers, and civilians from across the globe to support the war efforts.

Although social media campaigns have been lauded by some actors as ineffective, the reality is that the campaigns can translate into direct victories, both politically and on the ground (Dizikes, 2018). Another issue that emerges is related to social media censorship during a time of war. The reality is that during a time of war, there is a declaration of state of emergencies, which often results in the suspension of different rights and freedoms of

the populace. At the same time, the state-sponsored harassment campaigns have a negative implication on freedom of expression.

3.RESULTS AND DISCUSSION

3.1 Contrasting Analysis of Social Media Use

From the onset of the Russia-Ukraine war, social media has been utilized a tool of providing differing accounts of the unfolding events, with each side utilize different channels to amplify and contrast narratives. Those utilizing social media have varied from military personnel, civilians, government agencies, and government officials, who have utilized different platforms ranging from Facebook, TikTok, Twitter, Telegram, and YouTube. Although this is not the first time social media is being utilized in war, the scale of utilizing is at levels never seen before, as in the first week of the war, on TikTok alone, there were more than 37.2 billion videos with #Russia , and 8.7 billion with #Ukraine (Perez & Nair, 2018). The narratives from both sides are completely different, as Russia frames the war as a response to NATO expansion, and protection of ethnic Russians against genocidal campaigns. On the other hand, Ukraine insists that the country is protecting itself from illegal and unjustified invasion.

Ukraine and Russia have not been the only actors as individuals across the globe have joined in to amplify the message of different sides of the conflicts. Perez and Nair (2022) argued that countries such Belarus and China have joined in, as they have phrased the war in their own terms, but with the aim of downplaying Russia's responsibility for the war. The massive scale of information being churned out from different actors across the globe has enhanced the role of social media in war. The scale and speed of information being churned from millions of users across the globe has significantly complicated the efforts to combat disinformation campaigns.

3.2 Russia Social Media Campaign

In their extensive review, Paul and Matthews (2016) identified key features of the social media campaign run in the lead-up to the invasion of Crimea in 2014. The Russian social media campaign focused on high-volume and multichannel dissemination of propaganda, which was effective because the propaganda campaigns not only consumed individuals' attention but also drowned out opposing views. By creating widespread social media campaigns, Russian actors were able to achieve a perception of credibility of their messaging. The second feature of the propaganda campaigns is the rapid, and repetitive that ensures that messages not only reach a wide audience, but ensures that the messages are received multiple times, ultimately increasing the likelihood of acceptance. The other features highlighted by Paul and Mathews (2016) are that messaging campaigns often lack objective reality, and lack commitment to consistency.

In the wake of the invasion of Ukraine in 2022, Snyder (2023) notes that Russia tripled its mass media budget, with almost half of the budget being dedicated to social media campaigns. The social media campaigns were divided into two, those targeting populace in Russia, and those targeting the populace in Ukraine. The social media campaigns targeting

Ukrainians were often conducted with the aim of dismaying, distorting, dismaying, or distracting the populace. One of the most successful propaganda narratives from the onset of the war was the utilization of name calling as Ukrainian leaders were branded as Nazis, and Ukraine was described as an “Islamic State safe haven,” and a “hotbed for Chechen terrorists” (Snyder, 2023). Using social media, the Russian social media campaigns focused on creating alternative realities by popularizing sentiments such as Crimea is Russian, and that there was a danger that Ukraine and NATO would attack Crimea.

Russian social media campaign has focused on generating large volumes of propaganda content that are disseminated in images, videos, texts, and audio recordings. Russia relies on multiple internet trolls, who are expected to meet a given quota of posts across different platforms. The utilization of multiple platforms is critical because multiple sources increases the perception of reliability, and persuasiveness of the messages. The flooding of messages on social media platforms has been effective in drowning out the alternative and competing messages. Within Russia, there is a significant focus in monitoring, and blocking and dissenting messages. Federal agencies such as Roskomnadzor play an active role of monitoring “illegal” activities on social media, and punishing any detected dissenting messages (Snyder, 2023).

Since the start of Ukraine-Russia war, the country has blocked or restricted access to social media apps such as Facebook, X, Instagram, and Viber. Through active monitoring of social media content, regulatory agencies have sent a clear message that government is watching, and this has created fear among the Russian populace, while creating an effective environment for government to shape narrative on the war (Ciuriak, 2022). Apart from the high volume, and publication in multiple social media platforms, Russia utilizes subtle signs of truth, such as accurate names, and photos of cities. By incorporating elements of truths in the disinformation campaigns, it makes it hard for individuals to identify the falsities with the text, images, and videos. The campaigns utilize the real news channels such as CNN, Al Jazeera, and BBC as they duplicate and dub their content, and generate fake news that are disseminated widely on social media.

Overall, Russia has utilized social media campaigns to delegitimize and demonize Ukraine, express a litany of grievances, and provides analogy of the causes of the war. At the start of war, Putin reflected on the importance of reunification, and for this to be achieved there was a need to delegitimize the country, by spreading information that Ukraine was not a real country. This was of course untrue since Ukraine is a founding member of United Nations. This was followed by social media campaigns that demonized Ukraine by claiming that it was full of Nazis, a preposterous claim given that the far right only got 2.25% of the total votes in the last election (Ciuriak, 2022). Social media was then utilized to provide a litany of grievances that included claim of robbing of historic Russian lands by previous Russian regimes, betrayal through continued NATO expansion, and the existential threat of mass destruction through forced assimilation of ethnic Russians. In addition, there was a claim that Ukraine was conducting genocidal campaigns against ethnic Russians, but the existing data shows that areas such as Donbas were already occupied by Russian forces.

3.3 Ukrainian Response to Disinformation Campaigns

In response massive disinformation campaign, Ukraine constituted a digital term that it referred to using different terms such as “IT Army”, “Ukraine Internet Army”, and “Ukraine Internet Army” (Walker, 2024). The extent of the role of the digital army is greater, as it extends beyond social media spaces into the battlefield. Social media has been recognized as a formidable machine that is not only useful in purchases of military equipment such as military drones, but also plays a critical role of marshalling volunteer forces on the internet. Ukraine defense department has recognize the critical role of the digital army, and it has officially assigned them four responsibilities: IT, fundraising, political influence, and information war (Walker, 2024). In areas such as Donetsk, Ukraine was able to get information from the locals on the movement of the troops on the ground, which enabled targeted attacks. Through information provided by the locals, Ukraine was able to identify the type of weapons used by the invading army, location of the combatants, and the possible attack strategies being deployed.

Social media is also being utilized to coordinate care and delivery of supplies between different organized groups, civil society groups, and humanitarian organizations. The digital army provides information to the public on where they can get military supplies, medical care, and basic amenities (Snyder, 2023). Civilians have been very effective at creating a network of volunteers and donors, which has enabled the government on getting major military supplies such as air defense systems, vehicles, drones, and ammunitions.

The use of social media has been particularly effective in appealing to other countries to take actions against Russia. The images and videos of mutilated civilians, which include children wounded from shelling. The extent of the brutality meted out on civilians has painted Russia as a pariah state, and this has rallied support for Ukraine across the globe (Snyder, 2023). The social media campaign has encouraged countries to supply both humanitarian and military aid, with multiple voting against, and condemning the actions of Russia both on UN, and through their social media pages. Through social media, Ukraine has portrayed different images that have captured the indomitable spirit of the Ukrainian people. Social media posts have utilized a combination of detailed, visceral, and often horrific content which have been central to the global wave of resistance and condemnation.

Social media is being utilized by the digital army to counter fake news, and in some instances provides narratives that pre-empt disinformation from major battle field attacks. The major disinformation campaign that the digital army has been combating is the claim that Russia only target military installations and personnel. The digital army has responded by providing overwhelming evidence that Russia is continuously and intentionally targeting civilians. Ukraine has also utilized social media to target Russian population with information on the realities of what is taking place in the battle field. Adam (2022) recognizes that the attempt by Ukraine to appeal to the conscience of Russian population is less likely to succeed because of the extent of the media censorship in the country. Despite the censorship, Ukraine have been able to utilize platforms such as Telegram to reach out to the Russians with criticisms on the government, updates on military losses, and committed war crimes.

However, it's important to note that the overutilization of social media by Ukraine to bolster the reality of the war has had its negative impacts. Ukraine suffered a significant

loss of credibility in after the successful capture of Bakhmut by the Russian army in 2022 (Walker, 2024). This was because a few days' earlier social media campaigns by Ukraine had convinced leading news agencies such as Reuters to report that Russian forces were in retreat. The discontinuity in narration has the negative impact of extending ground battle more than necessary, instead of undertaking strategic withdrawals on time. As Argued by Walker (2024), the media-inflated offensives can create overconfidence among the troops resulting in depletion of defensive capabilities and wasting of lives.

3.4 Artificial Intelligence

The current social media environment has been characterized with the use of artificial intelligence based tools to generate and amplify disinformation in the Russia-Ukraine war. One of the major concern with social media has been the underlying algorithms which have a significant impact on the contents that social media users have access to. Before the start of the Russia-Ukraine war, there were already concerns on social media algorithms, which prioritize extremist contents and fail to flag disinformation (Perez & Nair, 2022). The limitation of the algorithms is reflected in the reality that Facebook's algorithm has routinely promoted disinformation on Ukraine War, and platforms such as TikTok have become very instrumental in disinformation campaigns by different actors.

Increasingly AI driven tools such as chatbots and deepfakes are being utilized by different actors to spread disinformation. AI driven bots have been very effective in creating social media accounts that can mimic users as on social media networks, providing an efficient way to spread disinformation. Russian-linked have been utilizing bots to spread disinformation, as was seen during the 2016 election in United States of America, as well as throughout COVID-19 pandemic. At the start of the war, Russia deployed a massive bot-based campaign, and by the third quarter of 2022, Twitter had removed at least 75,000 fake bot-based accounts that were spreading propaganda campaigns against Ukraine (Perez & Nair, 2022). However, Twitter's attempts proved to be ineffective because of the scale and speeds with which bots were creating new accounts and generating content for disinformation. At the start of the war, deepfakes were utilized on social media to generate videos of Presented Zelensky and Putin giving fabricated statements.

4. CONCLUSION

The Russia-Ukraine conflict has vividly illustrated how social media has evolved from a tool for interpersonal communication into a powerful instrument of modern warfare. Once celebrated for its democratizing potential and ability to connect diverse communities, social media now plays a central role in shaping geopolitical narratives, mobilizing public opinion, and conducting information warfare. The case of this war shows how digital platforms have become contested battlegrounds, where both state and non-state actors engage in real-time manipulation of facts, creation of alternative realities, and global influence campaigns.

Russia's disinformation strategies have demonstrated a systematic approach to psychological and narrative warfare, relying on high-volume content, repetition, and cross-platform dissemination to overwhelm counter-narratives. In contrast, Ukraine's innovative

use of digital volunteers and social media activism has demonstrated how grassroots digital mobilization can support national defense and sway international sentiment. However, both sides' reliance on social media has not been without costs—misinformation, overconfidence, and narrative dissonance have occasionally undermined credibility and strategic effectiveness.

Furthermore, the increasing role of AI tools such as bots and deepfakes has added a new layer of complexity, enabling actors to scale their influence campaigns with unprecedented efficiency. The challenge of discerning truth from fabrication is now a structural issue in the information ecosystem, making regulation, literacy, and digital responsibility more crucial than ever. Ultimately, the conflict reveals that warfare is no longer confined to physical terrain as it now thrives in the digital realm, where the battle for perception may prove as decisive as the battle for territory.

REFERENCES

- Adams, P. (2022). How Ukraine Is Winning the Social Media War. BBC News. Retrieved from: <https://www.bbc.com/news/world-europe-63272202>.
- Canetti, E. (1984). *Crowds and power*. Macmillan.
- Ciuriak, D. (2022). The Role of Social Media in Russia's War on Ukraine. Retrieved from: https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4131351_code1316940.pdf?abstractid=4078863&mirid=1
- Dizikes, P. (2018). Study: On Twitter, false news travels faster than true stories. MIT News, 8, 2018.
- Floridi, L. (2010). Ethics after the information revolution. *The Cambridge handbook of information and computer ethics*, 3-19.
- Olcott, A. (2010). *Institutions and Information: The Challenge of the Six Vs*. Washington, DC: Institute for the Study of Diplomacy, Georgetown University.
- Paul, C., & Matthews, M. (2016). The Russian "firehose of falsehood" propaganda model. *Rand Corporation*, 2(7), 1-10.
- Perez, C & Nair, A. (2022). Information Warfare in Russia's War in Ukraine. Retrieved from: <https://foreignpolicy.com/2022/08/22/information-warfare-in-russias-war-in-ukraine/>
- Popova, M. (2015). *Crowds and Power: Nobel Laureate Elias Canetti on the Four Attributes of Crowds and the Paradox of Why We Join Them*. Retrieved from: <https://www.themarginalian.org/2015/03/06/crowds-and-power-elias-canetti/>
- Prier, J. (2017). *The command of the trend: Social media as a weapon in the information age* (Doctoral dissertation, School of Advanced Air and Space Studies).
- Snyder, H. M. (2023). *Post, Share, Like: The Role of Facebook in the Russo-Ukrainian War*. Retrieved from: <https://stars.library.ucf.edu/honorstheses/1488/>
- Taddeo, M. (2012). Information warfare: A philosophical perspective. *Philosophy & Technology*, 25, 105-120.
- Walker, G. S. (2024). From Instagram to Infowar: The Weaponization of Social Media and its Consequences. *Emory Int'l L. Rev.*, 38, 673.