

BULLETIN OF 'CAROLI' NATIONAL DEFENCE UNIVERSITY

https://buletinul.unap.ro/index.php/en/

Mechanisms of Disinformation Amplification in Hybrid Warfare: The Case of the Conflict in Ukraine

Master's student Rafał ROMAŃSKI*

*The Józef Goluchowski University of Applied Sciences, Poland e-mail: romanski@goluchowski.edu.pl

Abstract

This article presents an interdisciplinary analysis of disinformation amplification mechanisms within the context of contemporary hybrid warfare, with particular emphasis on the armed conflict in Ukraine. The study aims to identify and characterize the complex processes that amplify false narratives, influencing both social perception and the informational environment. The main research question posed is: What disinformation amplification mechanisms are employed under conditions of hybrid warfare, and how do they affect the shaping of public awareness and conflict perception? The methodology combines qualitative content analysis, source triangulation, and network analysis of selected case studies, including manual analysis of hashtags and discussion groups. These include instances of denialism related to the Bucha massacre, heroic mythology (the "Ghost of Kyiv"), false flag operations (Zaporizhzhia Nuclear Power Plant), amplification on TikTok and Telegram, the functioning of botnets, and #IStandWithRussia campaigns. The findings indicate that disinformation is not a one-off communicative act but an iterative structure supported by three interrelated domains: propaganda communication, cognitive psychology, and algorithmic technologies. In conclusion, the research question is addressed, and five strategic action areas are proposed: media literacy education, cooperation with digital platforms, international coordination, support for independent media, and the development of cognitive resilience within society. The article contributes a novel theoretical framework in the form of a "hybrid tripartite model" (communication-perception-algorithms), which may serve as a useful analytical tool in future studies of disinformation in conflict situations.

Keywords:

disinformation; hybrid warfare; TikTok; propaganda; social perception; informational narratives; content analysis; fake news; algorithms; campaigns.

Article info

Received: 2 May 2025; Revised: 30 May 2025; Accepted: 3 June 2025; Available online: 27 June 2025

Citation: Romański, R. 2025. "Mechanisms of Disinformation Amplification in Hybrid Warfare: The Case of the Conflict in Ukraine." Bulletin of "Carol I" National Defence University, 14(2): 7-32. https://doi.org/10.53477/2284-9378-25-13

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With the onset of the Russian Federation's armed invasion of Ukraine in February 2022, an intensified and coordinated disinformation campaign was observed, constituting an integral component of modern hybrid warfare operations (Bryjka 2022). In such a framework, military actions are tightly synchronized with political, cyber, and propaganda operations, forming a cohesive system of strategic pressure. In the academic literature, hybrid warfare is defined as "a combination of conventional military and non-military actions that are synchronized to maximize operational effects" (Surdyk 2022, 88-90). Within this context, disinformation emerges as one of the key subversive tools used to destabilize the adversary and consolidate internal support.

Particular significance is attributed to contemporary digital communication, whose architecture, based on social media and dynamic content platforms, enables the instantaneous dissemination and repeated replication of messages across various formats (Allcott and Gentzkow 2017). This form of amplification results in a heightened propaganda potential for each generated narrative. Consequently, disinformation content not only spreads rapidly but also, due to recipients' cognitive mechanisms, it becomes entrenched and more impactful over time (Bryjka 2022).

To accurately define the phenomenon of disinformation, it is necessary to adopt an interdisciplinary approach that incorporates technological, social, and psychological dimensions. Interactions among these elements give rise to complex amplification mechanisms, understood as structures that allow for the repeated exposure of recipients to identical or thematically aligned false messages, ultimately leading to their deep internalization (NATO Review 2024).

Given the growing strategic importance of disinformation as a tool of hybrid warfare, the study poses the following research question: What disinformation amplification mechanisms are employed in hybrid warfare conditions, and how do they influence the shaping of public awareness and conflict perception?

This study draws upon extensive empirical material, including selected case studies of representative propaganda narratives embedded in the media environment of the conflict, as well as literature from the fields of communication studies, social psychology, and security sciences.

The article proposes an expanded theoretical framework designed to illustrate the multilayered nature of the phenomenon under investigation. Special attention is devoted to analyzing how state-controlled and social media platforms shape propaganda narratives; how recipients' cognitive mechanisms contribute to the internalization of false content; and how digital algorithms accelerate and intensify the circulation of such narratives within the information space. The subsequent sections of the article also examine the impact of these mechanisms on public awareness and political attitudes, particularly in the context of armed conflicts and the destabilization of the international communication order (Darczewska 2015).



Theoretical Framework

The theoretical framework adopted in this study focuses on three fundamental and interrelated pillars that condition the amplification of disinformation within the environment of contemporary information warfare. These include: communication and propaganda, cognitive psychology, and algorithmic mechanisms operating within digital media (Auswärtiges Amt 2024).

In the first dimension—the communicative one—disinformation is interpreted as an integral component of broader information operations, encompassing both political and propagandistic messaging (Allcott and Gentzkow 2017). The aim of such operations is to dominate the information space through the systematic replication of selected messages across multiple media channels, utilizing techniques of content multiplication. In the context of hybrid warfare, state-controlled media, such as television networks and news agencies, as well as affiliated communication networks, construct narrative messages based on selectively chosen "facts" and visuals aligned with a particular political agenda. It has been noted that the use of tactics aimed at discrediting press reports and disseminating disinformation has long been a fundamental tool of propaganda employed by the Russian Federation (Reuters 2024a). A key mechanism here remains the construction of a coherent propaganda narrative, whose impact is reinforced by its repetition and presence across multiple parallel information sources. Such content often utilizes emotionally charged language and powerful symbols—phrases like "the community against the enemy" or "external threat"—which directly target intuitive group responses. Over time, propaganda aims to impose an alternative version of reality in which one's own military activity is relativized, morally whitewashed, while the opposing side's actions are demonized and distorted (Pomerantsev and Weiss 2014).

The second pillar of the theoretical framework is cognitive psychology, which examines how human mental processes and enduring cognitive dispositions both facilitate the spread of disinformation and impede its correction. Individuals routinely employ heuristics, mental shortcuts that simplify complex judgments by relying on readily available cues, such as assuming that widely shared claims are credible or that sources with authoritative trappings must be reliable. While these heuristics conserve cognitive effort under uncertainty, they can lead to systematic errors when exploited by disinformation actors who engineer repeated exposure to falsehoods, thereby fostering a misleading sense of familiarity (the illusory truth effect). When heuristics interact with cognitive biases—systematic deviations from rational judgment driven by motivational and emotional factors—the result is an environment in which false narratives gain undue plausibility. For example, confirmation bias directs attention toward congenial information and away from contradictory evidence; availability bias causes overestimation of events that are most easily recalled; and motivated reasoning prompts individuals to counter-argue unwelcome facts while accepting supportive falsehoods. Emotional framing through fear, anger, or pride further diminishes

analytical scrutiny, allowing disinformation to embed itself in memory and resist even explicit corrections (Lewandowsky et al. 2022).

Beyond these universal vulnerabilities, stable individual differences in cognitive style critically modulate susceptibility to disinformation. Dogmatism, defined as rigid, closed-minded certainty in one's beliefs, predisposes individuals to accept congenial false narratives and reject corrective evidence without reflection. In contrast, those high in actively open-minded thinking (AOT) habitually question their assumptions, fairly evaluate opposing viewpoints, and revise beliefs when warranted, thereby mitigating common biases. Likewise, a strong need for cognition (NFC)—the inclination to engage in and enjoy effortful, analytical deliberation—encourages deeper scrutiny of dubious claims rather than reliance on intuitive shortcuts. An emergent protective dimension, epistemic sophistication, captures appreciation for the provisional, complex, and evidence-based nature of knowledge; epistemically sophisticated thinkers demand robust corroboration, recognize uncertainty, and resist simplistic or conspiratorial explanations. Empirical evidence from Mustață and the academic team demonstrates that lower dogmatism combined with higher AOT, NFC, and epistemic sophistication significantly enhances accuracy in distinguishing true from false security and defence news among Central and Eastern European audiences. These findings underscore the fact that educational interventions aimed at cultivating open-minded, analytical thinking and a nuanced understanding of knowledge can materially strengthen psychological resilience to manipulative information in hybrid warfare contexts (Mustață et al. 2023).

The third component comprises algorithmic mechanisms of digital media platforms, which significantly shape the distribution and amplification of content. Recommender algorithms, particularly those used by social media platforms, automatically promote content with high engagement potential. This results in a preference for sensational or controversial materials, regardless of their factual accuracy. Platforms such as TikTok, Facebook, and Twitter foster the creation of information bubbles and filter bubbles, which limit content diversity and expose users primarily to information aligned with their previous preferences. Research conducted by Ciampaglia and Menczer has shown that algorithms not only accelerate the spread of false content, owing to its emotional appeal, but also reinforce existing biases, leading to the formation of closed informational environments known as echo chambers (Ciampaglia and Menczer 2018). An experiment conducted by NewsGuard demonstrated that a newly created TikTok account can quickly become flooded with disinformation, often presented without clear distinctions between factual reporting and manipulation. Moreover, in highly polarized online communities, even neutral content can be distorted and infused with false contextual layers. Finally, the coordinated activity of botnets and troll networks artificially boosts the number of likes and shares, thereby increasing the visibility of disinformation narratives within the digital ecosystem (Ciampaglia and Menczer 2018).



The application of such an integrated approach enables a deeper understanding not only of the causes behind the emergence of disinformation in the context of hybrid warfare but also of the mechanisms that drive its rapid dissemination. Each of the components discussed does not operate only independently, but also synergistically, exerting mutual influence and leading to a reinforcement effect (Pomerantsev and Weiss 2014).

Particular emphasis is placed on the fact that digital media algorithms have the capacity to massively replicate messages engineered by propaganda apparatuses, thereby granting them high visibility and influence within the information space. This type of exposure triggers specific cognitive responses in recipients, resulting in the deeper entrenchment of disinformation narratives, the polarization of public opinion, and significant challenges in objectively evaluating the content being consumed.

The described feedback loop among communicative, algorithmic, and psychological structures clearly underscores the need to conceptualize disinformation as a complex systemic phenomenon—one that requires interdisciplinary analysis and multidimensional counterstrategies.

Methodology

The study employed a qualitative research design based on the analysis of selected case studies. Several representative examples of propaganda narratives that emerged in the media landscape during the ongoing conflict in Ukraine were selected. Among the cases analyzed were narratives involving Russian denialism with anti-Soviet undertones, constructs of "pro-Ukrainian" wartime mythology, as well as organized disinformation operations conducted through social media platforms (OHCHR 2025).

The primary research method applied was content analysis, complemented by comparative discourse analysis. In the initial phase of the study, sources and communication channels responsible for disseminating selected narratives were identified. The analysis encompassed both traditional media, such as state television, news portals, and press agencies, and social media platforms, including Twitter/X, Telegram, TikTok, and YouTube. The study examined not only original content but also derivative versions such as translations and audiovisual adaptations. This enabled the identification of patterns of message multiplication and dissemination.

The analysis involved systematic tracking of specific hashtags associated with selected narratives on the identified platforms. In the case of the Bucha massacre, hashtags such as #BuchaFake, #KievStaged, #RussianTruth, and #NatoPropaganda were observed for their frequency and co-occurrence. For the #IStandWithRussia campaign, key hashtags like #IStandWithRussia, #IStandWithPutin, #ISupportRussia, and #PutinIsRight were monitored.

The study identified and analyzed content from a variety of social media groups and pages. This included official state media accounts (e.g., Russian TV channels on YouTube, official Kremlin Telegram channels), pro-Kremlin news aggregators (e.g., fabricated Facebook pages mimicking legitimate media, Telegram channels like "War on Fakes" or "Truth from Moscow"), anonymous forums (e.g., discussions on 4chan related to false flag operations), and viral user-generated accounts on platforms such as TikTok and Twitter/X. The identification process involved searching for keywords related to the conflict and specific narratives (e.g., "Bucha massacre denial," "Ghost of Kyiv myth," "I stand with Russia"). Once initial accounts or groups were found, a snowball sampling technique was applied, following links, shared content, and user mentions in order to discover interconnected networks.

In this study, approximately 50–70 Telegram channels, 80–100 Facebook groups/pages, and numerous individual accounts on Twitter/X and TikTok were analyzed. This qualitative immersion in the data allowed for the observation of content dissemination patterns, user engagement, and narrative evolution over time. In the case of the #IStandWithRussia campaign, specific groups such as "The West United for Russia" and "International Supporters of Russia" on Facebook were identified as actively participating in content dissemination. Observation also revealed that many viral tweets originated from "small accounts" (under 500 followers) that rarely mentioned Russia before March 2022, suggesting their deliberate creation or repurposing for the campaign.

Empirical data were collected between 2022 and 2023 through continuous, ad-hoc monitoring of the identified platforms and media. This involved daily observation of trends, capture of screenshots and video segments of key disinformation content, and recording specific post characteristics (e.g., date, platform, associated hashtags, type of account). The identification of "derivative versions" (translations, audiovisual adaptations) was a process of comparing visual elements and keywords across different language versions of platforms or, where applicable, through reverse image searches. In the case of TikTok, analysis involved observing how "emotionally recontextualized" content was created, noting the use of suggestive captions, dramatic soundtracks, or voiceover commentary that altered the original meaning of authentic materials. This required careful, frame-by-frame observation of video content.

In subsequent stages, the method of data triangulation was employed. This involved comparing information drawn from different types of sources: press materials, reports by disinformation monitoring organizations, and findings from academic literature. This approach made it possible to verify the reliability of the analyzed narratives by comparing propaganda content with results from investigative journalism and reports published by independent research institutions.

The analysis was also contextualized within both historical and geopolitical frameworks. The historical context accounted for established patterns of Russian wartime



propaganda, while the geopolitical context influenced how disinformation messages were formatted. Empirical data were collected between 2022 and 2023, allowing for the observation of narrative evolution in response to the changing dynamics of the conflict. Quantitative analysis on a broad scale was deliberately excluded in favor of detailed qualitative descriptions and interpretations of selected cases, enabling the capture of the complexity and fluidity of the phenomena under study.

Throughout the research process, a critical distance toward the materials under analysis was maintained, applying principles of objective evaluation and multiperspectival interpretation, including both Russian and Ukrainian narratives. Particular attention was paid to the reliability and transparency of sources. The study drew primarily on data from reports issued by renowned research institutions and organizations specializing in counter-disinformation efforts, such as EUvsDisinfo, Atlantic Council's DFRLab, and the Institute for Strategic Dialogue—as well as from reputable international media outlets, including Reuters, Associated Press, and The Guardian (Reuters 2022).

Case Study:

As a preparatory step toward the detailed analysis of selected cases, the following table presents a comparative overview of their key parameters: type of narrative, primary sources of dissemination, amplification mechanisms, and dominant cognitive mechanisms on the part of the audience.

The Bucha Massacre: Denialism and the Propaganda of Amplified Falsehoods

One of the first spectacular and symbolically significant instances of disinformation-driven propaganda during the Russian invasion of Ukraine was the discovery of civilian bodies on the streets of Bucha, a Kyiv suburb, in March 2022. Visual materials released by the Ukrainian side—including photographs and video footage—documented the bodies of murdered residents, many with tied hands and visible execution-style wounds, clearly indicating their defenselessness at the moment of death (Lajka and Seitz 2022).

In response to the publication of this evidence, Russian state authorities and pro-Russian media immediately contested its authenticity. The Kremlin's narrative was framed around the claim that the footage was a "monstrous fabrication" designed to discredit the Russian Army (Reuters 2024a). Kremlin spokesperson Dmitry Peskov, citing Russian state television, described the materials as a "tragic but well-staged media spectacle." Russian news broadcasts repeatedly aired edited clips allegedly showing victims moving their fingers or changing position on camera, implying that the events had been staged. These materials were widely disseminated by state media and pro-Kremlin social networks (Lajka and Seitz 2022).

The denialist narrative spread in the form of a media cascade. Disinformation was disseminated through multiple channels—beginning with official state media,

TABLE NO. 1 Comparative Overview of Disinformation Cases in the Context of Hybrid Warfare

Case	Type of narrative	Main source of dissemination	Amplification mechanisms	Cognitive mechanisms
Bucha (2022)	Denialism (war crime denial)	Russian state media, government agencies	Media cascades, bots, memes	Illusory truth effect, confirmation bias
Ghost of Kyiv	Mobilizing myth	Grassroots, social media platforms	Meme repetition, public media adoption	Recency effect, halo effect
Zaporizhzhia Nuclear Plant	Fear/Disaster narrative	Pro-Kremlin channels, Telegram	Multilingual broadcasts, dramatization graphics	Fear heuristic, availability bias
False flag (nuclear threat)	Provocation narrative	Disinformation networks on 4chan/Twitter	Cross-platform citation, shadow sources	Authority heuristic, moral panic
TikTok (2022–2023)	Viral/emotional narrative	TikTok algorithm, viral user accounts	For You algorithm, no moderation, virality	Novelty bias, emotional impact
Telegram (2022–2023)	Dispersed/unsuperv ised narrative	Telegram channels (Russia, Ukraine)	Reposting, lack of labeling, networked users	Belief perseverance, in-group cognition
#IStandWithRussia Campaign	Pro-Kremlin/Anti- Western propaganda	Coordinated social media networks, influencers	Hashtag campaigns, influencer networks, bots, "whataboutism"	Confirmation bias, illusory truth effect, polarization

followed by bloggers and online commentators, and culminating in numerous social media accounts across platforms such as Facebook, Telegram, and YouTube. Within a short period, many pro-Russian accounts—including automated bots—began simultaneously publishing identical video segments and images containing manipulated content. Content analysis revealed consistent use of denialist hashtags, including #BuchaFake, #KievStaged, #RussianTruth, and #NatoPropaganda, across a variety of platforms. These hashtags were frequently present in posts from official Russian diplomatic accounts on Twitter/X, as well as on Telegram channels such as "War on Fakes", and in Facebook groups such as "Russia's True Story". Observation of these channels—encompassing over 30 different pro-Kremlin Telegram channels and 50 Facebook groups/pages—revealed synchronized posting patterns, often



occurring within minutes of official Kremlin statements. This rapid and identical dissemination of content from seemingly disparate sources, including accounts displaying bot-like characteristics (e.g., high posting frequency, repetitive content, minimal individual engagement), strongly suggested a coordinated campaign. The narrative was subsequently translated into foreign languages and adopted by pro-Russian media outlets and activists operating in Western Europe, thereby expanding its reach and facilitating its internationalization (Reuters 2022).

From the perspective of social psychology, this case illustrates the effective use of the illusory truth effect. The repeated exposure to identical content—the same video sequences and commentary quoted by multiple sources—reinforced the perceived credibility of the message. Repetition contributed to the internalization of these narratives, even when the content was demonstrably fabricated. The emotional intensity of the message, marked by dramatic visuals and a victim-centered narrative, further enhanced its impact on audiences inclined to embrace a "both-sides" framing (Lajka and Seitz 2022).

It is important to note, however, that the Ukrainian side and independent Western media simultaneously presented counter-evidence undermining the Russian narrative. One such example includes satellite imagery published by the Maxar company, which showed civilian bodies on the streets of Bucha long before Russian troops had withdrawn, directly contradicting claims of staging. Nevertheless, the sheer volume of disinformation, the coherence of the Russian narrative, and the selective trust of certain audiences toward preferred sources meant that corrective information failed to reach all segments equally, especially those susceptible to anti-Western messaging (Lajka and Seitz 2022).

In conclusion, the Bucha case exemplifies a mechanism in which state propaganda efforts were intensified by digital technologies (recommendation algorithms and content multiplication) and psychological factors (repetition effect and selective perception). The attempt to discredit evidence of war crimes proved partially effective among audiences who rely exclusively on Russian information sources, even though, in most international settings, this narrative was unambiguously identified as disinformation. As analyses indicate, such denialist narratives are particularly effective within organized propaganda ecosystems, where content is automatically disseminated and commented upon, further deepening polarization and antagonism between pro-Russian communities and other social groups (Lajka and Seitz 2022).

The "Ghost of Kyiv" Myth - Pro-Ukrainian Disinformation

One of the most intriguing cases of pro-Ukrainian narrative that achieved global recognition was the myth of the "*Ghost of Kyiv*." In the early days of the Russian invasion of Ukraine in February 2022, social media platforms such as Twitter and Telegram began circulating stories about an anonymous Ukrainian fighter pilot

who had allegedly shot down multiple Russian aircraft while defending the nation's capital. This figure was quickly shaped into a symbolic guardian of Kyiv, embodying the courage, determination, and resilience of the Ukrainian people in the face of armed aggression (Enlargement EC 2022).

Information about the "*Ghost of Kyiv*" spread rapidly, reaching viral status in both Ukrainian and international information spheres. Screenshots of tweets, video game footage mistakenly attributed to the pilot, memes, and visual materials—including T-shirts and merchandise featuring the silhouette of the "*ghost*"—were widely shared. Even former Ukrainian president Petro Poroshenko posted a tweet confirming the pilot's existence, further enhancing the myth's perceived credibility.

After several weeks, however, the Ukrainian Armed Forces acknowledged that the "Ghost of Kyiv" was not a specific individual but a symbolic construct, designed to boost public morale during wartime. This narrative—much like many Russian propaganda creations—was consciously and deliberately crafted with the approval and active participation of state structures. Ukrainian authorities allowed the myth to circulate as a tool to reinforce national unity, a sense of agency, and public readiness for continued resistance.

The denialist narrative spread in the form of a media cascade. Disinformation was disseminated through multiple channels—beginning with official state media, followed by bloggers and online commentators, and culminating in numerous social media accounts across platforms such as Facebook, Telegram, and YouTube. Within a short period, many pro-Russian accounts—including automated bots began simultaneously publishing identical video segments and images containing manipulated content. Content analysis revealed consistent use of denialist hashtags, such as #BuchaFake, #KievStaged, #RussianTruth, and #NatoPropaganda, across multiple platforms. These hashtags were frequently found in posts from official Russian diplomatic accounts on Twitter/X, as well as on Telegram channels like "War on Fakes", and in Facebook groups such as "Russia's True Story". Observation of these communication channels—including more than 30 pro-Kremlin Telegram channels and approximately 50 Facebook groups or pages—demonstrated highly synchronized posting patterns, often occurring within minutes of official Kremlin announcements. This rapid and uniform dissemination from seemingly unrelated sources, many of which exhibited characteristics typical of inauthentic behavior (e.g., high posting frequency, duplicated content, minimal original engagement), strongly indicated a centrally coordinated campaign. The narrative was later translated into several foreign languages and adopted by pro-Russian media actors and activists operating in Western Europe, significantly amplifying its reach and facilitating its international diffusion (Euro News 2022).

Elements of the communication network—including independent media, bot accounts, and digital content creators—replicated a coherent message centered on



emotional heroism. Communication analysis reveals that cognitive mechanisms such as the repetition effect and the recency effect played a particularly important role in this process. Each new post about the "*Ghost of Kyiv*" renewed public interest in the existing narrative. New TikTok and Twitter accounts quickly introduced additional content that appeared to confirm the pilot's existence (EU DisinfoLab 2022).

Despite the official debunking of the myth in April 2022, when real fallen pilots were identified and it was confirmed that no individual matching the "*Ghost of Kyiv*" description had existed, the narrative re-emerged cyclically in public discourse. Every new report of Ukrainian air force success revived the myth, assigning it fresh symbolic value. Even after the revelation of its fictional nature, content related to the "*Ghost of Kyiv*" continued to circulate, indicating a strong emotional attachment to the symbol and the influence of the belief perseverance effect (Euro News 2022).

In this case, the mechanism of narrative amplification was rooted in a dynamic social network. The narrative campaign moved from official state channels to independent creators and then to a wide base of individual users. Although initially intended to mobilize and inspire national defense, the case also highlights the dual nature of amplification: even positive, patriotic narratives can serve disinformation functions if they spread without verification or epistemic reflection (Euro News 2022).

The "*Ghost of Kyiv*" case also demonstrates that propaganda in hybrid warfare does not necessarily carry overtly negative informational content. It may be based on intentional overinterpretation that, on one hand, mobilizes audiences, and on the other, blurs the line between factual reporting and wartime mythology. In the long term, this myth not only bolstered societal morale but also illustrated how easily information about a single event, such as the alleged downing of four MiG fighters, can spread unchecked when embedded within a desirable narrative framework (Reuters 2024b).

It is also worth noting that such narratives, despite their "positive" character, can paradoxically undermine trust in fact-checking institutions. Following the myth's debunking, the message of "devastating success by the Ukrainian air force" remained active in the media ecosystem, as confirmed by numerous fact-checking studies. At the same time, some audiences perceived the correction as a symbolic "defeat" of the positive myth, which may have reduced their motivation to verify future information (Euro News 2022).

False Flag Operations - Fabricated Nuclear Provocations

During the course of the armed conflict on Ukrainian territory, numerous narratives emerged invoking the concept of so-called false flag operations—that is, suspicions that one party was planning a provocation in order to blame the adversary for a violent or catastrophic event. One of the most prominent examples of such a narrative involved accusations by the Russian side claiming that Ukraine—allegedly supported by the United States—was planning a terrorist attack on its own territory. According to this

narrative, the presumed target of such a provocation was the Zaporizhzhia Nuclear Power Plant, whose destruction would ostensibly serve as a pretext to accuse Russia and secure international support (US Department of State 2025).

In response, the Ukrainian side and allied expert organizations proposed an inverted scenario: namely, that the Russian Federation might be manipulating visual documentation (e.g., photographs of damaged infrastructure) or fabricating reports of alleged shelling in order to incite panic within the international community. These counter-narratives were reinforced by screenshots and sensational articles circulated by pro-Russian media. Such content was then disseminated a masse through communication platforms such as Telegram and by accounts identified as trolls or automated bots (EEAS 2025a).

The amplification mechanism behind this disinformation relied heavily on the bandwagon effect and the phenomenon of simultaneous distribution. False reports were posted concurrently on multiple platforms—including Twitter, Telegram, and online forums—creating an illusion of ubiquity and public concern. Numerous unverified reports about a supposed plot involving "American nuclear charges" surfaced across digital media. Through consistent resharing, these stories rapidly achieved broad reach. Replication of the same messages—often near-identical in wording—occurred primarily within pro-Russian networks, reinforcing and multiplying their impact (US Mission OSCE 2024).

Semantic and cognitive analysis of this phenomenon reveals the use of the authority heuristic—a psychological mechanism whereby information originating from multiple "independent" sources is perceived as more credible. In practice, this meant that even channels known for disseminating disinformation, such as 4chan, Twitter bot accounts, or local pro-Russian media, gained a semblance of credibility simply by repeating the same narrative. The very presence of identical information in numerous locations endowed it with perceived authority, regardless of its actual veracity (Zanders 2023).

Western and Ukrainian media outlets, as well as fact-checking institutions, responded to these messages by intensifying counter-narratives—publishing materials designed to expose the alleged provocation plans. This contributed to a spiral of media escalation, in which each new accusation or detail sparked additional commentary and reactions, heightening emotional tension and deepening informational chaos (EEAS 2025a).

Crucially, this case underscores the insight that the goal of disinformation campaigns is not always to convince the public of a particular claim. Often, the primary objective is to induce cognitive disorientation. Fear-mongering around so-called "nuclear terrorism" enabled the construction of a narrative of systemic threat on Ukrainian territory. On one hand, it served to disorganize civil society, and on the other, it provided rhetorical justification for the Russian Federation's military actions.



According to findings published by the Atlantic Council, accusations regarding planned false flag operations were actively disseminated on digital platforms such as Twitter and 4chan as deliberate fabrications aimed at inciting fear and shifting the blame for potential threats onto Ukraine¹. Even though many users identified such claims as untrustworthy, their pervasive presence in public discourse led to a tangible information blur, in which the boundary between truth and manipulation became increasingly difficult to discern (EEAS 2025a).

TikTok as a Source and Engine of Disinformation

Since early 2022, the TikTok platform—previously associated primarily with entertainment content—has transformed into one of the key arenas of information warfare. A particularly important role in this process has been played by the "For You" recommendation algorithm, which, based on a user's activity and interaction history, generates a continuous stream of tailored video content. The structure of this algorithm has proven especially susceptible to the dissemination of propaganda content, including disinformation related to the war in Ukraine (Hern 2022).

According to an investigation conducted by NewsGuard, a newly created TikTok account, after just 45 minutes of casual browsing, was exposed to a mix of accurate and entirely false information regarding the ongoing war. In none of these cases were fact-checking mechanisms or credibility warnings applied. The recommendation feed featured narratives that echoed well-known Russian propaganda tropes, such as claims about the existence of American biological laboratories on Ukrainian territory or suggestions of Ukrainian provocations. Accompanying comments often included expressions like "evidence" or "breaking revelation," which further enhanced the perception of these materials as credible (Hern 2022).

One of the key mechanisms behind disinformation amplification on TikTok is the logic of attention, which favors emotionally engaging and controversial content. Short video formats, with their capacity for immediate sharing, can reach viral levels very quickly. New users, who have yet to develop personalized preferences, are immediately exposed to conflictual or dramatic content, triggering a spiral of engagement that encompasses both factual and manipulated materials (Hern 2022).

Unlike traditional news services, TikTok does not provide adequate contextualization or editorial warnings. As a result, for an unprepared user, distinguishing between authentic and manipulated content becomes difficult from the first point of contact. TikTok's algorithm operates without regard for the credibility of sources, prioritizing instead those materials that generate the highest engagement metrics (Reuters 2025).

From a psychological standpoint, TikTok also exploits heuristic mechanisms, particularly the novelty heuristic and the fear heuristic. The rapid pace of content presentation gives users the impression that something highly significant is happening in real-time and demands immediate attention. Even factually accurate content, such

as genuine footage from war zones, is often emotionally recontextualized through suggestive captions, dramatic soundtracks, or voiceover commentary that alters its original meaning (Hern 2022).

The repetition effect plays an equally important role in this environment. When users repeatedly encounter similar materials, such as video compilations tagged with #UkraineWar, the recurring themes begin to be perceived as normative and more trustworthy. Mere repetition reinforces the social legitimacy and perceived reliability of a message. The absence of effective moderation of political content and the lack of disinformation labels allow any narrative, regardless of its factual basis, to reach a broad audience within a short timeframe (Hern 2022).

As a result, TikTok has become a platform where both debunking content and propaganda materials coexist simultaneously. This coexistence of contradictory messages creates confusion, especially for users lacking advanced media literacy skills. The outcome is an informational blend of accurate and false content, which ultimately weakens the user's ability to make sound judgments (Reuters 2025).

Telegram – A Soviet "Relic" as an External Information Channel

Telegram, a messaging application founded by Russian entrepreneur Pavel Durov, plays a complex and dual role in the context of the ongoing armed conflict in Ukraine. On the one hand, it is utilized by Ukrainian authorities and independent, often grassroots activist groups—referred to as "online armies"—as a tool for countering disinformation and disseminating counter-propaganda messages. On the other hand, Telegram also serves as a space for the intense spread of pro-Russian narratives, often manipulative and destabilizing in nature. What sets Telegram apart from other social media platforms is its minimal content moderation. Channel administrators—including official accounts of the Russian government, pro-government media, and extremist groups—are free to publish disinformation, hate speech, and overtly false materials without oversight (Reuters 2024b).

According to research by the Institute for Strategic Dialogue (ISD), pro-Russian channels on Telegram systematically disseminate conflicting versions of war events, manipulate visual content, and reinforce narratives aligned with messages from the Russian Ministry of Defense. Researchers describe Telegram as an "environment conducive to disinformation and hate speech".

The mechanism of content dissemination on Telegram is based on mass retransmission. Thousands of users subscribe to channels that automatically repost content from other sources, creating a multilayered chain of redistribution. The scale of this operation is substantial—even entirely unreliable content, such as falsehoods about refugees or unverified accusations of treason involving public figures (e.g., oligarch Ihor Kolomoisky), can gain massive reach and be instrumentalized to deepen social prejudice, fear, and fragmentation (Lajka and Seitz 2022).



Despite these risks, Telegram also fulfills a vital role in contexts where access to independent media is restricted, especially in areas affected by active warfare. In this sense, it may be seen as a hybrid platform, functioning both as a conduit for reliable information (e.g., daily security updates from Ukrainian authorities) and as a medium for the uncontrolled spread of propaganda.

The absence of warning labels, fact-checking indicators, or contextualization systems means that Telegram users must rely heavily on the perceived credibility of the sender. Channels known for pro-Russian discourse are often viewed by loyal subscribers as sources of "truthful" content, regardless of the actual informational quality (Lajka and Seitz 2022). Although Telegram does not employ selective recommendation algorithms to the same extent as platforms like TikTok or YouTube, its technical architecture, enabling instant message delivery across extensive contact networks, facilitates the amplification of low-credibility content (Reuters 2024b).

In this case study, a fundamental principle of digital communication becomes evident: the social impact of a message increases proportionally with the number of retransmissions. On Telegram, amplification is not primarily algorithmic but rather "*community-driven*", fueled by an organized network of loyal users who consistently share selected content regardless of its factual status. In this sense, Telegram operates as a decentralized tool for driving propaganda and disinformation, in which users become co-producers and distributors of strategically significant messages (EEAS 2025b).

The #IStandWithRussia Campaign

The #IStandWithRussia campaign emerged shortly after the full-scale invasion of Ukraine in early 2022 as a significant pro-Kremlin influence operation. Its core consisted of highly divisive, nationalist, xenophobic, and anti-imperialist narratives, often employing the "whataboutism" technique to deflect criticism of Russia by pointing to alleged Western hypocrisy (Institute for Strategic Dialogue 2022b).

Content analysis allowed for the identification of key themes that were consistently promoted in the campaign. These included narratives of "Traditional Civilization versus Western Democracy," accusations of Western hypocrisy (often with hashtags like #hypocrisy, #doublestandards, #terrorists), race-related content (e.g., #africansinukraine, #racism, #blacklivesmatter), and solidarity with Palestine (#palestine, #istandwithpalestine), aiming to draw false analogies and sow division. The campaign's objective was to undermine trust in Western institutions and exploit existing social divisions, particularly within the United States. The use of "whataboutism" and the strategic pairing of pro-Russian hashtags with broader social movements or anti-Western themes (e.g., racism, the Palestinian issue) revealed a sophisticated, multi-layered propaganda tactic, designed to resonate with diverse, often already predisposed audiences. This approach went beyond simple pro-Kremlin messaging, demonstrating a deliberate strategy to leverage existing grievances and divisions within target societies (Geissler et al. 2023).

The campaign was amplified through a complex network encompassing official Russian government accounts, state media (e.g., RT, Sputnik), and a significant number of inauthentic or suspicious accounts, including automated bots and small user accounts. Observation revealed that many viral tweets originated from "small accounts" (under 500 followers) that rarely mentioned Russia before early March 2022, suggesting their deliberate creation or repurposing for the campaign. These accounts often posted identical messages in a coordinated manner. The observation that viral content frequently originates from small, newly active, or repurposed accounts indicates a deliberate strategy to circumvent platform moderation and create the illusion of grassroots support, rather than relying solely on overt state channels. This highlights the adaptive nature of disinformation operations and their ability to mask their origins (Gragnani, Arora, and Ali. 2022).

Key vectors included platforms such as Twitter/X, Facebook, YouTube, and Telegram. On Facebook, groups like "The West United for Russia" and "International Supporters of Russia" actively shared content, generating thousands of interactions. YouTube channels branded "Western Truth" also contributed to the dissemination. Amplification was characterized by a "star interaction structure" for bots and a "hierarchical structure" for human users, as noted in broader research on social media bots. Tracing of retweets and mentions revealed the existence of distinct country-level communities engaged in the campaign, with influential figures from South Africa playing a significant role.

The campaign effectively leveraged cognitive biases such as confirmation bias, appealing to existing anti-Western sentiments, or political grievances. Repeated exposure to emotionally charged narratives, often presented as "alternative truths," contributed to the illusory truth effect. The deliberate targeting of specific demographics (e.g., MAGA supporters in the US) and the exploitation of existing internal political divisions demonstrate a sophisticated understanding of audience psychology and societal fragmentation. This is not merely a general exploitation of cognitive biases, but a strategic application of psychological manipulation against specific, vulnerable segments of the population, which leads to deeper societal divisions.

The use of "fabricated influencers" and "fake profiles" aimed to build perceived credibility and activate the authority heuristic, making false narratives appear more trustworthy by seemingly originating from diverse, independent sources. The focus on divisive issues (gender, immigration, race) was intended to inflame emotions and deepen political polarization, leading to cognitive disorientation and reduced trust in objective information (Institute for Strategic Dialogue 2022b).

Zaporizhzhia - Narratives of Nuclear Attacks

The Zaporizhzhia Nuclear Power Plant became one of the most high-profile and controversial topics in the information space surrounding the Russian–Ukrainian conflict. Both sides—the Russian Federation and Ukraine—repeatedly accused



each other of shelling or planning attacks on this critical infrastructure. A notable escalation of such narratives occurred in the summer of 2023, when reports surfaced regarding drone activity over the nuclear complex. These reports were accompanied by alarmist posts on social media, particularly on Twitter (Atlantic Council Digital Forensic Research Lab 2023).

The pro-Russian narrative, disseminated through Kremlin-controlled media outlets, was based on fabricated reports alleging that Ukraine was conducting shelling or planning incidents that could lead to radioactive contamination. According to this version, such acts were intended to discredit Russia internationally. In contrast, Ukrainian and Western media consistently asserted that these accusations were disinformation tactics aimed at instilling fear and justifying the Russian Federation's increased military presence in contested territory (U.S. Department of State 2025).

The amplification mechanism behind these narratives relied on the repeated exposure of the topic across diverse information sources. Telegram channels featured dramatized posts, infographics, and hypothetical radiation spread maps. Such content was often automatically translated into various languages and disseminated beyond the borders of Russia, occasionally triggering short-lived waves of panic among users of Western social media. This case exemplifies a narrative strategy employing the metaphor of "nuclear apocalypse"—regardless of factual grounding, the symbolic weight of nuclear threat acted as a powerful emotional trigger, activating widespread attention and public reaction (EEAS 2025b).

The reinforcement of this narrative was achieved through the repetition of identical phrases and key expressions across all major information channels linked to the Russian propaganda apparatus. Terms such as "*Ukrainian provocation*" or "*radioactive threat*" were reproduced without variation, crafting the illusion of a coherent and unified truth. At the same time, fragments of these messages circulated in various language versions—appearing in TV news, international media, and later reappearing online in the form of analyses, commentaries, and public opinions. In this way, propaganda assumed a multilingual and self-propagating form, where every retweet or repost, regardless of its intent, contributed to extending the reach of the narrative (Zanders 2023).

An informational feedback loop was also observed: the more intense the military tensions at the front, the more vigorously the "nuclear threat" theme was echoed in the media. This messaging served both manipulative and performative functions: it influenced public opinion and acted as a rhetorical foundation for demands of a "global response" from the international community (EUvsDisinfo 2023).

It must also be acknowledged that the Ukrainian side employed similar propagandistic techniques, attributing responsibility for all damage to the nuclear plant to Russian forces. Both parties utilized parallel strategies to amplify their messaging, relying on the repetition of key formulations (e.g., "Russian provocation" vs. "Ukrainian provocation") and emotionally charged language. As noted by the

Associated Press, propaganda, regardless of its origin, has become one of the most significant instruments employed in this armed conflict (Zanders 2023).

The very repetition and prominence of the Zaporizhzhia nuclear plant in public discourse, regardless of actual events on the ground, had a profound impact on public opinion. Narratives of alleged attacks and threats attracted global attention and increased diplomatic pressure, even though they were often based on speculation lacking empirical evidence. The analysis of these messages shows that nuclear threat narratives function as effective tools for fear mobilization (via inflammatory messaging) and as mechanisms for obscuring real events, such as conventional air raids or ground operations.

The dissemination of such content is sustained by the mutual reinforcement of three primary factors:

- 1. Cognitive mechanisms particularly the fear effect and susceptibility to suggestion;
- 2. Social confirmation the quoting and resharing of identical messages by various users;
- 3. Technological ease of distribution via social networking systems.

This triadic convergence creates an environment highly susceptible to disinformation, in which emotionally charged topics, such as nuclear threat, serve as ideal vehicles for wartime narrative warfare.

Case Summary

The conducted case analysis, strengthened by detailed observation of campaigns #IStandWithRussia, reveals the existence of repetitive and mutually reinforcing mechanisms responsible for the effective dissemination of disinformation within the context of modern hybrid conflicts. In each of the examined cases, three core components were identified as enabling the successful functioning of disinformation campaigns: tight synchronization of messaging, multiplication of communication channels, and intense emotional engagement of recipients. Regardless of whether a narrative was directed toward internal audiences (e.g., citizens of the Russian Federation) or external ones (e.g., the international public), it achieved its objective by instilling uncertainty and generating social fragmentation.

From a communication theory perspective, disinformation was observed to operate on multiple levels simultaneously. Traditional media—such as television and print—set the baseline tone of the message, while social media platforms like Twitter/X, TikTok, and Telegram served as catalysts, facilitating the rapid and widespread diffusion of narratives among targeted audience segments. On a psychological level, a consistent exploitation of cognitive structures was evident, enhancing the salience of particular messages. Each analyzed narrative contained elements that aligned with pre-existing cognitive schemas, such as the figures of the enemy, the hero, or the existential threat, making them easier to internalize and embed in the audience's consciousness.



Psychological literature unequivocally shows that attempts to correct disinformation face significant obstacles, especially when false messages align with the recipient's pre-existing mental frameworks. This phenomenon was repeatedly observed in the analyzed cases: supporters of the Russian Federation persistently rejected evidence of the Bucha massacre, while pro-Ukrainian audiences clung to the "Ghost of Kyiv" myth, even after its official debunking.

On the infrastructural level, algorithmic mechanisms embedded in social media platforms played a critical role. As demonstrated by Ciampaglia and Menczer, digital environments are particularly vulnerable to disinformation due to the preference of recommendation algorithms for short-term, emotionally engaging content. These systems automatically increase the visibility of emotionally charged materials, and their underlying logic leads to a cognitive homogeneity effect—users are repeatedly exposed to similar content, reinforcing their initial beliefs and contributing to the polarization of informational ecosystems (Ciampaglia and Menczer 2018).

The analysis also identified high activity levels of automated bots and network scripts, particularly in cases linked to Kremlin-aligned messaging. Spikes in user engagement—thousands of retweets, likes, and reposts—were often observed immediately after the publication of content by pro-Russian sources, indicating deliberate and coordinated amplification of disinformation narratives (Ciampaglia and Menczer 2018).

The most significant conclusion drawn from this analysis is the identification of a three-part structure—communication, cognition, algorithm—as the core engine of disinformation's power in the realities of modern information warfare. This process begins with the initiation of a message within the realm of propaganda communication, proceeds through audience cognitive mechanisms that determine acceptance or rejection, and is ultimately amplified by digital technologies, which multiply the content geometrically (Ciampaglia and Menczer 2018).

This triadic structure is directly embedded in the doctrine of hybrid warfare. In this context, information campaigns and psychological operations constitute an integral part of nonlinear strategies, aimed at destabilization and narrative control, synchronized with military operations. Such a strategy offers conflict actors a powerful instrument for manipulating perception, both of their own populations and of international public opinion (EU Science Hub 2023).

Discussion

The analysis of the collected case studies clearly demonstrates that disinformation is not a one-off or incidental phenomenon, but rather an iterative process, characterized by repetition, mutual reinforcement, and deep entrenchment within communicative,

psychological, and technological structures. Each of the analyzed cases revealed the presence of three interdependent operational layers.

At the communicative level, the key factor was multi-channel message dissemination. Propagandistic narratives—even those not directly linked to internal objectives of the Russian Federation, such as the "Ghost of Kyiv" myth—were systematically replicated by the global digital community. Every additional distribution channel adopting the narrative automatically increased its visibility and reach. This supports the thesis that in the era of social media, audience response is no longer linear—a few key posts or pieces of content can initiate a cascade effect of amplification, as seen in the synchronized posting patterns of denialist content for Bucha or the rapid spread of the #IStandWithRussia campaign. (Hameleers, Bos, and de Vreese 2020).

From a psychological perspective, disinformation operates according to a pattern of "cognitive targeting and correction failure," wherein corrective efforts often prove ineffective. Once false information becomes anchored in audience consciousness, it is remarkably difficult to dislodge. Serial amplification—i.e., the repeated reintroduction of the same topic, as observed through the persistent use of specific hashtags in the Bucha and #IStandWithRussia campaigns—creates an illusion of increased credibility, a dynamic confirmed by research on the repetition effect by Fazio and colleagues. Furthermore, conflict-driven narratives activate heuristic mechanisms related to group identity and self-valorization, intensifying phenomena such as ingroup favoritism and outgroup hate. For example, representations of Ukrainians as heroic underdogs or systemic victims resonated strongly with Western audiences, while Russian propaganda reinforced narratives about a "Nazi threat" emanating from Ukraine, and the #IStandWithRussia campaign leveraged anti-Western and nationalist sentiments.

In the algorithmic context, studies by Ciampaglia and Menczer demonstrate that recommendation systems on social media platforms reward highly engaging content while entirely disregarding factual accuracy. These systems create feedback loops: the more frequently false information is encountered, the more likely it is to be perceived as true. These effects were particularly evident on TikTok and YouTube, where war-related content received immediate algorithmic support. Moreover, the presence of bot networks and automated scripts, manually identified through their repetitive posting patterns and unusual spikes in activity in the #IStandWithRussia campaign, contributed to the artificial amplification of disinformation, manipulating algorithms to boost reach and visibility.

Network analysis (so-called "second-degree" analysis) revealed the existence of tightly consolidated information cores. On Twitter, accounts spreading disinformation formed dense clusters, intensively retweeting one another, while high-authority accounts rarely cited fact-checking sources. Similar dynamics were observed on Telegram, where the repetition of identical messages produced a redundant media



environment, effectively obstructing the circulation of credible information among less informed users.

At the same time, it must be acknowledged that the Ukrainian side also conducted organized informational and psychological operations, focusing on mobilizing the public and countering enemy propaganda. Research by Sirinyok-Dolgaryova's team confirmed that Ukrainian channels employed similar narrative and technological strategies, reinforcing the conclusion that disinformation and propaganda are integral tools of hybrid warfare employed by all parties involved.

In conclusion, the findings give rise to the concept of the "hybrid tripartite model"—the interpenetration of communication, perception, and algorithmics in the amplification of disinformation. Each of the analyzed cases illustrates that none of these spheres operates independently: propaganda without support from online communities would not achieve mass reach, and media users, without sustained exposure to repetitive messaging, might return to more balanced sources of information. Amplification mechanisms thus function as interlinked flywheels: every new retweet, article, comment, or video increases the velocity and impact of circulation.

Conclusions

Based on the conducted analysis, it can be concluded that the mechanisms of disinformation amplification under hybrid warfare conditions are systemic and repetitive. In response to the stated research question, the study demonstrates that disinformation gains its effectiveness through iterative messaging, nonlinear reinforcement, and its capacity to embed itself in recipients' cognitive schemas. A fundamental conclusion of the study is the confirmation of a threefold interaction encompassing propaganda communication, cognitive processes, and algorithmic operations in the digital environment. According to communication theory, disinformation narratives serve not only to motivate political and military actions but also to intentionally polarize the adversary. Social psychology further indicates that the human mind is highly susceptible to repetitive stimuli—the illusory truth effect—and to identity-confirming mechanisms that lead to perceiving reality in binary terms such as "us versus them." These conclusions are consistent with the research of Stephan Lewandowsky, Giovanni Ciampaglia, and academic teams from the University of Oxford (Ciampaglia and Menczer 2018).

The case studies examined in this article show that direct communicative influence (e.g., state propaganda) gains multiple exposures through the technological infrastructure of social media, while audience reactions, shaped by biases, heuristics, and emotions, contribute to further replication. As a result, disinformation functions not as a unidimensional or self-replicating system but rather as the synergistic outcome of communication, perception, and technology, working together to ensure its persistence and impact in armed conflict contexts.

In light of these findings, the following recommendations are proposed to mitigate the effects of disinformation amplification:

- 1. Implement comprehensive media and digital literacy programs: Public awareness campaigns should equip citizens with the ability to critically analyze content. Skills in source evaluation, distinguishing fact from opinion, and understanding that visual appeal is not a proxy for truth are essential. Integrating mandatory media literacy education at all levels of schooling may significantly strengthen societies' cognitive resilience, in line with the concept of psychological inoculation, which scholars increasingly recommend as an effective preventive strategy against disinformation (RAND Corporation 2024).
- 2. Enhance cooperation between public institutions and digital platforms: governmental and non-governmental actors should engage in structured dialogue with digital platforms such as TikTok, Telegram, and Twitter/X to improve the labeling of disinformation and the verification of potentially destabilizing content. Best practices include graphical tags such as "verified information" and transparent user notifications regarding how recommendation algorithms work. While such efforts may not eliminate disinformation entirely, they increase the likelihood that users recognize warnings and reassess content (EEAS 2025a; EEAS 2025b).
- 3. Strengthen international coordination frameworks: Member states of organizations such as NATO and the European Union should continue to support initiatives like EUvsDisinfo, which enable effective monitoring and rapid response to emerging disinformation campaigns. Particularly important is the exchange of expert knowledge and the development of joint responses to information crises. Coordinated action by democratic states to preemptively counter a specific propaganda narrative before it achieves global reach is an example of effective deterrence. International institutions such as the UN or NATO should also work toward establishing legal frameworks for the penalization of black information operations conducted by aggressor states as elements of hybrid warfare (European Parliament 2025).
- 4. Support independent journalism in conflict zones: funding and promoting diverse media organizations, especially those engaged in investigative journalism, local reporting, and fact-checking, is essential to counteract informational monism. Grants for local newsrooms, training programs, and physical protection for journalists are vital measures for maintaining the functionality of information ecosystems under extreme conditions (OSCE Delegation France 2024).
- 5. Build long-term societal resilience: fostering trust in reliable sources and promoting a culture of verification can reduce vulnerability to disinformation. Encouraging intergroup dialogue and education based on critical thinking, in



accordance with the work of William J. McGuire and proponents of cognitive self-intervention, may serve as an effective response to polarized and extremist narratives (OSCE Permanent Council 2023).

The culmination of these observations is the recognition that contemporary hybrid warfare has become a war of minds and narratives. Each analyzed case confirms that control over the flow and amplification of information constitutes a strategic tool in the hands of conflict actors. Effective countermeasures, therefore, require a holistic approach that integrates technological regulation (e.g., algorithm governance), educational investment (e.g., audience competence development), and political coordination (e.g., multinational frameworks) as a complementary effort to conventional military operations. Future research should focus on the evolving dynamics introduced by emerging technologies such as artificial intelligence and deepfake techniques, to ensure that disinformation theory keeps pace with the realities of modern warfare.

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Funding Information

The author declares that no funding or financial support was received from any organization, institution, or individual for the research, design, execution, or writing of this work.

Conflict of Interest

The author declares no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.