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DISINFORMATION AS A FACTOR IN THE TRANSFORMATION OF THE POLITICAL SYSTEM: QUANTITATIVE ANALYSIS AND THE ROLE OF ARTIFICIAL INTELLIGENCE

This article examines disinformation as a factor in the transformation of the political system under conditions of digitalized political communication and large-scale information confrontation. The topic is especially relevant in the contemporary security environment, where disinformation no longer functions merely as a set of misleading messages but increasingly operates as a systematic instrument for influencing public opinion, undermining trust in institutions, intensifying political polarization, and reshaping democratic processes. The study adopts an analytical approach that combines political communication analysis with quantitative methods and artificial intelligence-based tools. Particular attention is paid to the capacity of quantitative analysis to identify patterns in the production, dissemination, amplification, and reception of disinformation across digital platforms. At the same time, the article explores the dual role of artificial intelligence: on the one hand, as a technology that facilitates the generation of deepfakes, synthetic narratives, and automated influence operations; on the other hand, as an instrument for detecting manipulated content, classifying disinformation narratives, and mapping coordinated information attacks. It is argued that the combination of quantitative methods and AI significantly expands the analytical capacity of political research by enabling a more precise assessment of how disinformation affects institutional legitimacy, political participation, and the functioning of democratic systems. The article concludes that disinformation should be understood not only as a media-related challenge, but also as a structural factor capable of transforming the political system, especially in contexts of war, hybrid threats, and algorithmically mediated communication.

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Дезінформація як фактор трансформації політичної системи: кількісний аналіз та роль штучного інтелекту

У статті досліджено дезінформацію як чинник трансформації політичної системи в умовах політичної комунікації та інформаційного протистояння. Обґрунтовано, що дезінформація функціонує не лише як сукупність оманливих повідомлень, а як системний інструмент впливу на громадську думку, довіру до інституцій, політичну поляризацію та демократичні процеси. Дослідження поєднує аналіз політичної комунікації з кількісними методами та інструментами штучного інтелекту. Показано подвійну роль ШІ: як засобу створення дипфейків, синтетичних наративів і автоматизованих операцій впливу, а також як інструмента виявлення маніпульованого контенту й класифікації дезінформаційних наративів. Доведено, що поєднання кількісного аналізу та ШІ розширює можливості політичних досліджень у вивченні впливу дезінформації на легітимність інституцій, політичну участь і функціонування демократії. Зроблено висновок, що дезінформація є не лише медійною, а й структурною проблемою, здатною трансформувати політичну систему, особливо в умовах війни, гібридних загроз та алгоритмічно опосередкованої комунікації.

Ключові слова: *дезінформація, політична система, штучний інтелект, кількісний аналіз, алгоритмічні платформи, дипфейк, великі мовні моделі, політична комунікація, інформаційна війна, демократичні інститути.*

Statement of the Scientific Problem. In the contemporary digital environment, disinformation appears not merely as a distortion of facts, but as a political factor that affects trust in institutions, political participation, polarization, and the legitimacy of public decisions. For democratic systems, this is of particular importance, since their resilience depends not only on formal institutions, but also on the reliability of political communication and the public recognition of procedures as legitimate. Recent studies show that disinformation operates through emotional triggers, manipulative framing, and the distortion of public discourse,

thereby changing the conditions under which political judgment is formed (Lim 23 ,2023; McLoughlin et al. 35 ,2024; Horban and Oliinyk 14 ,2024; Makukh-Fedorkova 16 ,2025; Stopkin 21 ,2024).

The problem becomes more acute in conditions of algorithmically mediated communication, where digital platforms not only transmit content but also filter, rank, and amplify it. In such an environment, manipulative messages may acquire a disproportionate political influence, especially when they appeal to fear, outrage, or identity conflicts. The situation is further complicated by the development of artificial intelligence, which simultaneously expands the possibilities for creating synthetic content and opens up new tools for its detection (Gauthier et al. 22 ,2026; McLoughlin et al. 35 ,2024; Shin and Shin 32 ,2026; Appel and Prietzel 41 ,2022; Hameleers, van der Meer, and Dobber 53 ,2024; Hameleers, van der Meer, and Dobber 35 ,2022; Lee and Shin 34 ,2022; Montoro-Montarroso et al. 22 ,2023; Makukh-Fedorkova 41 ,2025).

Under wartime conditions, disinformation performs an even more explicit political function: it is used to undermine trust in state institutions, weaken democratic resilience, provoke internal divisions, and delegitimize public authority. In this sense, it becomes part of a broader strategy of political destabilization that requires a more precise methodological response (Horban and Oliinyk 43 ,2024; Kulesza and Burdiak ,2023 33; Makarova 41 ,2024; Makukh-Fedorkova 32 ,2025; Matviienkiv and Bratakh 11 ,2024). Thus, the central scientific problem of the article lies in clarifying how disinformation, reinforced by the algorithmic environment and artificial intelligence technologies, influences the transformation of the political system, as well as how quantitative methods make it possible to identify and measure this influence (Bieliková, Pospíšil Macková, and Novotná 22 ,2025; Hamed, Ab Aziz, and Yaakub 31 ,2023; Kramer, Golovchenko, and Hjorth 32 ,2025; Montoro-Montarroso et al. 55 ,2023; Shin and Shin 43 ,2026).

The purpose of the article is to examine disinformation as a factor in the transformation of the political system and to determine the analytical value of combining quantitative methods with AI-based approaches in the study of its political effects.

Analysis of recent research. Contemporary studies relevant to this topic can be grouped into three analytical blocks: research on disinformation as a political phenomenon; works devoted to quantitative and computational approaches to its analysis; and studies on the role of artificial intelligence

in the creation and detection of manipulative content. Such a structure makes it possible to move consistently from the conceptualization of disinformation to the instruments of its empirical study and to emerging technological challenges.

The first block includes works in which disinformation is understood not only as false content, but also as a factor affecting trust in institutions, political legitimacy, and democratic resilience. In this context, conceptual distinctions between disinformation, misinformation, and malinformation are important, as are approaches that interpret disinformation as a mechanism for manipulating political perception (Lim 23 ,2023; Stopkin 11 ,2024). Some studies show that its political effect is especially intensified through emotionally charged content (McLoughlin et al. ,2024 35), particularly content that exploits outrage. In the wartime context, Ukrainian scholars additionally emphasize that disinformation is not only a media-related issue but also a security problem connected with the vulnerability of the information space and institutional resilience (Horban and Oliinyk 11 ,2024; Matviienkiv and Bratakh 12 ,2024).

The second block consists of studies devoted to quantitative and computational approaches to the analysis of disinformation (Hamed, Ab Aziz, and Yaakub 45 ,2023; Kramer, Golovchenko, and Hjorth ,2025 21). Their significance lies in the fact that they make it possible to study disinformation through measurable indicators, network patterns, and the analysis of large-scale datasets. These works focus on the problems of constructing reliable datasets, the automated classification of fake messages, the detection of hostile narratives using large language models, and the study of the speed (Vosoughi, Roy, and Aral 11 ,2018), scale, and cascade logic of the dissemination of false information in digital environments (Zhuravskaya, Petrova, and Enikolopov 2020; Allen et al. 10 ,2020). Taken together, this body of literature forms the methodological basis for the empirical analysis of the political effects of disinformation (Bieliková, Pospíšil Macková, and Novotná 25 ,2025; Gauthier et al. ,2026 32; Shin and Shin 41 ,2026).

The third block focuses on the dual role of artificial intelligence. On the one hand, AI expands the possibilities for creating disinformation through deepfakes, synthetic texts, and multimodal forms of manipulation that increase the persuasiveness of false content. On the other hand, it becomes a tool for detecting manipulative patterns (Appel and Prietzel 21 ,2022), classifying narratives (Lee and Shin 22 ,2022), and identifying coordinated

information operations (Hameleers, van der Meer, and Dobber 58 ,2022). Research in this area also shows that the effect of AI-generated content depends not only on its technical quality (Hameleers, van der Meer, and Dobber 73 ,2024), but also on context, trust, and the level of audience skepticism (Montoro-Montarroso et al. 23 ,2023). In the Ukrainian wartime context, this is especially important, since technologically sophisticated disinformation intensifies political and institutional vulnerability (Makukh-Fedorkova 22 ,2025).

Despite the growing number of such studies, there is still a lack of a comprehensive explanation of how exactly the combination of quantitative analysis and artificial intelligence helps to conceptualize disinformation as a factor in the transformation of the political system, especially in the Ukrainian wartime context. It is precisely this gap that defines the logic of the present article, which seeks to combine the conceptual, methodological, and technological dimensions within a single analytical framework (Gauthier et al. 2026; Kramer, Golovchenko, and Hjorth ,2025 56; McLoughlin et al. 35 ,2024; Montoro-Montarroso et al. 67 ,2023; Shin and Shin 93 ,2026; Vosoughi, Roy, and Aral 21 ,2018; Zhuravskaya, Petrova, and Enikolopov 43 ,2020; Erlich and Garner 45 ,2023; Pierri et al. 78 ,2023).

Presentation of the Main Material. Disinformation should be considered not only as a distorted message or a misleading communicative act, but also as an instrument capable of influencing the political system at several interconnected levels. Its impact extends beyond media content itself and affects political trust, perceptions of legitimacy, citizens' information behavior, the functioning of the public sphere, and the resilience of democratic institutions. In this sense, disinformation changes not only what citizens know about politics, but also how they interpret state decisions, evaluate political actors, and define their own place within the broader communicative space of politics (Lim 23 ,2023; Stopkin ,2024 43). One of the most serious consequences of disinformation is the erosion of trust in institutions. Democratic systems rely not only on formal rules, constitutional procedures, or legally defined powers, but also on public recognition of institutional credibility. When manipulative narratives systematically call into question the reliability of the government, parliament, electoral procedures, media, or security structures, they weaken the symbolic foundations on which political authority rests. Such narratives do not necessarily destroy trust instantly; however, their

repeated circulation contributes to the normalization of suspicion and, consequently, to delegitimization. In such a case, citizens begin to perceive public decisions not as the outcome of an institutional procedure (Osadtsa and Polishchuk 25 ,2025), but as the result of manipulation, conspiracy, or hidden interests (Makukh-Fedorkova 21 ,2025; Matviienkiv and Bratakh 23 ,2024; Stopkin 54 ,2024). This delegitimizing effect intensifies when disinformation is constructed around emotionally powerful and politically divisive frames. Recent studies show that manipulative content spreads especially effectively when it appeals to outrage, fear, moral anxiety, or resentment (McLoughlin et al. 35 ,2024).

Another important dimension of this process is connected with the transformation of citizens' information behavior. In a digital environment saturated with manipulative content, it becomes increasingly difficult to distinguish verified information from strategically constructed narratives. Such uncertainty produces several interrelated consequences: selective attention to ideologically comfortable messages, declining trust in professional media, growing dependence on informal channels of communication, and increased susceptibility to simplified explanatory models. Under such circumstances, not only trust in individual sources is undermined, but also the very possibility of reliable political communication as a basis for democratic deliberation. For democratic systems, this is particularly dangerous, since the weakening of epistemic trust complicates the maintenance of a shared political reality (Horban and Oliinyk 21 ,2024; Makarova 35 ,2024; Matviienkiv and Bratakh 11 ,2024).

Disinformation also affects the functioning of the public sphere by distorting the agenda and the hierarchy of visibility. Through repeated amplification, manipulative narratives are able to divert public attention away from substantive political issues and redirect it toward fabricated scandals, emotionally sharpened accusations, or conspiratorial interpretations. In this way, agenda displacement occurs: issues that require rational political reflection are pushed aside by stories constructed primarily to provoke reaction, confusion, or hostility. Algorithmic platforms intensify this process, since content that generates engagement usually receives greater visibility regardless of its epistemic quality. As a result, the public sphere becomes more vulnerable to the normalization of anti-institutional frames and hostile narratives (Nikolaienko 23 ,2025).

In wartime, these processes become even more significant. In the Ukrainian context, disinformation functions not only as a means of

misleading audiences, but also as a form of pressure on the political system itself. Its purpose is to weaken democratic resilience, discredit public authority, undermine social cohesion, and create the impression that state institutions are either ineffective or unworthy of trust. Such influence is especially dangerous because it strikes not only at individual political attitudes, but also at the communicative infrastructure through which political order is sustained. That is why disinformation should be interpreted as a strategic factor of political transformation: it operates through delegitimization, polarization, distrust of media, agenda displacement, and the normalization of hostile narratives, gradually changing the conditions under which the political system functions (Horban and Oliinyk 32 ,2024; Kulesza and Burdiak 21 ,2023; Makukh-Fedorkova 35 ,2025; Matviienkiv and Bratakh 45 ,2024).

If disinformation is considered as a factor in the transformation of the political system, it should be analyzed not only interpretively or descriptively, but also by means of methods capable of capturing observable patterns and measurable effects. It is precisely here that quantitative analysis acquires particular heuristic value. Its significance lies not in reducing political communication to a set of numerical indicators, but in making visible those structural dynamics that are difficult to grasp through qualitative observation alone. In the study of disinformation, quantitative analysis makes it possible to move from isolated examples to the identification of patterns of repetition, dissemination, amplification, and audience engagement, and thus to better understand how manipulative narratives acquire political significance (Hamed, Ab Aziz, and Yaakub 23 ,2023; Montoro-Montarroso et al. 43 ,2023).

The transition from the conceptual understanding of disinformation to its empirical analysis requires a clear operationalization of disinformation influence. Within the framework of this study, the unit of analysis may be an individual message, a news item, an audiovisual object, a narrative cluster, or a dissemination cascade, depending on which aspect of disinformation is being measured (Hamed, Ab Aziz, and Yaakub 2023; Kramer, Golovchenko, and Hjorth 2025; Leite et al. 2024). Independent variables may include the intensity of the appearance of a particular narrative, its thematic repetition, emotional intensity, signs of synthetic or AI-generated content, as well as indicators of coordinated dissemination; intermediate variables may include the level of audience engagement, the speed of replication, the depth and breadth of cascades, and indicators of

algorithmic amplification; dependent variables may include the visibility of delegitimizing frames, agenda displacement, the nature of audience reactions, and, where digital traces are combined with survey data, indicators of trust in institutions and political polarization (Gauthier et al. 2026; Hamed, Ab Aziz, and Yaakub 2023; Kramer, Golovchenko, and Hjorth 2025; McLoughlin et al. 35 ,2024; Montoro-Montarroso et al. 23 ,2023; Shin and Shin 2026; Vosoughi, Roy, and Aral 2018). The empirical basis of such an analysis may combine open platform data, news archives, expert-annotated samples, and repositories of pro-Kremlin disinformation, including the EUvsDisinfo corpus (Kramer, Golovchenko, and Hjorth 2025; Erlich and Garner 2023; Leite et al. 2024). At the same time, these data remain incomplete due to restrictions on platform access, the multilingual nature of corpora, content deletion, and the difficulty of distinguishing between organic dissemination and artificially amplified spread. Therefore, the most convincing approach is a combined one that integrates automated classification, expert verification, and interpretive analysis (Hamed, Ab Aziz, and Yaakub 2023; Montoro-Montarroso et al. 2023; Leite et al. 2024).

Table 1.

Operationalization of Research Questions in the Study of Disinformation as a Factor in the Transformation of the Political System

Research Question	Potential Indicators	Data Sources	Methods of Analysis
Which disinformation narratives are the most visible and recurrent in the digital environment?	Frequency of mentions, thematic repetition, temporal peaks of activity, co-occurrence of key markers	News texts, social media posts, fact-checking databases, expert-annotated corpora	Content analysis, topic modeling, automated text classification
How does disinformation content spread in the platform environment?	Speed of replication, depth and breadth of cascades, network density, node centrality, signs of coordination	Data on reposts, retweets, comments, interaction networks between accounts	Network analysis, dissemination cascade analysis, time-series analysis
Which characteristics of content are associated with a higher level of audience engagement?	Number of shares, comments, and reactions, engagement rate, emotional intensity, conflict-oriented framing	Platform interaction metrics, comment corpora, multimodal content	Regression analysis, analysis of emotional markers, content classification

What role do algorithmic amplification and AI-mediated forms of manipulation play?	Disproportionate reach of individual messages, anomalous visibility trajectories, signs of synthetic content, multimodal plausibility	Platform data, samples of audiovisual content, expert-labeled corpora	Anomaly analysis, multimodal analysis, LLM-assisted classification
Which political effects of disinformation can be empirically identified?	Visibility of delegitimizing frames, agenda displacement, markers of anti-institutional rhetoric, changes in perceptions of trust	Digital traces, news archives, survey data, fact-checking datasets	Comparative analysis, correlation and regression analysis, data triangulation

Note. Compiled by the authors on the basis of (Gauthier et al. 2026; Hamed, Ab Aziz, and Yaakub 2023; Kramer, Golovchenko, and Hjorth 2025; McLoughlin et al. 25 ,2024; Montoro-Montarroso et al. 2023; Shin and Shin 2026; Vosoughi, Roy, and Aral 2018; Zhuravskaya, Petrova, and Enikolopov 2020; Erlich and Garner 2023; Pierri et al. 2023; Leite et al. 2024).

One of the key advantages of quantitative approaches is the possibility of tracing the frequency and recurrence of specific narratives. Repetition plays a fundamental role in the logic of disinformation, since manipulative messages rarely achieve a political effect through a single appearance. Instead, they operate through cumulative exposure, discursive persistence, and strategic variations around a common interpretive core. Quantitative analysis makes it possible to identify how often certain themes recur, how long they remain visible, and under what circumstances they receive renewed momentum. This, in turn, helps to determine whether a particular narrative is marginal, episodic, coordinated, or embedded in a broader campaign of political influence (Hamed, Ab Aziz, and Yaakub 23 ,2023; Kramer, Golovchenko, and Hjorth 41 ,2025).

Equally important is the study of dissemination networks. Contemporary disinformation does not circulate randomly; it moves through structured digital infrastructures shaped by platform architecture, account coordination, and algorithmic visibility. Quantitative and computational approaches make it possible to map these networks, determine the density of connections, analyze the cascade structure of dissemination, and distinguish more organic forms of circulation from behavior indicative of coordinated amplification. In this way, the analysis of network dynamics provides insight not only into how false content spreads, but also into how

digital environments themselves shape the informational conditions of public judgment (Gauthier et al. 23 ,2026; Shin and Shin 31 ,2026).

Another dimension that quantitative analysis makes it possible to conceptualize with particular clarity is audience engagement. Reactions such as shares, reposts, comments, and other forms of interaction are not politically neutral metrics. They indicate the extent to which a manipulative message resonates with users, enters broader circuits of visibility, and acquires social legitimacy through circulation itself. At the same time, such indicators should be analyzed in connection with the emotional markers of content, since recent studies show that outrage, anxiety, and moral provocation significantly intensify the spread of disinformation (McLoughlin et al. 35 ,2024). Therefore, the value of quantitative analysis lies not only in counting interactions, but also in the possibility of relating those interactions to emotional intensity, thematic framing, and the logic of platform amplification.

A separate analytical dimension concerns algorithmic amplification. In digital political communication, visibility is rarely determined solely by the communicative value of a message. Instead, platform algorithms rank and amplify content according to variables related to engagement and attention retention. Quantitative methods make it possible to trace how particular forms of manipulative content receive disproportionately wide reach, how quickly they are replicated, and whether the pattern of their dissemination points to the existence of algorithmic preference or platform-driven escalation. Such observations are especially important for political research, because they show that the impact of disinformation cannot be reduced solely to the intentions of its producers, but is also determined to a significant extent by the technical systems that govern the circulation and exposure of content (Gauthier et al. 41 ,2026; Shin and Shin 32 ,2026).

In methodological terms, the heuristic value of quantitative analysis lies in its ability to construct politically meaningful indicators. These may include the number of mentions of a particular narrative, estimated reach, speed of replication, the ratio between organic and artificially amplified dissemination, the level of audience engagement, the recurrence of key lexical or thematic markers, the emotional intensity of messages, as well as the presence of deepfake or LLM-generated content. None of these indicators is sufficient on its own; however, taken together they make it possible to see how disinformation functions as a structured phenomenon

rather than as a random set of false messages. From this perspective, quantitative analysis becomes a means of recording political change in communicative form: it reveals shifts in visibility, legitimation, the dominance of interpretations, and audience reactions, which may later develop into deeper transformations of political trust and democratic practice (Hamed, Ab Aziz, and Yaakub 32 ,2023; Kramer, Golovchenko, and Hjorth 21 ,2025; Montoro-Montarroso et al. 31 ,2023).

This approach is especially important in the context of hostile information campaigns directed against democratic states. The identification of pro-Kremlin narratives, the classification of manipulative content, and the measurement of the scale of its dissemination on digital platforms demonstrate how quantitative and AI-assisted tools can be used to analyze not only communication itself, but also its broader political consequences (Kramer, Golovchenko, and Hjorth 2025; Montoro-Montarroso et al. 2023; Makukh-Fedorkova 2025). Thus, the heuristic value of quantitative analysis lies in the fact that it makes it possible to identify the structural patterns through which disinformation affects the public sphere and contributes to the transformation of the political system.

Artificial intelligence has become one of the most significant factors reshaping the contemporary disinformation environment. Its importance lies not only in technical novelty, but above all in its capacity to alter the scale, form, speed, and persuasiveness of manipulative political communication. In this sense, AI should be regarded as a double-edged phenomenon: on the one hand, it expands the possibilities for producing more convincing forms of disinformation, while on the other hand, it provides new tools for its detection, classification, and counteraction (Baranets and Osadtsa 2025). This duality is especially important for political analysis, since the same technological systems that intensify information threats can simultaneously support democratic resilience and the analytical response to them (Appel and Prietzel 2022; Montoro-Montarroso et al. 2023; Makukh-Fedorkova 43 ,2025).

First, artificial intelligence has significantly intensified the production of disinformation. The most visible manifestation of this process has been the spread of deepfakes and other forms of synthetic audiovisual manipulation. Such technologies make it possible to create politically charged videos, images, and audio recordings that increasingly realistically imitate real persons, institutions, or events. As recent research shows, the persuasiveness of such materials is grounded not only in technical

sophistication, but also in their ability to combine textual, visual, and audio signals into a coherent multimodal communicative form (Appel and Prietzel 2022; Lee and Shin 21 ,2022). Beyond deepfakes, generative systems also facilitate the production of synthetic political texts, the imitation of credible sources, and the replication of narratives through automated content networks. Under such conditions, hostile actors can produce adaptive and continuously reproduced narratives that enter public discourse under the guise of spontaneity or legitimacy, and in algorithmic environments this is especially dangerous because content visibility often depends on its capacity to provoke emotional reactions (Hameleers, van der Meer, and Dobber 2022; Lee and Shin 2022; McLoughlin et al. ,2024 35).

Second, artificial intelligence is becoming an increasingly valuable analytical instrument in the study of disinformation. AI-based systems can be used for narrative classification, anomaly detection, the recognition of coordination patterns, and the processing of large volumes of digital messages that exceed the limits of manual analysis. This makes it possible to move from isolated cases to the identification of recurring structures, discursive models, and strategic forms of hostile communication. Recent studies show that computational models and large language models are capable of identifying pro-Kremlin disinformation narratives, classifying manipulative messages, and tracking the dissemination of false content within platform environments (Hamed, Ab Aziz, and Yaakub 23 ,2023; Kramer, Golovchenko, and Hjorth 51 ,2025; Montoro-Montarroso et al. 21 ,2023; Shin and Shin 35 ,2026). In methodological terms, this increases the analytical precision of political research.

The value of AI as an analytical tool is especially evident when disinformation operates through coordinated, recurrent, and partially automated behavior. In such cases, ordinary interpretive reading remains necessary, but is no longer sufficient. AI-assisted analysis makes it possible to identify suspicious regularities, semantic clusters, and unusual dissemination trajectories that may indicate strategic coordination or the synthetic origin of content. This is particularly relevant in the context of hostile campaigns directed against Ukraine, where the classification of pro-Russian patterns and the recognition of manipulative frames require the processing of large, multilingual, and rapidly changing corpora of messages (Kramer, Golovchenko, and Hjorth 2025; Montoro-Montarroso et al. 2023; Makukh-Fedorkova 2025).

At the same time, growing reliance on artificial intelligence in the analysis of disinformation also generates serious limitations. One of the central problems is the opacity of many algorithmic systems, whose internal decision-making logic remains unclear to researchers, institutions, and the public. Such opacity complicates the explanation of why a particular message has been classified as manipulative, suspicious, or coordinated. In addition, AI systems are vulnerable to classification errors, biased outputs, and false positives, especially when they are trained on incomplete or contextually weak datasets (Hamed, Ab Aziz, and Yaakub 2023; Montoro-Montarroso et al. 2023). For this reason, artificial intelligence in this field should be understood not as a substitute for critical analysis, but as an auxiliary instrument whose results require interpretation, verification, and normative restraint (Hamed, Ab Aziz, and Yaakub 2023; Montoro-Montarroso et al. 2023; Makarova 2024).

In the Ukrainian context, disinformation should be viewed not as an isolated communicative anomaly, but as part of a broader strategy of political pressure under wartime conditions. In the context of full-scale aggression, manipulative information campaigns are aimed not only at misleading audiences, but also at weakening the institutional, communicative, and symbolic foundations of the political system. Their function lies in undermining trust in state institutions, provoking internal conflicts, delegitimizing governmental decisions, reducing international support, and distorting Ukraine's political subjectivity in both domestic and external perception (Horban and Oliinyk 2024; Makukh-Fedorkova 2025; Matviienkiv and Bratakh 2024). Studies working directly with Ukrainian material show both the uneven susceptibility of audiences to pro-Kremlin disinformation and the disproportionate role of superspreaders in amplifying propaganda and low-quality content (Erlich and Garner 2023; Pierri et al. 2023).

For this reason, the transformation of the political system in the Ukrainian case should not be understood merely as a change in regime type or institutional form (Osadtsa and Polishchuk 2025). It is more appropriate to speak of a transformation in the character of political communication, the institutional response to information threats, the role of the state in strategic communications, the significance of digital security, and the balance between democratic openness and the protection of the information space. Wartime disinformation compels the state and society to strengthen communication policy, develop fact-checking,

strategic messaging, and new forms of media resilience (Nikolaienko et al. 32 ,2025). In this sense, disinformation acts as a catalyst of political-systemic adaptation, since it forces a reconsideration of the ways in which legitimacy, trust, and democratic communication are maintained under conditions of prolonged hybrid pressure (Horban and Oliinyk ,2024 23; Kulesza and Burdiak 12 ,2023; Makarova 18 ,2024; Matviienkiv and Bratakh 20 ,2024).

Conclusions. The conducted study provides grounds to argue that disinformation should be viewed not merely as a media problem or a collection of misleading messages, but as a structural factor capable of influencing the transformation of the political system. Its political effect manifests itself through the undermining of trust in institutions, the delegitimization of public decisions, the intensification of polarization, agenda displacement, and the distortion of the conditions under which political judgment is formed. This influence becomes especially pronounced in an algorithmically mediated environment, where the visibility and circulation of content depend not only on its substance, but also on the platform logic of amplification and audience engagement.

Second, the analysis has shown that studying disinformation as a factor in the transformation of the political system requires not only a conceptual, but also an empirically sensitive approach. For this reason, quantitative methods have particular heuristic value in this field: they make it possible to identify the recurrence of narratives, measure the speed and scale of dissemination, analyze replication cascades, the structure of network interaction, the character of audience engagement, and signs of algorithmic amplification. In combination with qualitative interpretation, such approaches make it possible to understand more precisely how disinformation affects political perception, agenda formation, and institutional vulnerability.

Third, artificial intelligence occupies a dual position in the contemporary ecology of disinformation. On the one hand, it intensifies the production of manipulative content through deepfakes, synthetic texts, multimodal falsifications, and the automated generation of messages, thereby expanding the adaptability and persuasiveness of hostile information operations. On the other hand, AI provides important analytical tools for detecting suspicious narratives, recognizing coordination patterns, classifying hostile messages, and mapping information attacks. Therefore, artificial intelligence should be treated neither as an exclusively destructive

force nor as a self-sufficient solution, but rather as a technological factor whose political significance is determined by the way it is embedded in broader institutional, ethical, and analytical frameworks.

Fourth, in the Ukrainian wartime context, disinformation appears as a component of a broader strategy of political pressure aimed at undermining state trust, provoking internal conflicts, delegitimizing governmental decisions, and weakening international support. Under such conditions, the transformation of the political system should be understood not only as a change in formal institutions, but also as a change in the character of political communication, the mechanisms for protecting the information space, and the ways of maintaining democratic legitimacy. At the same time, countering disinformation must be carried out while preserving a balance between information security, algorithmic transparency, freedom of expression, and political accountability, since without such a balance, the very response to manipulation may generate new risks for democracy.

Prospects for further research. Further studies should be directed toward the comparative analysis of cases of disinformation influence in different political and wartime contexts, the empirical study of the Ukrainian segment of social media, and the construction of indicators for measuring the impact of disinformation on institutional trust, political polarization, and perceptions of legitimacy. It would also be promising to deepen the methodological line connected with combining quantitative analysis, expert interpretation, and artificial intelligence tools for detecting coordinated information operations. Special attention should also be paid to developing models for the responsible use of AI in democratic information security systems. Another important direction for future research may be the application of agent-based modelling to simulate how algorithmic curation, recommendation regimes, and user behavior affect content visibility, information diversity, and the conditions for the spread of manipulative narratives in the digital political environment.

References:

1. Allen, J., B. Howland, M. Mobius, D. Rothschild, and D. J. Watts. 2020. “Evaluating the fake news problem at the scale of the information ecosystem.” Science Advances 6 (14): eaay3539. https://doi.org/10.1126/sciadv.aay3539

2. Appel, M., and F. Prietzel. 2022. "The detection of political deepfakes." Journal of Computer-Mediated Communication 27 (4). https://academic.oup.com/jcmc/article/27/4/zmac008/6650406

3. Baranets, V., and I. Osadtsa. 2025. "Artificial Intelligence as a Catalyst of Hybrid Threats: Political Challenges to National and International Security." In The Role of Security in Cross-Border and International Cooperation: Conference Abstracts Proceedings, 72–74. Berehove: Rákóczi University. https://kme.org.ua/wp-content/uploads/2025/12/role-security_conf-abstracts_ua-en-hu_elektronne-vydannia_2025.pdf (in Ukrainian).

4. Bieliková, K., A. Pospíšil Macková, and M. Novotná. 2025. "Doing What Is Right: Role of Social Media Users in Resilience to Disinformation." Social Media + Society. https://doi.org/10.1177/20563051251342223

5. Erlich, A., and C. Garner. 2023. "Is pro-Kremlin Disinformation Effective? Evidence from Ukraine." The International Journal of Press/Politics 28 (1): 5–28. https://doi.org/10.1177/19401612211045221

6. Gausen, A., W. Luk, and C. Guo. 2023. "Using Agent-Based Modelling to Evaluate the Impact of Algorithmic Curation on Social Media." ACM Journal of Data and Information Quality 15 (1): 2:1–2:24. https://doi.org/10.1145/3546915

7. Gauthier, G., R. Hodler, P. Widmer, and E. Zhuravskaya. 2026. "The political effects of X's feed algorithm." Nature. https://doi.org/10.1038/s41586-026-10098-2

8. Hamed, S. K., M. J. Ab Aziz, and M. R. Yaakub. 2023. "A review of fake news detection approaches: A critical analysis of relevant studies and highlighting key challenges associated with the dataset, feature representation, and data fusion." Heliyon 9 (10): e20382. https://doi.org/10.1016/j.heliyon.2023.e20382

9. Hameleers, M., T. G. L. A. van der Meer, and T. Dobber. 2022. "You Won't Believe What They Just Said! The Effects of Political Deepfakes Embedded as Vox Populi on Social Media." Social Media + Society. https://doi.org/10.1177/20563051221116346

10. Hameleers, M., T. G. L. A. van der Meer, and T. Dobber. 2024. "They Would Never Say Anything Like This! Reasons To Doubt Political Deepfakes." European Journal of Communication 39 (1): 56–70. https://doi.org/10.1177/02673231231184703

11. Horban, Yu., and O. Oliinyk. 2024. "Media Literacy as a Factor in Protecting the Information Space from Enemy Disinformation

in Wartime." Ukrainian Information Space 1 (13): 194–205. https://ukrinfospace.knukim.edu.ua/article/view/300896 (in Ukrainian).

12. Kramer, M., Y. Golovchenko, and F. Hjorth. 2025. "Detecting pro-kremlin disinformation using large language models." Research & Politics. https://doi.org/10.1177/20531680251351910

13. Kulesza, J., and P. Burdiak. 2023. "Countering Disinformation on Social Media Platforms: Developments in the EU and Poland." Mediaforum: Analytics, Forecasts, Information Management 13: 143–160. https://doi.org/10.31861/mediaforum.2023.13.143-160

14. Lee, J., and S. Y. Shin. 2022. "Something that They Never Said: Multimodal Disinformation and Source Vividness in Understanding the Power of AI-Enabled Deepfake News." Media Psychology 25 (4): 531–546. https://doi.org/10.1080/15213269.2021.2007489

15. Leite, J. A., O. Razuvayevskaya, K. Bontcheva, and C. Scarton. 2024. "EUvsDisinfo: A Dataset for Multilingual Detection of Pro-Kremlin Disinformation in News Articles." In Proceedings of the 33rd ACM International Conference on Information and Knowledge Management (CIKM '24), 5380–5384. https://doi.org/10.1145/3627673.3679167

16. Lim, W. M. 2023. "Fact or fake? The search for truth in an infodemic of disinformation, misinformation, and malinformation with deepfake and fake news." Journal of Strategic Marketing. https://doi.org/10.1080/0965254X.2023.2253805

17. Makarova, M. V. 2024. "Instruments for Promoting Information Security in the Media Space." Visnyk Knyzhkovoi Palaty, no. 8: 23–30. https://elibrary.kubg.edu.ua/id/eprint/49945/ (in Ukrainian).

18. Makukh-Fedorkova, I. 2025. "The Influence of Digital Disinformation on the Course of the Russian-Ukrainian War." Mediaforum: Analytics, Forecasts, Information Management 16: 129–138. https://journals.chnu.edu.ua/mediaforum/article/view/885 (in Ukrainian).

19. Matviienkiv, S. M., and L. I. Bratakh. 2024. "Information Threats in the Context of Full-Scale War: Contemporary Challenges to the National Security of Ukraine." Actual Problems of Philosophy and Sociology. https://doi.org/10.32782/apfs.v049.2024.36 (in Ukrainian).

20. McLoughlin, K. L., W. J. Brady, A. Goolsbee, B. Kaiser, K. Klonick, and M. J. Crockett. 2024. "Misinformation exploits outrage to spread online." Science 386 (6725): 991–996. https://doi.org/10.1126/science.adl2829.

21. Montoro-Montarroso, A., J. Cantón-Correa, P. Rosso, B. Chulvi, Á. Panizo-Lledot, J. Huertas-Tato, B. Calvo-Figueras, M. J. Rementeria, and J. Gómez-Romero. 2023. "Fighting disinformation with artificial intelligence: fundamentals, advances and challenges." Profesional de la Información 32 (3). https://revista.profesionaldelainformacion.com/index.php/EPI/article/view/87328.

22. Nikolaienko, N., V. Nadolska, L. Melnychuk, T. Yelova, I. Osadtsa, and M. Blahovirnyi. 2025. "Navigating Geopolitics through Culture: An Analysis of Ukraine's Strategic Communication and Cultural Diplomacy in its EU Accession Bid." European Journal of Social Science Education and Research 12 (3): 31–40. https://doi.org/10.26417/kt3g6q64

23. Osadtsa, I., and I. Polishchuk. 2025. "Transformation of the System of Public Authority under Martial Law in the Context of the Hybridization of the Political Regime in Ukraine." Historical and Political Problems of the Modern World 52: 137–146. https://doi.org/10.31861/mhpi2025.52.137-146 (in Ukrainian).

24. Pierri, F., L. Luceri, N. Jindal, and E. Ferrara. 2023. "Propaganda and Misinformation on Facebook and Twitter during the Russian Invasion of Ukraine." In Proceedings of the 15th ACM Web Science Conference 2023, 65–74. https://doi.org/10.1145/3578503.3583597

25. Shin, D., and E. Y. Shin. 2026. "Cascading falsehoods: mapping the diffusion of misinformation in algorithmic environments." AI & Society 41: 1435–1452. https://doi.org/10.1007/s00146-025-02575-5

26. Stopkin, A. 2024. "Peculiarities of the Conceptualization of the Notion of Disinformation in Contemporary Political Science." Mediaforum: Analytics, Forecasts, Information Management 15: 320–336. https://journals.chnu.edu.ua/mediaforum /article/view/694 (in Ukrainian).

27. Vosoughi, S., D. Roy, and S. Aral. 2018. "The spread of true and false news online." Science 359 (6380): 1146–1151. https://doi.org/10.1126/science.aap9559

28. Zhuravskaya, E., M. Petrova, and R. Enikolopov. 2020. "Political Effects of the Internet and Social Media." Annual Review of Economics 12: 415–438. https://doi.org/10.1146/annurev-economics-081919-050239

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