



REVIEW ARTICLES
ОГЛЯДИ

<https://doi.org/10.17721/CIMC.2026.39.60-70>

**Artificial Intelligence in Media and Communication:
Analytical Perspectives on Digital Empowerment
and Algorithmic Domination**

Zineb Khelalfa

University of Oum El Bouaghi, Algeria

The study aims to examine the dual dynamic of artificial intelligence (AI) in media and communication, exploring how AI simultaneously fosters digital empowerment—enhancing access to information, participation, and productivity—and facilitates algorithmic domination, where decision-making, social interactions, and economic opportunities are increasingly governed by opaque computational systems. **Method** The research employs a theoretical and analytical approach, situating AI within a framework that integrates concepts of filter bubbles, algorithmic governance, symbolic capital, and datafication. It synthesizes findings from empirical studies, policy reports, and critical scholarship to analyze AI's effects on autonomy, inequality, and digital power distribution. **Results.** The analysis highlights mechanisms through which algorithms reinforce social and informational inequalities, limit user autonomy, and concentrate digital power among dominant actors in media and communication spaces. **Conclusion.** The study concludes by proposing strategies to mitigate algorithmic domination and enhance digital empowerment, emphasizing the importance of transparency, algorithmic literacy, ethical design, and participatory governance in digital media ecosystems. Besides, it underscores the need for empirical and interdisciplinary research to develop context-aware frameworks for understanding AI's long-term impact on media.

Keywords: artificial intelligence, digital empowerment, algorithmic domination, filter bubble, algorithmic governance, symbolic capital, datafication, digital inequality

Citation: Khelalfa, Z. (2026). Artificial Intelligence in Media and Communication: Analytical Perspectives on Digital Empowerment and Algorithmic Domination. *Current Issues of Mass Communication*, 39, 60–70. <https://doi.org/10.17721/CIMC.2026.39.60-70>

Copyright: © 2026 Zineb Khelalfa. This is an open-access article distributed under the terms of the **Creative Commons Attribution License (CC BY)**. The use, distribution, or reproduction in other forms is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution, or reproduction is permitted if it does not comply with these terms.



Штучний інтелект у медіа та комунікації: аналітичні перспективи цифрового розширення прав і можливостей та алгоритмічного домінування

Зінеб Хелальфа

Університет Ум-ель-Буагі, Алжир

Мета дослідження – вивчити подвійну динаміку штучного інтелекту (ШІ) у медіа та комунікаціях, досліджуючи, як ШІ одночасно сприяє цифровому розширенню можливостей – збільшуючи доступ до інформації, участі та продуктивності – і полегшує алгоритмічне домінування, де прийняття рішень, соціальна взаємодія та економічні можливості дедалі більше регулюються непрозорими обчислювальними системами. Метод дослідження. Дослідження використовує теоретичний та аналітичний підхід, розміщуючи ШІ в рамках, що інтегрує концепції фільтруючих бульбашок, алгоритмічного управління, символічного капіталу та обробки даних. Воно синтезує результати емпіричних досліджень, політичних звітів та критичних досліджень для аналізу впливу ШІ на автономію, нерівність та розподіл цифрової влади. Результати. Аналіз висвітлює механізми, за допомогою яких алгоритми посилюють соціальну та інформаційну нерівність, обмежують автономію користувачів та концентрують цифрову владу серед домінуючих акторів у медіа та комунікаційних просторах. Висновок. Дослідження завершується пропозицією стратегій для пом'якшення алгоритмічного домінування та посилення цифрового розширення можливостей, підкреслюючи важливість прозорості, алгоритмічної грамотності, етичного дизайну та партисипативного управління в екосистемах цифрових медіа. Крім того, воно підкреслює необхідність емпіричних та міждисциплінарних досліджень для розробки контекстно-залежних рамок для розуміння довгострокового впливу ШІ на медіа.

Ключові слова: штучний інтелект, цифрове розширення прав і можливостей, алгоритмічне домінування, бульбашка фільтрів, алгоритмічне управління, символічний капітал, датафікація, цифрова нерівність

The digital sphere has witnessed profound transformations driven by the integration of artificial intelligence (AI) technologies into the architecture of media and communication platforms. AI has become a central tool in organizing information flows, personalizing content and steering interactions. It is often promoted as a means of empowering users by enabling efficient and rapid access to information and enhancing their capacity for interaction and participation. AI-driven systems now, structure the circulation of information, govern visibility, and mediate everyday communication practices across platforms. As scholars such as Gillespie (2014) and Boyd & Crawford (2012) argue, these systems not only filter and prioritize content but also participate in constructing the conditions under which knowledge is accessed and shared. When deployed responsibly, AI holds the potential to expand users' communicative agency—broadening access to information, facilitating participation in the public sphere, and enabling more inclusive forms of digital expression (Napoli, 2019).

These transformations raise epistemological and ethical concerns within the field of media and communication studies, particularly regarding the extent to which artificial intelligence contributes to achieving genuine digital empowerment, as opposed to the growing risks of what can be described as algorithmic domination exercised by major platforms through tracking, recommendation, and informational filtering technologies. In this context, it becomes necessary to distinguish these new dynamics from a critical perspective that links technology to power, and empowerment to control.

Zineb Khelalfa  <https://orcid.org/0000-0002-2581-8146>

This article was first published online on March 30, 2026.

The author is a Full Professor (Human Sciences Department) University of Oum El Bouaghi, Algeria.

The author declares no conflict of interest.

Corresponding author's email: zineb.khelalfa@univ-oeb.dz



Studies such as Noble (2018) examining algorithmic discrimination and Zuboff's (2019) analysis of surveillance capitalism reveal how opaque algorithmic processes can reinforce structural inequalities, shape public discourse, and centralize power within dominant technology corporations. These concerns parallel earlier debates on filter bubbles and echo chambers (Pariser, 2011), which foreground the ways in which algorithmic curation narrows the horizon of available information.

Anchored in theoretical frameworks including datafication, algorithmic governance, and platform capitalism, this paper examines the dual capacity of AI to either enhance communicative autonomy or intensify asymmetries within the digital ecosystem. Drawing on empirical studies and critical media scholarship, this study identifies the mechanisms through which AI technologies restructure user-platform relations and recast the dynamics of participation, visibility, and control.

Accordingly, this study poses the following research questions:

RQ1: To what extent does artificial intelligence contribute to empowering users in the digital sphere within media and communication contexts?

RQ2: What are the limits of this empowerment considering the increasing dominance of algorithms over the production and distribution of content?

Finally, the study proposes strategies to mitigate the risks of algorithmic domination in the media and communication sphere.

The paper is structured as follows. It first outlines the methodological approach adopted in conducting the theoretical and analytical review. It then presents a synthesis of key findings organized around two central dimensions: digital empowerment and algorithmic domination, supported by relevant theoretical frameworks. This is followed by a discussion of the paradoxical relationship between these two dynamics and its implications for media and communication. Finally, the paper proposes a set of mitigation strategies and concludes by highlighting key insights and directions for future research.

Method

This study adopts a **theoretical and analytical research design**, relying on a qualitative review of scholarly literature in media and communication studies, as well as interdisciplinary research on artificial intelligence, algorithmic governance, and digital society. The analysis is based on **conceptual synthesis**, which involves identifying, comparing, and integrating key theoretical frameworks – including digital empowerment, algorithmic domination, symbolic capital, datafication, and filter bubbles. Peer-reviewed journal articles, policy reports, and authoritative academic books were systematically examined to trace how AI transforms communicative practices and restructures power relations in the digital sphere. The study evaluates existing evidence and arguments to construct a comprehensive conceptual understanding of AI's dual role in the media and communication field. This method allows for the development of an integrated theoretical perspective and the formulation of analytical insights and recommendations.

Findings and Discussion

This section presents the main analytical outcomes of the study, organized around two inter-related dimensions: digital empowerment and algorithmic domination. It begins by examining how artificial intelligence contributes to enhancing communicative capacities at multiple levels, followed by an analysis of the risks associated with algorithmic control and power concentration. The section then explores the paradoxical relationship between these dynamics and discusses their broader implications for media and communication. This structure aims to provide a coherent analytical framework that connects the theoretical foundations of the study with its key insights



Digital Empowerment through Artificial Intelligence

Digital empowerment refers to the enhancement of individual and collective capacities through digital technologies, enabling access to information, tools, and resources that improve decision-making and agency (UNIDO, 2024). AI contributes to this process by automating routine tasks, supporting data-driven insights, and facilitating personalized learning and productivity enhancement.

The integration of artificial intelligence within media systems provides multiple levels of digital empowerment in the field of media and communication.

Access and Content Production Empowerment

AI-driven tools lower traditional barriers: they enable automated content creation, streamline editorial workflows, and support broader participation beyond established media institutions – potentially democratizing media production and expanding who can contribute to the public sphere. (Diakopoulos N. , 2019).

Personalization and Audience Engagement Empowerment

On the audience side, AI-based recommendation systems, sentiment analysis, and social media content analytics enable more tailored, relevant, and engaging media consumption experiences. These technologies help match content to user interests, optimize timing, and improve messaging effectiveness, transforming passive audiences into more active and informed participants (Baig, Altaf, & Azam, 2024).

Institutional and Structural Empowerment

AI supports institutional-level empowerment by providing media organizations with data-driven insights that can inform editorial strategies, content planning, and governance practices. Analytics of audience behavior, content performance, and platform dynamics allow institutions to adapt to changing consumption patterns and design more effective communication strategies (Thurman, 2014; Alem, Hasdiyanto, Irwanto, & Rido, 2024).

Empowerment via Governance, Ethics, and Reflexivity

A higher-order level of empowerment occurs when frameworks for governance, transparency, and ethical oversight accompany AI deployment. When media stakeholders adopt responsible design and participatory governance, AI not only amplifies voices but does so while preserving fairness, accountability, and inclusion, promoting a democratic and pluralistic media environment (Mathias-Felipe, Wang Ngai, & Tomás, 2024).

Overall, digital empowerment through AI in media and communication is layered from enabling content creation and access, through enhancing audience engagement, to restructuring institutional practices and embedding ethical governance. Recognizing these levels allows scholars and practitioners to understand both the potential benefits and the necessary conditions for AI to contribute meaningfully and equitably to media empowerment.

Algorithmic Domination: Risks and Theoretical Frameworks

Algorithmic domination refers to the **control and influence exerted by computational systems over human behavior, information access, and social interactions** (Ulises & Nick, 2019). Unlike traditional forms of control, which are visible and accountable, algorithmic domination operates largely through opaque systems where decisions are automated, continuous, and often unchallengeable. These systems can shape public opinion, influence economic opportunities, and reinforce social hierarchies by selectively promoting content, determining visibility, and personalizing experiences according to hidden metrics (Eubanks, 2018).

Global studies in media and communication demonstrate the pervasive reach of algorithmic power in shaping news dissemination, audience engagement, and content visibility. For example, platforms such as YouTube, Facebook, and Twitter employ recommendation algorithms that



determine which news articles, videos, and social content are prioritized in users' feeds. These algorithms subtly influence audience attention, engagement patterns, and the spread of information without direct editorial intervention, raising concerns about bias, filter bubbles, and structural inequalities in information access (Bucher, 2018; Napoli, 2019). Consequently, the power of algorithms in media environments highlights the need for transparency, critical literacy, and governance mechanisms to ensure equitable and informed participation in the digital public sphere. Similarly, AI-based welfare management systems in the United States have been criticized for creating "digital poorhouses", where automated decision-making can disproportionately disadvantage vulnerable populations (Eubanks, 2018).

Theoretical Frameworks

Several conceptual frameworks help explain how algorithmic systems can produce domination while appearing neutral or beneficial.

Filter Bubble

The concept of **filter bubble** describes how personalized algorithms limit exposure to diverse perspectives, reinforcing existing beliefs and creating **information silos** (Eubanks, 2018; Fernando, Stephen, Michael, & Qian, 2023). Filter bubbles reduce cognitive autonomy by controlling what information users see, often amplifying social polarization and diminishing opportunities for critical engagement with alternative viewpoints. Recent studies in media and communication provide concrete evidence of this process. E.g., Benoit, Faridah, & Faiz (2025) demonstrate through agent-based modelling that algorithmic filtering on digital platforms systematically reduces informational diversity and leads to the formation of isolated information clusters. Similarly, Cerro (2024) shows that when social-media algorithms interact with homophilic network structures, they intensify political and ideological polarization by continuously reinforcing user-aligned content. A systematic review by Mohammad et al. (2023) further reveals that recommender systems across major platforms tend to amplify existing preferences, thereby limiting exposure to heterogeneous viewpoints and promoting personalized echo chambers. Complementing this empirical evidence, a recent analysis of Rodillo (2024) argues that AI-driven curation on social media can undermine democratic deliberation by narrowing users' information horizons and prioritizing emotionally charged confirmatory content. Collectively, these findings illustrate how filter bubbles diminish cognitive autonomy, heighten polarization, and restrict opportunities for critical engagement in today's algorithmically mediated communication environment.

Algorithmic Governance

Algorithmic governance refers to the use of AI and computational systems to manage, regulate, or guide organizational and user behavior in digital media environments, often without direct human intervention (Bucher, 2018). In the field of media and communication, it encompasses how platforms, news organizations, and content distributors implement algorithms to **organize content, prioritize information, and inform editorial strategies**. For example, YouTube employs recommendation algorithms that determine which videos are promoted or demoted, shaping content visibility and audience reach (Napoli, 2019). Similarly, Facebook and X use algorithmic moderation and ranking systems to manage news feeds, advertisements, and trending topics, effectively guiding user interactions and platform dynamics (Gillespie, 2018).

At the institutional level, algorithmic governance enables media organizations to analyze audience behavior, evaluate content performance, and make data-driven decisions regarding content planning, distribution strategies, and platform management (Adam, Jamie, & Hancock, 2014). Legal and regulatory frameworks play a crucial role in mediating the tension between digital empowerment and algorithmic domination in media. E.g., recent research on AI regulation in Ukraine and the EU demonstrates how sector-specific recommendations and legislative



measures can guide the responsible deployment of AI in media organizations, ensuring transparency, compliance with journalistic standards, and protection of audience rights. These frameworks provide a model for integrating ethical and accountable AI practices into media ecosystems, highlighting the importance of governance mechanisms that balance technological innovation with social responsibility (Приступенко & Євдокименко, 2025).

Policy initiatives such as the European Union's **Digital Services Act (DSA)** provide frameworks for transparency, accountability, and oversight of algorithmic processes, highlighting the need to regulate computational systems while acknowledging their influence on the production and circulation of information (Cooperation, 2024). Overall, algorithmic governance structures not only the operational logic of media platforms but also the strategic and ethical frameworks within which digital communication takes place.

Symbolic Capital in Digital Spaces

Building on Bourdieu's theory of symbolic capital, digital platforms distribute visibility, recognition, and influence in ways that reflect and reinforce existing social hierarchies (Ulises & Nick, 2019). Algorithmic mechanisms – such as recommendation systems, trending lists, and social scoring – determine who gains attention and whose contributions remain marginalized, thereby producing a digital form of social stratification. E.g., Annaki, Ouassou, & Igamane (2025) show that platforms assign digital actors differing levels of visibility and influence, creating a hierarchy in which certain users accumulate symbolic capital while others are largely invisible. Alessandro, Pujan, Mauro, Emiliano, & Gianluca (2024) provide empirical evidence that recommendation algorithms systematically amplify some content while suppressing others, independent of intrinsic quality, highlighting the structural impact of algorithmic design on digital recognition. Conceptually, Ragnedda (2018) frame this process as the production of “digital capital,” where social and symbolic resources are redistributed according to platform affordances and algorithmic governance.

Datafication

Datafication involves transforming human behavior into quantifiable data, which can be processed, analyzed, and monetized (Ulises & Nick, 2019; Eubanks, 2018). This transformation is not neutral: by converting everyday activities into data, platforms gain the capacity to predict behavior, segment audiences, and optimize content promotion strategies to benefit certain actors over others – effectively reinforcing structural power imbalances. Research on newsrooms demonstrates that datafication has reshaped journalistic practices such as editorial decisions, content visibility, and the perceived “success” of journalistic output increasingly depend on audience analytics and consumption metrics rather than purely editorial value (Kalender, 2024). From a critical-data perspective, data itself becomes a form of capital; platforms and media companies leverage it to control attention, influence, and cultural production (Bolin, 2022). Even scholarly research in communication employs datafied traces to produce knowledge, indicating how deeply datafication penetrates the epistemic foundations of media studies (Jeffrey & Yonaira, 2025).

In this light, datafication should be understood not merely as a technical or methodological shift, but as a structural transformation; a reconfiguration of the power to define visibility, legitimacy, and symbolic value in digital media environments.

The Paradox: Digital Empowerment vs. Algorithmic Domination

Artificial intelligence (AI) presents a paradoxical dynamic: it empowers users by enhancing access to knowledge, facilitating communication, and enabling efficient decision-making, yet it simultaneously enforces algorithmic control, subtly shaping behaviors, preferences, and social hierarchies (Ulises & Nick, 2019; Eubanks, 2018). This duality raises critical questions about the nature of autonomy, freedom, and agency in the digital era.



While AI tools promise to enhance individual and institutional capabilities, they often embed constraints through opaque algorithmic rules that challenge transparency and accountability. Research has shown that many decision-making systems function as “black boxes,” where the logic of decisions is hidden and unchallengeable (Md. Tanzib, et al., 2023). This opacity undermines users’ ability to understand, contest, or audit the outcomes – particularly when those systems influence media distribution, public communication, or institutional governance. Initiatives aimed at promoting algorithmic transparency suggest that without deliberate efforts, AI’s efficiency gains may come at the cost of democratic oversight and public legitimacy (Bell & Stoyanovich, 2024; Karl & Jenny, 2020). This tension illustrates that the benefits of AI (e.g., efficiency, predictive power) are often accompanied by structural constraints on visibility, accountability, and user autonomy.

The tension between empowerment and domination can be interpreted through non-domination theory, which emphasizes the absence of arbitrary interference as a condition for genuine freedom (Hoeksema, 2023). From this perspective, AI systems may superficially increase capabilities but fail to guarantee autonomy when opaque algorithms dictate choices or outcomes without meaningful oversight. Additionally, concepts of filter bubbles, symbolic capital, and datafication provide explanatory power for why empowerment and domination coexist; algorithms simultaneously expand access and concentrate power (Ulises & Nick, 2019).

- Awareness of AI’s dual role in media: Policymakers, media organizations, and civil society must recognize that AI-driven tools for content distribution, audience analytics, and recommendation systems are not inherently empowering; they can also reinforce biases, limit exposure to diverse perspectives, and consolidate editorial power.
- Digital literacy and algorithmic transparency in communication: Enhancing media literacy for both content creators and audiences, alongside promoting transparent algorithmic practices, is essential to ensure that AI serves as a genuine instrument for informed engagement rather than a covert mechanism of agenda setting or influence. (Diakopoulos, 2019; Napoli, 2019).
- Participatory governance and editorial oversight: The paradox of AI empowerment versus control highlights the importance of participatory design and governance in media platforms, allowing journalists, editors, and users to have input in how algorithmic decision-making shapes visibility, content prioritization, and news circulation (Gillespie, 2018).

The paradox of AI as both a tool of empowerment and domination necessitates proactive strategies to minimize risks and enhance the benefits of digital technologies. Based on theoretical frameworks and empirical studies, several mitigation approaches are proposed.

Transparency in AI refers to the openness of algorithmic processes, enabling users and regulators to understand how decisions are made. Transparent systems can reduce arbitrary interference, improve accountability, and build trust. E.g., disclosing how recommendation algorithms prioritize content or determine service eligibility can prevent opaque decision-making that disproportionately harms marginalized groups (Eubanks, 2018; Ulises & Nick, 2019).

Algorithmic literacy empowers users to critically engage with AI systems by understanding their functions, limitations, and potential biases (UNIDO, 2024). Educational programs and digital workshops can equip individuals and communities to navigate algorithmic systems effectively, enhancing autonomy and resilience against covert manipulation.

AI systems should be designed according to principles of justice, fairness, and non-discrimination (Barocas & Selbst, 2016; Joy & Timmit, 2018). Ethical design requires developers and institutions to:

- Avoid training models on biased datasets that reproduce structural inequalities.
- Implement clear accountability mechanisms for automated or algorithmically assisted decisions.



- Integrate human rights considerations and broader societal values into all stages of development, deployment, and evaluation.

Participatory Governance

Participatory governance requires involving multiple stakeholders – including audiences, content creators, civil society, and regulatory actors – in the design, deployment, and oversight of algorithmic systems that shape news distribution, content moderation, and media visibility. When stakeholders participate in defining content ranking rules, moderation policies, and transparency standards, this helps align platform algorithms with public interest values, social diversity, and democratic communication aims. Empirical and theoretical scholarship supports this approach: for example, the framework proposed by *We Build AI* shows that community-driven co-design of algorithmic policies can produce more legitimate, accountable, and context-sensitive governance arrangements for digital platforms (Lee, et al., 2019). Similarly, research on algorithmic governance indicates that participatory and audit-oriented regimes – including stakeholder involvement, transparent reporting, and institutional oversight – are necessary to counteract opacity, reduce bias, and preserve public accountability in media systems (Christian & Lena, 2019). This participatory turn enables media organizations and platforms to negotiate normative standards (such as fairness, equity, and representativeness) with those affected by algorithmic decisions – thus, mitigating the risk that algorithmic gatekeeping reproduces entrenched power imbalances and undermines pluralistic public discourse.

Data Sovereignty and Regulation

Ensuring data sovereignty allows individuals and communities to control how their personal data is collected, stored, and used (Ulises & Nick, 2019). Regulatory measures may include:

- Legal frameworks for ethical data use.
- Standards for cross-border data transfer and platform accountability.
- Institutional oversight of AI systems deployed in public services.

By asserting control over data, societies can reduce the risk of algorithmic domination and promote equitable access to digital benefits.

Integrated Approach

The most effective mitigation strategy combines technical, educational, ethical, and regulatory interventions. Only through a holistic approach—linking transparency, literacy, ethical design, participatory governance, and data sovereignty – can AI fulfill its promise as a tool for genuine digital empowerment while minimizing risks of domination (UNIDO, 2024; Ulises & Nick, 2019).

While these strategies provide a conceptual foundation for addressing the risks of algorithmic domination, their effectiveness depends on context-sensitive implementation and cross-sector collaboration. Future efforts should focus on operationalizing these principles through measurable indicators, institutional accountability mechanisms, and comparative policy frameworks across different media systems. In this regard, bridging the gap between theoretical recommendations and practical applications remains a critical challenge that requires sustained engagement between researchers, policymakers, and industry actors. It is important to consider how different stakeholders in the media and communication ecosystem can act upon these insights.

For journalists and media practitioners, the findings underscore the importance of engaging critically with AI tools used in content production, distribution, and audience analytics. This includes advocating for greater transparency in platform algorithms, adopting ethical guidelines in AI-assisted journalism, and maintaining editorial autonomy in increasingly data-driven environments.

For policymakers and regulatory bodies, the study points to the necessity of developing comprehensive governance frameworks that ensure accountability, fairness, and transparency in AI



deployment within media systems. This may involve implementing regulatory standards, supporting independent audits of algorithmic systems, and fostering collaborations between public institutions, academia, and technology companies.

For researchers, this work highlights the need to move toward more empirical and interdisciplinary investigations that examine the real-world implications of AI systems, particularly in diverse socio-cultural contexts. Researchers are also encouraged to develop methodological tools capable of critically analyzing algorithmic processes and their societal impact.

Conclusions

Artificial intelligence has profoundly reshaped the digital media landscape, creating new opportunities for audience engagement, content personalization, and participatory communication, while simultaneously introducing risks of algorithmic control and concentration of influence. AI tools can enhance the capacities of both media organizations and individual communicators by optimizing content distribution, analyzing audience behavior, and facilitating interaction across digital platforms. However, these same systems can reinforce structural inequalities in visibility and influence, prioritize certain voices over others, and embed opaque decision-making processes that limit transparency and accountability.

The tension between empowerment and domination in media contexts highlights the need for deliberate design, governance, and regulation of AI systems. Strategies such as algorithmic transparency, media literacy, ethical AI design, and participatory governance frameworks are essential to ensure that digital platforms foster informed engagement, equitable representation, and public trust.

Ultimately, the evolving media ecosystem requires continuous critical inquiry and scholarly attention. Researchers, journalists, policymakers, and technology developers must collaborate to harness AI's potential for enhancing communication, civic participation, and media pluralism, while mitigating risks associated with algorithmic gatekeeping and biased content amplification. Future research should examine empirical case studies of AI-driven media platforms, evaluate participatory governance approaches, and investigate innovative strategies for embedding ethical principles directly into content moderation, recommendation systems, and audience analytics.

This study identifies several directions, beyond its theoretical contribution, for future research. There is a need for more empirical and comparative studies that examine how AI-driven systems concretely shape media practices across different socio-cultural contexts, particularly in underrepresented regions. Additionally, future research could explore the long-term implications of algorithmic governance on journalistic autonomy, audience agency, and content diversity. Interdisciplinary approaches that integrate communication studies, data science, and critical algorithm studies may also provide deeper insights into the socio-technical dynamics of AI. Such efforts would contribute to moving beyond descriptive synthesis toward more actionable and context-aware frameworks for understanding and regulating AI in media environments.

Declaration of generative artificial intelligence and technologies using artificial intelligence in the writing process. The author confirms that no artificial intelligence tools were used to create, write, or edit the text during the preparation of this manuscript except for translation. All results are original and obtained without the help of AI.

References

- Adam D. I., K., Jamie E., G., & Hancock, J. T. (2014). Experimental Evidence of Massive-Scale Emotional Contagion through Social Networks. *Proc Natl Acad Sci U S A*, *111*(24), 8788–90. <https://www.doi.org/10.1073/pnas.1320040111>
- Alem, F. S., Hasdiyanto, H., Irwanto, I., & Rido, L. (2024). Digital Newsroom Transformation: A Systematic Review of the Impact of Artificial Intelligence on Journalistic Practices, News Narratives, and Ethical Challenges. *Journal Media*, *5*(4), 1554–1570. <https://doi.org/10.3390/journalmedia5040097>



- Alessandro, G., Pujan, P., Mauro, C., Emiliano, D. C., & Gianluca, S. (2024). Revealing The Secret Power: How Algorithms Can Influence Content Visibility on Twitter/X. *arXiv:2410.17390*. <https://doi.org/10.48550/arXiv.2410.17390>
- Andrejevic, M. (2020). *Automated Media*. Routledge
- Annaki, F., Ouassou, S., & Igamane, S. (2025). Visibility and Influence in Digital Social Relations: Towards a New Symbolic Capital? *African Scientific Journal*, 3(29). <https://doi.org/10.5281/zenodo.15364096>
- Baig, K., Altaf, A., & Azam, M. (2024). Impact of AI on communication relationship and social dynamics: A qualitative approach. *Bulletin of Business and Economics (BBE)*, 13(2), 282-289. <https://doi.org/10.61506/01.00283>
- Barocas, S., Selbst, A. (2016). Big Data's Disparate Impact. *California Law Review*, 104. <https://www.doi.org/10.2139/SSRN.2477899>
- Bell, A., & Stoyanovich, J. (2024). Making Transparency Advocates: An Educational Approach Towards Better Algorithmic Transparency in Practice. *arXiv:2412.15363*. <https://www.doi.org/10.48550/arXiv.2412.15363>
- Benoit, D., Faridah, D., & Faiz, G. (2025). Filter bubbles as a Vector of Tradition? Decoding Opinion Dynamics with Agent-Based Modelling. *Journal of Computational Social Science*, 8(4). <https://www.doi.org/10.1007/s42001-025-00422-7>
- Bolin, G. (2022). The Value Dynamics of Data Capitalism: Cultural Production and Consumption in a Datafied World. Dans A. J. Hepp. *New Perspectives in Critical Data Studies: The Ambivalences of Data Power*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-96180-0_8
- Boyd, D., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information Communication & Society*, 15(2), 662–679. <https://doi.org/10.1080/1369118X.2012.678878>
- Bucher, T. (2018). *If...Then: Algorithmic Power and Politics*. Oxford University Press. Retrieved from <https://doi.org/10.1093/oso/9780190493028.001.0001>
- Cerro, C. C. (2024). The Power of Social Networks and Social Media's Filter Bubble in Shaping Polarisation: An Agent-based Model. *Applied Network Science*, 9(1). <https://www.doi.org/10.1007/s41109-024-00679-3>
- Christian, K., & Lena, U. (2019). Algorithmic governance. *Internet Policy Review*, 8(4). <https://www.doi.org/10.14763/2019.4.1424>
- Cooperation, E. U. (2024). *Digital Services Act: Ensuring a Safe and Accountable Online Environment*. Brussels: EU Publications
- Diakopoulos, N. (2019). *Automating the news: How algorithms are rewriting the media*. Harvard University Press
- Diakopoulos, N. (2019). *Automating the News: How Algorithms Are Rewriting the Media*. Harvard University Press
- Eubanks, V. (2018). *Automating Inequality: How High Tech Tools Profile, Police, and Punish the Poor*. New York, NY: St. Martin's Press
- Fernando, D., Stephen, Y., Michael, M., & Qian, Y. (2023). The Participatory Turn in AI Design: Theoretical Foundations and the Current State of Practice. Dans E. 2023 (Éd.), *ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization*. Boston, MA, USA. <https://www.doi.org/10.1145/3617694.3623261>
- Gillespie, T. (2014). The Relevance of Algorithms. Dans P. B. T. Gillespie, *Media Technologies: Essays on Communication, Materiality, and Society* (pp. pp. 167–193). MIT Press. <https://www.doi.org/10.7551/mitpress/9780262525374.003.0009>
- Gillespie, T. (2018). *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. <https://www.doi.org/10.12987/9780300235029>
- Hoeksema, B. (2023). Digital Domination and the Promise of Radical Republicanism. *Philosophy & Technology*, 36(1). <https://www.doi.org/10.1007/s13347-023-00618-7>
- Jeffrey, L., & Yonaira, R. (2025). Leveraging Digital Spaces and Datafication in Communication Research: Contributions of Digital Qualitative Fluidity to Ethnographic Interviewing. *Journal of Communication*, 75(4). <https://www.doi.org/10.1093/joc/jqaf017>



- Joy, B., & Timnit, G. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. *Fairness, Accountability and Transparency*, PMLR. Proceedings of Machine Learning Research.
- Kalender, A. B. (2024). The Datafication of Newsrooms: A Study on Data Journalism Practices in a British Newspaper. *Journal Media*, 5(1), 48–64. <https://doi.org/10.3390/journalmedia5010004>
- Karl, d. F., & Jenny, d. F. (2020). Artificial Intelligence, Transparency, and Public Decision-making: Why Explanations are key when Trying to Produce Perceived Legitimacy. *AI and Society*, 35(4), 917–926. <https://www.doi.org/10.1007/s00146-020-00960-w>
- Mathias-Felipe, d.-L.-S., Wang Ngai, Y., & Tomás, D. (2024). Guiding the Way: A Comprehensive Examination of AI Guidelines in Global Media. *AI and Society*. <https://www.doi.org/10.48550/arXiv.2405.04706>
- Md. Tanzib, H., Mehedi Hasan, A., Sadman, R., Rana, T., Khaleque, I., & Md. Mehrab, S. (2023). Path To Gain Functional Transparency in Artificial Intelligence with Meaningful Explainability. *arXiv:2310.08849*, 3(2), 166–180. <https://www.doi.org/10.57019/jmv.1306685>
- Min Kyung Lee, Daniel Kusbit, Anson Kahng, Ji Tae Kim, Xinran Yuan, Allissa Chan, Daniel See, Ritesh Noothigattu, Siheon Lee, Alexandros Psomas, and Ariel D. Procaccia. 2019. WeBuildAI: Participatory Framework for Algorithmic Governance. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 181 (November 2019), 35 pages. <https://doi.org/10.1145/3359283>
- Mohammad, A., Mohammad, N., Shahab Saquib, S., Raza, I., Faiyaz, D., Yassine, H., . . . Abbes, A. (2023). Filter Bubbles in Recommender Systems: Fact or Fallacy -- A Systematic Review. *arXiv:2307.01221*. <https://www.doi.org/10.48550/arXiv.2307.01221>
- Napoli, P. (2019). *Social Media and the Public Interest: Media Regulation in the Disinformation Age*. Columbia University Press
- Napoli, P. M. (2019). *Social Media and the Public Interest: Governance of News Platforms in the Realm of Individual and Algorithmic Gatekeepers*. Press, Columbia University
- Nick, C., & Andreas, H. (2017). *The Mediated Construction of Reality*. Polity Press
- Noble, S. U. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York University Press
- Pariser, E. (2011). *The Filter Bubble: What the Internet Is Hiding from You*. Penguin Press
- Ragnedda, M. (2018). Conceptualizing Digital Capital. *Telematics and Informatics*, 35(8), 2366–2375. <https://doi.org/10.1016/j.tele.2018.10.006>
- Rodilosso, E. (2024). Filter Bubbles and the Unfeeling: How AI for Social Media Can Foster Extremism and Polarization. *Philosophy & Technology*, 37(2). <https://www.doi.org/10.1007/s13347-024-00758-4>
- Sawsen, T., & Rania, A.-Q. A. (2025). Leveraging Artificial Intelligence in Social Media Analysis: Enhancing Public Communication Through Data Science. *Journal Media*, 6(3). <https://doi.org/10.3390/journalmedia6030102>
- Thurman, N. (2014). Newspaper consumption in the digital age: Measuring multichannel audience attention and brand popularity. *Digital Journalism*, 2(2), 156–178. <https://www.doi.org/10.1080/21670811.2013.818365>
- Ulises, A. M., & Nick, C. (2019). *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Stanford University Press
- UNIDO. (2024). *Bridging the AI divide: Empowering developing countries through manufacturing*. United Nations Industrial Development Organization. <https://hub.unido.org/sites/default/files/publications/Bridging%20the%20AI%20Divide%20Empowering%20Developing>
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: Public Affairs
- Приступенко, Т., Євдокименко, І. (2025). Правове регулювання використання штучного інтелекту в медіа: Український та світовий досвід [Legal Regulation of the use of Artificial Intelligence in the Media: Ukrainian and Global Experience]. *Наукові записки Інституту журналістики*, 86(1), 9–20. <https://doi.org/10.17721/2522-1272.2025.86.1>

Received 22.12.2025
Approved 27.03.2026
Published 30.03.2026