



The age of synthetic media: Perspectives from communication and media studies

SCM Special Issue – Call for Papers

Guest Editors

Alexander Godulla (University of Leipzig) Christian Pieter Hoffmann (University of Leipzig)

Ever since a Reddit user called "Deepfake" created a forum for publishing pornographic content based on deep learning technologies, synthetic media have attracted increasing interest in research and practice (Godulla et al., 2021). Deep learning technologies enable users to depict individuals in scenarios that never happened and have them say anything imaginable (Citron & Chesney, 2019; Vaccari & Chadwick, 2020). The rapid advances of these technologies result in synthetic media increasingly entering new social domains, such as entertainment, education, journalism, or politics (Seibert, 2023).

To date, research has focused primarily on the concept of deepfakes, while the term synthetic media has only recently gained popularity. Although both terms refer to the use of deep learning technologies in the creation of media content, the term "synthetic media" might be more suitable when discussing the benefits of synthetically generated content (e.g., WDR Innovation Hub, 2021), as the term "deepfake" is connotated with fake news and, thus, misinformation (Altuncu et al., 2022; Dan et al., 2021; Weikmann & Lecheler, 2023). Research into deepfakes is currently dominated by studies in the field of computer science, focusing on the development of tools for the automatic detection of deepfakes. In addition, studies in the field of law discuss legal frameworks to combat harmful effects of the novel technology (Godulla et al., 2021). Thus far, studies in the social sciences mostly focus on the implications of deepfakes for audiences (e.g. Dobber et al., 2020; Hameleers et al., 2024; Vaccari & Chadwick, 2020). Initial findings suggest that audiences have difficulties identifying deepfakes as such (Bray et al., 2023; Thaw et al., 2020) and that the mere awareness of the existence of deepfakes can create a sense of uncertainty, skepticism and even distrust towards online news and media in general (Ternovski et al., 2022; Vaccari & Chadwick, 2020; Hameleers & Marquart, 2023). From the audience's perspective, deepfakes and synthetic media increasingly blur the boundaries between reality and fiction (Bendahan Bitton et al., 2024).

The interdisciplinary nature of research into deepfakes and synthetic media is partly due to the technology's diverse fields of application. However, research on the emergent technology from the perspective of communication and media studies is still in its infancy. Therefore, the upcoming special issue of SCM aims at examining deepfakes and synthetic media specifically from the perspective of communication and media studies. We welcome qualitative, quantitative as well as theoretical and methodological contributions addressing challenges faced by the public, organizations and institutions as well as individual recipients in dealing with synthetic media and deepfakes.





We define synthetic media as media content created using deep learning technologies with a wide range of potential applications, such as education, entertainment, journalism, or advertising. In contrast, we define "deepfakes" as a specific application of synthetic media, which primarily serves harmful purposes such as disinformation. Synthetic media can be used to generate audiovisual recordings that can be used in the context of corporate or organizational communication. Further, synthetic media hold the potential to create and enhance journalistic content, for example by illustrating real events or rendering the reception of news content more interesting through new forms of personalization (e.g. synthetic news anchors). Finally, synthetic media can be used in the creation of entertaining and satirical content, which can, however, mislead audiences if there is a lack of labelling or background information. Deepfakes can be used to expose individuals to risks (e.g. by means of non-consensual pornographic content) or to defame public actors and spread disinformation. Politically motivated deepfakes may have the potential to influence political knowledge, attitudes or even voting intentions and thus challenge democracy. The public, in turn, could be deceived and manipulated by deepfakes if they do not dispose of the necessary digital skills to recognize them. The continuous improvement in the quality of deepfakes makes it increasingly difficult to determine the veracity of media content. Consequently, journalists and influencers could fall for a deepfake and accidentally share it with their audience.

Individual submissions could cover, but are not limited to, the following perspectives (or a combination thereof):

- *Media Reception and Effects*: How do synthetic media influence recipients' trust in media content? How do they affect recipients' attention and entertainment? What dispositions and boundary conditions influence these relationships? What interventions can reduce deepfake misinformation effects?
- *Political Communication*: What role do political deepfakes play in the context of elections? What persuasive effects do they have on voters? How are deepfakes employed in the context of political disinformation (e.g. Ukraine war)? To what extent are synthetic media used in the context of political campaigning?
- *Journalism Studies*: To what extent can standards of journalistic work be reconciled with the use of synthetic media? What specific labels should be introduced for synthetic media to ensure transparency for audiences? What skills do journalists need to be equipped to deal with deepfakes?
- *Visual Communication*: To what extent do the persuasiveness and credibility of audiovisual deepfakes differ from text-based content? Which factors favor or impede the credibility of audiovisual deepfakes (e.g. plausibility, background knowledge, attitude, psychological factors)? How do synthetic media and deepfakes change the definition and perception of authenticity of visual content?
- *Media Education*: What skills do audiences need to develop to critically question and recognize deepfakes and synthetic media? How can children and young people be protected from negative applications of deepfakes?





- *Media Ethics*: To what extent can generated content be used to depict real events? What ethical aspects should be considered when using synthetic media for the creation and distribution of audiovisual content, for example in the context of education or strategic communication?
- *Media Law*: What legal framework could prevent the misuse of deepfake technologies without unduly restricting the creative use of synthetic media and freedom of expression? What legal protections of personal rights and user privacy apply in connection with deepfakes and synthetic media? To what extent can the use of synthetic content depicting deceased individuals be justified?
- *Communication History*: How can deepfakes be placed in historical contexts of media manipulation (e.g. Photoshop) and propaganda? What role do the negative effects of this new technology on audience trust play against the background of the history and development of audiovisual media?

Submission Instructions

SCM is an Open Access Journal of the German Communication Association (DGPuK) and Affiliate Journal of the International Communication Association (ICA). Accepted papers will be published as Open Access without additional costs.

We invite submissions that fit any of the SCM formats: *Extended paper* (50–60 pages), *Full paper* (15–20 pages), and *Research-in-brief* (5–10 pages). Manuscripts should be prepared in accordance with the SCM guidelines:

https://www.nomos.de/en/journals/scm/#directions-for-authors

Interested authors will submit *abstracts* (500-word max.) and short author biographies for review by the guest editors. Authors should specify in their abstract whether they intend to submit an Extended paper, Full Paper, or Research-in-brief for the full paper deadline in case the abstract is accepted. Authors of selected abstracts will submit full papers, which will undergo peer review; therefore, selected abstracts do not guarantee publication in the special issue.

Timeline:

•	Abstract submission deadline:	31 January 2025
•	Austract submission deadmite.	31 January 2023
•	Notifications of acceptance of the proposals:	15 February 2025
•	Full paper deadline:	1 April 2025
•	Peer review process:	April 2025 – October 2025
•	Publication of the special issue:	December 2025

Abstracts and manuscripts are to be submitted to

<u>christian.hoffmann@uni-leipzig.de</u> & <u>alexander.godulla@uni-leipzig.de</u>. Please also contact both guest editors for any inquiries regarding the special issue





References

- Altuncu, E., Franqueira, V. N., & Li, S. (2022). Deepfake: Definitions, performance metrics and standards, datasets and benchmarks, and a meta-review. *arXiv preprint*. https://doi.org/10.48550/arXiv.2208.10913
- Bendahan Bitton, D., Hoffmann, C. P., & Godulla, A. (2024). Deepfakes in the context of AI inequalities: Analysing disparities in knowledge and attitudes. *Information, Communication & Society*, 1–21. <u>https://doi.org/10.1080/1369118X.2024.2420037</u>
- Bray, S. D., Johnson, S. D., & Kleinberg, B. (2023). Testing human ability to detect 'deepfake'images of human faces. *Journal of Cybersecurity*, 9(1), tyad011. <u>https://doi.org/10.1093/cybsec/tyad011</u>
- Citron, D. K. & Chesney, R. (2019). Deep fakes: a looming challenge for privacy, democracy, and national security. *California Law Review*, 107, 1753–1820. https://scholarship.law.bu.edu/faculty_scholarship/640
- Dan, V., Paris, B., Donovan, J., Hameleers, M., Roozenbeek, J., van der Linden, S., & von Sikorski, C. (2021). Visual mis-and disinformation, social media, and democracy. *Journalism & Mass Communication Quarterly*, 98(3), 641–664.
- Dobber, T., Metoui, N., Trilling, D., Helberger, N., & de Vreese, C. (2020). Do (microtargeted) deepfakes have real effects on political attitudes? *The International Journal of Press/Politics*, 26(1), 69–91. <u>https://doi.org/10.1177/1940161220944364</u>
- Godulla, A., Hoffmann, C. P., & Seibert, D. (2021). Dealing with deepfakes An interdisciplinary examination of the state of research and implications for communication studies. *SCM Studies in Communication and Media*, 10(1), 72–96. https://doi.org/10.5771/2192-4007-2021-1-72
- Hameleers, M. & Marquart F. (2023). It's nothing but a deepfake! The effects of misinformation and deepfake labels delegitimizing an authentic political speech. *International Journal* of Communication, 17, 6291–6311. <u>http://ijoc.org</u>
- Hameleers, M., van der Meer, T. G., & Dobber, T. (2024). Distorting the truth versus blatant lies: The effects of different degrees of deception in domestic and foreign political deepfakes. *Computers in Human Behavior*, *152*, 108096.
- Seibert, D. (2023). Deepfakes Temporary hype or long-term innovation driver? In A. Godulla & S. Boehm (Eds.), *Digital disruption and media transformation: How technological innovation shapes the future of communication* (pp. 143–152). Springer VS.
- Ternovski, J., Kalla, J., & Aronow, P. (2022). The negative consequences of informing voters about deepfakes: Evidence from two survey experiments. *Journal of Online Trust and Safety*, *I*(2), 1–16. <u>https://doi.org/10.54501/jots.v1i2.28</u>





- Thaw, N. N., July, T., Wai, A. N., Goh, D. H., & Chua, A. Y. K. (2020). Is it real? A study on detecting deepfake videos. *Proceedings of the 83rd Annual Meeting of the Association for Information Science and Technology*, 57(366), 1–3. https://doi.org/10.1002/pra2.366
- Vaccari, C., & Chadwick, A. (2020). Deepfakes and disinformation: Exploring the impact of synthetic political video on deception, uncertainty, and trust in news. *Social Media* + *Society*, 6(1), 2056305120903408. <u>https://doi.org/10.1177/2056305120903408</u>
- WDR Innovation Hub (2021). Synthetische Medien. Zukünfte der Medienproduktion mit Künstlicher Intelligenz [Synthetic media. The future of media production with Artificial Intelligence]. Westdeutscher Rundfunk Köln. <u>https://bit.ly/3xQBirJ</u>
- Weikmann, T., & Lecheler, S. (2023). Visual disinformation in a digital age: A literature synthesis and research agenda. New Media & Society, 25(12), 3696–3713. https://doi.org/10.1177/14614448221141648