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Editorial

Stefan Stieglitz*, Jonas Fegert, Hanna Krasnova, Georg Voronin and Christof Weinhardt

Social media and society

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1 Introduction

Social media platforms have transformed communication, culture, and social interactions in ways that require serious attention. With billions of users engaging daily with platforms such as TikTok, Facebook, X and Instagram, digital spaces have become a central part of social life. As these technologies continue to evolve and influence many aspects of social life, researchers are faced with a "double-edged sword": On the one hand, social media are tools that offer remarkable opportunities for networking and democratic participation. On the other hand, they pose significant threats to social cohesion and democratic integrity. Against this background, this special issue examines the complex impact of these platforms on societal structures, individual behavior, and public discourse.

Indeed, social media possesses considerable potential to democratize the exchange of information, facilitate global dialogue, and promote the deliberative democracy – an ideal conceptualized by Habermas as the public sphere.^{2,3} However, the reality has proven to be more complex. Instead of creating an environment that supports rational public discourse, we have witnessed radical polarization, the spread of misinformation, and the exploitation of these platforms for harassment, hate speech, and political manipulation.^{4,5} These undesirable developments have significantly impacted societal cohesion and democratic

institutions, raising fundamental questions about the future of public discourse in the digital space. ^{1,6,7}

Current research around social media and society addresses critical questions ranging from the role of social media in authoritarian and democratic political systems at the macro level to its impact on users' behavior and wellbeing at the micro level. For example, scholars have examined how platforms can disseminate misinformation and have drawn attention to the ethical considerations behind algorithmic bias in underlying recommendation systems, raising concerns about systemic user manipulation. Further, the evolving capabilities of artificial intelligence raise particular concerns about deepfakes, coordinated disinformation campaigns, and targeted hate speech that can aim to incite animosity between groups. These developments have profound implications for users' perceptions, behavioral patterns, and, on a broader level, for democratic processes as a whole, underscoring the urgent need for effective regulation at the policy level. At the same time, social media platforms facilitate social interactions, intergroup contact, and act as powerful tools for civic engagement, political participation, and grassroots activism. By enabling users to gain exposure to diverse perspectives and knowledge, these platforms support community building among minorities and marginalized groups that might otherwise lack voice or visibility. The ability of social media to shape public opinion and facilitate political engagement, combined with its potential to enhance cultural representation and diversity in digital narratives, can significantly contribute to the formation of democratic opinions. Moreover, social media represent arenas for valuable information exchange between different groups. For example, academics can share study results and scientific evidence publicly with other experts or laypeople.8 Another example is that social media and conversational agents might strengthen direct interaction between citizens and public authorities, fostering trust in the state.9

Thus, the key challenge for researchers, policy-makers, and platform providers is to understand how to harness this positive potential for social connection and civic participation while mitigating the negative effects that threaten the social fabric of modern democracies.

E-mail: stefan.stieglitz@uni-potsdam.de.

https://orcid.org/0000-0002-4366-1840

Jonas Fegert, FZI Research Center for Information Technology, Friedrichstr. 60, 10117 Berlin, Germany

Hanna Krasnova and Georg Voronin, Universität Potsdam, August Bebel Str. 89, 14482 Potsdam, Germany

Christof Weinhardt, Karlsruher Institut für Technologie (KIT), Kaiserstrasse 89-93, 76131 Karlsruhe, Germany

^{*}Corresponding author: Stefan Stieglitz, Universität Potsdam, August Bebel Str. 89, 14482 Potsdam, Germany,

2 Emerging research directions and contributions

This special issue presents six research papers that examine different facets of social media use. It brings together a diverse collection of research that explores the constructive and destructive potentials of social media across a range of contexts, from the individual's search for meaning to the dynamics of international conflict. While constructive engagement is characterized by activities that yield beneficial results for the individual and their social environment, destructive engagement involves behaviors that are detrimental to the user and others. The special issue offers both theoretical insights and practical approaches to understanding and addressing these complex challenges.

Three articles discuss different areas of the constructive potential of social media.

The paper by Cuong et al. 10 "The Role of Social Media in Constructing Meaning in Life" explores the relationship between social media use and meaning in life among university students, employing structural equation modeling to understand how different purposes of social media engagement - academic, social, informational, and entertainment - contribute to users' sense of purpose and wellbeing. This research draws upon Uses and Gratifications theory to contribute to our understanding of how social media can serve positive functions in users' lives while highlighting the importance of intentional and purposeful engagement.

In their paper "Sharing knowledge under pressure" on trust dynamics in academic social media environments, Schewina et al.¹¹ investigate how scientific communication unfolds on these platforms and what factors influence the credibility and dissemination of research findings. This research is particularly relevant as social media increasingly becomes a venue for science communication and public engagement with research, addressing concerns about misinformation in scientific discourse.

In their paper, "Social Media in Crisis Communication: Insights from Peace Operations on the African Continent," Riebe et al. 12 provide a qualitative analysis of 126 UN documents, detailing the use of social media by African peace operations (POs) from 2003 to 2024. The study finds that while African peace operations rely on ICTs in their peacebuilding efforts, the potential of social media is underutilized, with POs mainly using these platforms for disseminating crisis information. Overall, this paper demonstrates

how ICTs, including social media, can effectively contribute to sustainable peace efforts.

Three articles explore how digital platforms can become arenas for targeted violence, tools for political polarization, and catalysts for social marginalization.

The paper by Mirbabaie & Lekscha¹³ "How to Analyze Cyberbullying on Social Media Platforms - A Systematic Literature Review in Information Systems" investigates cyberbullying detection and prevention mechanisms, addressing one of the most pressing concerns for platform safety and user well-being. Through a comprehensive literature review and analysis of technological approaches, detection methods, socio-behavioral perspectives, and regulatory influences, this study provides a framework for understanding how different approaches can work together to create safer digital environments.

The paper "Silenced Voices: Social Media Polarization and Women's Marginalization in Peacebuilding During the Northern Ethiopia War" by Ali et al. 14 examines the role of social media in conflict situations, specifically analyzing how platforms were used during the Northern Ethiopia war to polarize communities and marginalize women's voices in peacebuilding efforts. This research highlights the marginalization of women in peacemaking processes due to hostile online environments, digital divides, and cultural norms, while identifying substantial gaps in leveraging digital media for sustainable peace.

The paper by Guntrum et al. 15 "Chilling or Resisting? Exploring the Influence of Technology-Facilitated (Gender-Based) Violence on Female Feminists in Colombia and Costa Rica" explores technology-facilitated gender-based violence's impact on feminist mobilization in digital spaces. Based on 23 interviews with female activists from Colombia, Costa Rica, and Bolivia, this paper uncovers harassment tactics (doxing, hate speech, threats) alongside adaptive responses (anonymous profiles, security workshops). By showing how self-censorship and collective resistance coexist, this study calls for gender-sensitive digital protection measures and context-aware moderation to safeguard marginalized voices.

3 Implications for design, policy, and practice

Research published in this special issue points to several important directions for the design, regulation, and use of social media platforms to maximize their beneficial potential while minimizing harm.

3.1 Design implications

Research findings indicate that platform design decisions significantly shape user behavior and social outcomes. 16,17 Features that encourage thoughtful engagement - like adding friction to sharing mechanisms or including reflection prompts before posting – could help reduce the dissemination of harmful content. Likewise, making algorithms more transparent and giving users control over recommendation systems may help address concerns about filter bubbles and user manipulation.¹⁸

3.2 Policy implications

This research underscores the need for thoughtful regulatory approaches that take into account the contextual and cultural factors shaping how social media operates in different societies. 19,20 Effective governance likely requires adaptive frameworks that can respond to emerging challenges while preserving the democratic potential of these platforms, rather than applying universal solutions everywhere.

3.3 Educational implications

The multiple challenges identified in this special issue highlight the relevance of digital literacy. Indeed, teaching users to evaluate information critically, understand algorithmic systems, and engage constructively online may prove as important as technical fixes to platform problems.

3.4 Research implications

The interdisciplinary character of social media research calls for continued collaboration across the fields of Information Systems, computer science, psychology, sociology, political science, and communication studies. On the methodological side, the complexity of these systems requires approaches capable of capturing both individual and societal effects over time.

4 Future directions and challenges

Looking ahead at social media research, several key challenges and opportunities emerge from this work. First, the integration of AI into social media platforms creates both opportunities and significant risks. Therefore, future research must address questions about algorithmic accountability, the potential for AI-driven manipulation, and provide answers on how to develop AI systems that support rather than undermine social cohesion and societal discourse.

Second, the global reach of social media platforms calls for research that transcends cultural and national boundaries. The papers in this special issue demonstrate this necessity, with studies spanning Germany, Ethiopia, Latin America, and Vietnam. Understanding the differences in how these platforms operate in diverse social, political, and economic contexts will be essential for developing appropriate governance frameworks and design principles.

Third, we also need to pay more attention to the temporal dynamics of social media platforms. Current studies mainly provide snapshots of the short-term impacts of social media platforms on individuals and societies, while the long-term consequences remain unclear. Hence, longitudinal research is crucial for understanding how these processes evolve over time.

Finally, the rapid pace of technological change places further demands. Thus, research must remain flexible to address emerging platforms and features while building cumulative knowledge about fundamental dynamics.

5 Conclusions

The papers in this special issue show that social media's impact on society is really that of a double-edged sword, with social media platforms capable of fostering social connections, user engagement, and democratic participation while simultaneously enabling harassment, misinformation, and social division. This duality represents a fundamental characteristic that we need to understand and adapt to as a society.

Overcoming ongoing challenges requires intense collaboration between researchers, platform providers, policymakers, and civil society organizations. To better understand the ongoing dynamic, we need research methods that can capture the complexity of socio-technical systems and policy frameworks that can adapt to the rapidly changing landscape of technologies and platforms.

To this effect, this issue presents current research and highlights cases that might serve as blueprints for overcoming present problems.

References

- 1. Stieglitz, S.; Ross, B. The Impact of Social Media on Social Cohesion: a Double-Edged Sword. *Media Commun.* **2022**, *10* (2), 104–107.
- 2. Bruns, A.; Highfield, T. Is Habermas on Twitter? Social Media and the Public Sphere. In The Routledge Companion to Social Media and Politics; Routledge, 2015.

- 3. Habermas, J. *Strukturwandel der Öffentlichkeit: Untersuchungen zu einer Kategorie der bürgerlichen Gesellschaft*, 15th ed.; Suhrkamp: Berlin, 1990.
- Lazer, D. M.; Baum, M. A.; Benkler, Y.; Berinsky, A. J.; Greenhill, K. M.; Menczer, F.; Metzger, M. J.; Nyhan, B.; Pennycook, G.; Rothschild, D.; Schudson, M.; Sloman, S. A.; Sunstein, C. R.; Thorson, E. A.; Watts, D. J.; Zittrain, J. L. The Science of Fake News. Science 2018, 359 (6380), 1094—1096.
- Wardle, C.; Derakhshan, H. Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking; Council of Europe: Strasbourg, 2017.
- 6. Levitsky, S.; Ziblatt, D. *How Democracies Die*; Crown: New York City,
- Weinhardt, C.; Fegert, J.; Hinz, O.; van der Aalst, W. M. P. Digital Democracy: A Wake-Up Call. Bus. Inf. Syst. Eng. 2024, 66 (2), 127 – 134.
- Biermann, K.; Nowak, B.; Braun, L.-M.; Taddicken, M.; Krämer, N.; Stieglitz, S. Does Scientific Evidence Sell? Combining Manual and Automated Content Analysis to Investigate Scientists' and Laypeople's Evidence Practices on Social Media. *Sci. Commun.* 2024, 46 (5), 619–652.
- Kocur, A.; Clausen, S.; Hofeditz, L.; Brünker, F.; Fromm, J.; Stieglitz, S. Fighting False Information — Designing a Conversational Agent for Public Sector Organizations. *Proc. Eur. Conf. Inf. Syst.* 2023, 65.
- Cuong, T.-V.; Piko, B. F.; Tuong, N. V. The Role of Social Media in Constructing Meaning in Life: A SEM Analysis. *I-com J.* 2025, 24 (1).

- Schewina, K.; Jung, A.-K.; Jelenc, V. Sharing Knowledge under Pressure: Scientific Crisis Communication on Social Media. *I-com J.* 2025, 24 (1).
- Riebe, T.; Guntrum, L.; Reichert, L.; Reuter, C. Social Media in Crisis Communication: Insights from Peace Operations on the African Continent. *I-com J.* 2025, 24 (1).
- Mirbabaie, M.; Lekscha, J. How to Analyze Cyberbullying on Social Media Platforms — A Systematic Literature Review in Information Systems. *I-com J.* 2025, *24* (1).
- Ali, A.; Yimam, S.; Ayele, A.; Biemann, C.; Semmann, M. Silenced Voices: Social Media Polarization and Women's Marginalization in Peacebuilding During Northern Ethiopia War. *I-com J.* 2025, 24 (1).
- Guntrum, L.; Forero Nunez, D.; Reuter, C. Chilling or Resisting? Exploring Thew Influence of Technology-Facilitated (Gender-based) Violence on Female Feminists in Colombia and Costa Rica. *I-com J.* 2025, 24 (1).
- Hinz, O.; Otter, T.; Skiera, B. Estimating Network Effects in Two-Sided Markets. J. Manag. Inf. Syst. 2020, 37, 12–38.
- Weinhardt, C.; Holtmann, C.; Neumann, D. Market-Engineering. Wirtschaftsinformatik 2003, 45, 635—640.
- Kölbel, T.; Kunz, D.; Lamberty, R. Dark Sides of the Platform Economy: Market Power and its Abuse by Platform Orchestrators. Bus. Inf. Syst. Eng. 2023, 65, 359—378.
- Aytac, U. Digital Domination: Social Media and Contestatory Democracy. *Polit. Stud.* 2022, 72, 6–25.
- 20. van Dijk, J. The Digital Divide; Wiley: Cambridge, 2020.