

## The Communicative Dynamics of AI in Datafied Societies Introduction to the themed issue

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Artificial intelligence (AI) is not only shaping communication processes; it is also actively contributing to and participating in them. AI communicates *with* us in the form of chatbots, *about* us through prediction and surveillance models, and *instead* of us as automatic content generators. Consequently, AI applications alter communication processes in datafied societies. This is not only in terms of how communication happens but also in relation to what it means to communicate, how communication is constituted, and with whom we are able to communicate. Recent AI developments are challenging media and communication scholars to re-examine established media and communication theory as well as to re-think the notion of communication.

This themed issue addresses related knowledge gaps and contributes conceptual and empirical studies that examine and reflect on the role of (Gen)AI in various communication processes, applications, and organizational environments. The issue's contributions nuance and detail the interplay between humans and AI at the intersection of critical AI and communication studies. The critical perspectives shared in this issue not only address the multifaceted nature of AI in datafied societies but also examine how these technologies influence the social fabric and the everyday lives of individuals, organizations, and society at large, assessing and discussing both the opportunities and risks associated with the pervasive presence of AI in various contexts.

## The rise of (Gen)AI

Over the past two years, GenAI applications have mushroomed, and the AI industry has become ubiquitous. The widely-noticed launch of ChatGPT in November 2022 stands not as an isolated example. Microsoft, for example, has developed a solution called Copilot; Alphabet (Google) has introduced Gemini, and various start-ups such as Quillbot and developer communities such as Hugging Face are likewise penetrating the market. Moreover, numerous other organizations are enhancing their offerings by incorporating AI-based solutions.

According to Burgess, we are experiencing a "GenAI moment",<sup>1</sup> characterized by an unprecedented number of applications and users as well as a substantial increase in financial investments into AI development. Since the launch of ChatGPT, private investments have risen immensely, with the global AI market currently valued at more than 184 billion U.S. dollars. Public investment is equally expanding, although it remains relatively small in comparison to the significantly larger investments seen in regions such as the United States and China (Madiaga & Ilnicki, 2024). GenAI is appealing to a wide range of users because of its easy accessibility. Users do not need specific technical knowledge, and a simple prompt can generate several pages of texts or images within a few seconds. In contrast to traditional AI solutions, generative AI focuses on generating new content. As business models are under development, many GenAI applications are currently offered free of charge. Not least, therefore, ChatGPT surpassed the 1 million user mark within

just five days of its launch. At the time of writing, ChatGPT has attracted over 180 million users (Duarte, 2024). In comparison, with the changing media landscape in mind, Facebook needed ten months and Netflix three and a half years to achieve the same number of users (Cox, 2023).

As public discussions suggest, comprehending AI in a meaningful and systematic way is an ongoing struggle. This difficulty arises from the ambiguities surrounding AI, the openness in terms of how AI systems are coded and applied, and the potential and desirability of developing AI that surpasses human forms of intelligence. While AI is a contested terrain, with unclear boundaries and referents, the openness of AI applications is manifested most evidently in how the same system can be used for both beneficial and malicious purposes. Deepfakes, for instance, are often associated with misinformation and identity theft but also have positive applications, such as providing synthetic voices for those who have lost their ability to speak or offering real-time translation that syncs the speaker's lip movement with translated audio, enhancing comprehension among meeting participants.

In *The New Yorker*, one of the so-called "godfathers of AI" is quoted as being afraid of his own invention (Rothman, 2023). As a result, it is not surprising that many discussions revolve around the dichotomy of human versus machine intelligence, examining the question of who (or what) will ultimately be in control. In contrast, and perhaps less surprisingly, technology actors present AI in the opposite way, framing AI as the key to overcoming global challenges such as poverty, health issues, and climate change. OpenAI's CEO, Sam Altman, goes as far as to state that "because the upside of AGI [artificial general AI] is so great, we do not believe it is possible or desirable for society to stop its development forever" (Altman, 2023). This shows that, for OpenAI and probably for many other software-developing companies, the launch of generative AI marks an important yet also just one more step in the ongoing pursuit of creating AI that is "generally smarter than humans" (Altman, 2023).

These discussions exemplify the fact that AI may be approached as an empty signifier capable of being imbued with various meanings (Barthes, 1957/2009). By implication, what AI "is" depends on how citizens, users, developers, governments, etc. understand it at a particular point in time (see, amongst others, Lindgren, 2023). AI thus resists any attempt at singularizing and must be approached as a multifaceted technique encompassing a range of diverse applications, understandings, and practices.

## Conceptualizing AI in the context of media and communication studies

It is not only public debate that is grappling with the challenge of how to grasp this "AI moment"; scholars in the humanities and social sciences are too. In the literature, attempts have been made to systematize and define AI, mostly along the lines of narrow, generative, and predictive AI (Gill, 2016). Furthermore, a number of studies have discussed

the potentials and risks of AI, including implications for work practices, trust, ethics and governance, and society more generally (Crawford & Calo, 2016; Kellogg et al., 2020; Newell & Marabelli, 2017; Wiesenberg & Tench, 2020; Zuboff, 2019). However, the question of how to theorize AI and make it accessible to scholarly work remains open in the broader field of media and communication research. Philosopher and human-machine scholar Gunkel (2012) proposes conceptualizing Turing's famous imitation game as a fundamental test of communication, thus laying the groundwork for communication and media studies. The basic idea behind the Turing test is to determine whether machines can think, or, in other words, if they can be considered intelligent. However, instead of going deeper into the distinction between human and machine intelligence, this view allows for a change of perspective that focuses on the communicative aspects. Part of the test includes a set of exchanges in written messages between a human interlocutor and the machine. The premise of the thought experiment was thus a machine attempting to mimic human communication in such a way that it passes as a human interlocutor. Gunkel (2012) interprets this communicative exchange as a primitive form of what we call "chatting" nowadays, understanding Turing's test as a fundamental test of communication, determining whether a machine could successfully replicate human conversational patterns to be indistinguishable from a human.

The relatively young field of human-machine communication has taken this argument further and has started to question the traditional anthropocentric paradigm of communication studies, suggesting that meaning nowadays is increasingly created with machines rather than through them (Guzman, 2018). Intelligent machines are hence not merely positioned as a facilitator or enabler of communication but as an active participant. In this view, current models of communication, which have predominantly focused on human-to-human interaction, are inadequate for understanding and theorizing people's interactions and sense-making processes with AI (Guzman & Lewis, 2020). AI becoming an actively participating interlocutor underscores the necessity of rethinking how AI is incorporated into the theoretical frameworks of media and communication studies, thus mirroring the profound shifts that AI introduces into the communicative dynamics of datafied societies.

## Human-AI entanglements

A growing body of literature treats AI as sociotechnical configurations comprising inseparable human and other-than-human agencies (Dignum, 2022). Data, algorithms, and program language, but also "people debating the models, cleaning the training data, designing the algorithms, tuning the parameters, deciding on which algorithms to depend on in which context" (Gillespie, 2016, p. 22) are constitutive of an AI model. AI is thus not developed, adopted, and employed in isolation. Users have furthermore become active participants in the exploratory and configurative process of AI development. Their every-

day practices contribute substantially to data training and management; high-quality data is crucial to optimal AI performance. IBM's definition of GenAI as "deep learning models that can generate high-quality text, images, and other content based on the data they were trained on" (Martineau, 2023) further emphasizes this critical role of data. Not least, therefore, has data also been called the "new oil" (Arthur, 2013). While the phrase is nowadays primarily used to point towards the value that lies in owning and having access to data, it also highlights the ambiguity that lies in raw data. Raw data requires continuous and substantial processes of cleaning and administration to ensure validity and operability (boyd & Crawford, 2012).

Additionally, how, among others, media researchers, citizens, vendors, and data scientists understand, imagine, and communicate around AI is another key factor in how AI develops, what models are constructed, and how they take part in processes of communication (Bailey & Barley, 2020). The entanglement of discourse and practice, of humans and AI, raises many questions and has thus become a topic of scholarly interest across a diverse set of disciplines. As mentioned above, while much literature has sought to define AI (see also Monett & Lewis, 2018), such definitional work has placed less significance on everyday communicative dynamics and enactments of AI. Further empirical, methodological, and theoretical investigations are hence needed to advance the understanding of how the communicative dynamics of AI are shaped and reshaped in datafied societies. With the contributions in this issue, we hope to shed light on these dynamics, offering new insights into the evolving relationship between humans and AI and contributing towards nuanced discussions that consider the complex interplay of intelligent technologies, communication, and society at large.

## Contributions to the themed issue

When selecting the contributions for this themed issue, we aimed for broad and diverse analyses of the communicative dynamics of AI in datafied societies. The articles are hence not to be read in any particular order but in relation to how and why they study AI. The authors approach their object of study from various theoretical angles, spanning broadly across philosophy, social science theory, feminist theory, human-machine communication, and strategic communication. Each article provides an original perspective on (Gen) AI and communication, and, collectively, they offer a broad exploration and multifaceted critique. With these contributions, this themed issue aims to further academic discussions in the broader field of media and communication studies and invites its readers to reflect on the broader implications of AI in general and GenAI in datafied societies in particular.

The first article, authored by Amanda Lagerkvist, entitled "*Yearning for a You: Faith, doubt and relational expectancy in existential communication with chatbots in a world on edge*", reflects on the existential question of why individuals feel a sense of belonging and connection when communicating with chatbots. In other words, the article discusses why

people communicate with chatbots as if somebody was “at home” and thus examines the profound implications chatbots have on human communication. The article argues that relational technologies, such as communicative AI, serve as a powerful reminder of the significance of existential communication, a type of communication that needs somebody to be at “home”, that is, having authentic intentions, responding truthfully, and showing care.

The second article, written by Olivier Driessens and Magda Pischetola, entitled “*Danish university policies on generative AI: Problems, assumptions, and sustainability blind spots*”, studies how Danish universities handle the use of GenAI in an educational context. Drawing on Bacchi’s methodology, the authors conduct an empirical analysis of how Danish universities address and problematize generative AI through their policies and guidelines. The authors argue that, because the ‘problem’ of generative AI is framed rather conventionally in functional terms, alternative interpretations are overlooked and the technologies’ materiality, as well as their broader political, economic and environmental implications, are downplayed.

The third article, written by Laura Sūna and Dagmar Hoffmann, examines users’ imaginaries of artificial intelligence. The study, entitled “*From AI imaginaries to AI literacy: artificial intelligence technologies in the everyday lives of migrants in Germany*”, describes in-depth how migrants in Germany perceive and experience a variety of digital media AI technologies. The study concludes that AI can be perceived as simultaneously empowering and disempowering. It may function as a translator, navigator, enabler, and selector of cultural, informational, and entertaining content. Nevertheless, if users begin to perceive the technology as controlling or manipulating, it may simultaneously provoke feelings of resignation and powerlessness.

The fourth article, entitled “*The absent algorithm*” and authored by Christoffer Bagger, examines the corporate communication (or lack thereof) surrounding algorithmic curation processes in enterprise social media. Drawing on Meta’s social media enterprise platform, Workplace, as a case study, the article examines how artificial intelligence and algorithmic processes as core platform functionalities are presented and explained. The empirical analysis is situated at the intersection of algorithmic management and social media studies, with algorithms and algorithmic content curation being a common and rather mundane aspect of digital platforms. The analysis finds that, in the corporate communication surrounding Workplace algorithmic content, curation is hardly mentioned or addressed, and, in conclusion, the article discusses this finding as a potential conflict of authority between enterprise social media and organizational communication management.

The fifth article, authored by Musthafa Mubashir and entitled “*The gendered dress of DALL-E 2: Exploring profession-based images in the Indian context*”, examines how gender and professions are performed within DALL-E 2-generated images in an Indian context. The study reflects theoretically on the notions of dress, gender, and religion and thus

focuses on an empirical analysis of the role of dress in the DALL-E 2 gender performances, the manifestation of religiosity in AI-generated genders, and the body aesthetics of Indian professionals. As a way forward, the research proposes considering religion as an additional layer to understanding gender dynamics in AI-generated images.

The sixth article, written by Ana Isabel Zermeño-Flores, Thomas Tufte, and Mabel Andrea Navarrete-Vega, entitled *“Knowledge production and epistemic injustices: The use of digital technologies and artificial intelligence”*, examines the role of the knowing subject in knowledge production using digital and intelligent technologies. Drawing on a literature review conducted as a case study and decolonial and feminist approaches as a theoretical framework, the study investigates potential biases that may distort the studied reality and create epistemic inequalities. The findings highlight the fact that occurring biases are not solely isolated incidents but reflect broader systemic issues, including the complexity of scientific, technological, and institutional structures.

The seventh article, co-authored by Raphaël Baptista and Célia Belim, entitled *“To use or not to use, that is the question: A study of artificial intelligence with strategic communication professionals in Portugal”*, explores strategic communication professionals’ perceptions of their use of AI applications for daily work purposes. The qualitative analysis provides an in-depth description and discussion of professionals’ thoughts on the benefits and constraints of AI, specifically in terms of how to maintain originality, address ethical issues, and manage associated costs.

The eighth and concluding article for the themed section, written in Danish by Jesper Tække, is entitled *“AI som intelligens og kommunikation: Et sociologisk perspektiv”* [AI as intelligence and communication: A sociological perspective]. The article draws on Luhmann’s communication theory and asks how artificial intelligence can be 1) conceptualized theoretically, 2) participate in societal communication, and thereby 3) influence the developmental possibilities of society. Finally, the focus is on adapting the educational system to these changes in order to analyze and discuss the article’s points regarding the impact of artificial intelligence on a specific social system.

## Open section

This issue also includes an article and a book review in the open section. In the article *“Teaching children to discriminate? A quantitative study of linguistic representation in Disney’s “Revival Era” animated films”*, Jens Kjeldgaard-Christiansen, Zac Boyd and Misa Hejrná investigate 273 Disney characters in animated films from 2009 – 2021. Among other things, the authors find that foreign-accented characters are no longer evil and untrustworthy, as a previous study of Disney characters had found. In newer animated Disney films, foreign-accented characters are distinctively good, and female and younger characters tend to be more moral than older and male characters.

In the book review, Theo van Leeuwen reviews Nicolai Jørgensgaard Graakjær's, *The Sounds of Spectators at Football*. This Bloomsbury monograph depicts the soundscapes of football matches: the spectators' chatter, their rhythmic shouting, clapping, singing, booing, and the referee's whistle – plus many other sounds. Graakjær also compares live and televised football, emphasizing that televised football not only reproduces the live event but transforms it by adding sounds that the spectator in the stadium does not hear.

## Notes

- 1 Burgess coined the term during a public lecture, which was delivered at the Annual International Communication Association (ICA) conference on 22 June 2024, held in the Gold Coast (Weaver, 2024).

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