#AISCICOMM24. Discussing the role of (generative) AI for science communication research and science communication practice

Reviewed Conference

SCIENCE COMMUNICATION IN THE AGE OF ARTIFICIAL INTELLIGENCE
ZURICH, SWITZERLAND, 5–7 JUNE 2024

Reviewed by

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Abstract

The annual conference of the Science Communication Division of the German Communication Association (DGPuK) was held in Zurich, Switzerland, from 5–7 June 2024. The conference attracted around 125 researchers and science communication practitioners from Europe and beyond. In this review, I provide an overview of the conference and discuss some of the challenges for researching AI in science communication as well as for science communication practice.

Keywords

AI tools in science communication; Bridging research, practice and teaching; Digital science communication

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Given that artificial intelligence has been a major topic in research and public discourse over the last few years and has gained even more attention since the release of ChatGPT, it was only logical that the organizers of this year's Annual Conference of the "Science Communication" Division of the German Communication Association (DGPuK) centered the event around the topic "Science Communication in the Age of Artificial Intelligence". While reflections on how AI may change science communication had already begun at earlier conferences [see Fleerackers, 2022] and publications on the role of AI in science communication have since emerged [e.g. Schäfer, 2023], the dynamic development of the field certainly warranted a conference devoted to it. With 34 presentations in 10 panels held by 98 authors, two keynotes, and a panel discussion the program was packed with the latest research on AI in science communication.

The two keynote talks framed the conference. Shirley Ho, a professor at the Wee Kim Wee School of Communication and Information at the Nanyang Technological University in Singapore, opened the conference with a talk on public perceptions of

AI. By focusing on technologies such as automated driving or drones, she presented several studies [e.g. Goh & Ho, 2024; Ho & Cheung, 2024] researching public perceptions and factors influencing them. For example, she demonstrated that AI explainability is a crucial factor in explaining trust in AI.

The second keynote by Christoph Neuberger, professor at the Free University of Berlin and Director of the Weizenbaum Institute, presented ideas on how the societal knowledge order changes through AI. He began by explaining how digitalization has already transformed the traditional linear knowledge order [Neuberger et al., 2023]. Digitalization lowered the gatekeeper threshold in media and communication and reduced the scientist-layman divide in science, creating a more circular knowledge order. Neuberger argued that while the circular knowledge order has emphasized participation in knowledge generation and dissemination, the rise of AI necessitates considering the role of automation. He concluded that it is still not certain how automation through AI applications changes the knowledge order — either it could reinforce the already observed changes, with the possibility that knowledge is deteriorating through misinformation, or it could strengthen knowledge professions such as journalism.

Many of the studies presented over the course of the conference touched upon points made in the keynotes. With studies on AI in science journalism and science communication, for example, researching how German universities use AI or how German science journalists make use of AI, first empirical results are available. AI is being used for brainstorming and inspiration in science journalism, and AI can help with tasks such as translations, creating summaries, or social media posts. "Who doesn't like having an intern?" was a catchy quote from an interview with a science journalist about AI, albeit the fear of losing their jobs also exists.

A panel on AI in the news media added valuable perspectives on how AI is portrayed in public discourse across various countries — not only in journalistic news media but also in alternative news media and in visuals accompanying articles. Studies examining perceptions of AI in different countries showed different levels of knowledge and different attitudes towards AI, though most research focused on Western-oriented countries. Results from the Science Barometer Germany (Wissenschaftsbarometer Deutschland) were presented, showing that in 2023 many Germans were aware of AI, and that trust in science and technology generally correlates with trust in specific technologies such as AI. This broadened the understanding of public perceptions of AI.

Another element relevant to the conference was the concept of AI imaginaries [e.g. Richter, Katzenbach & Schäfer, 2023], to which another panel was devoted. Imaginaries, understood as desirable visions of the future, differ between countries and stakeholders. In this panel, it was interesting to get a glimpse into countries such as China, which are important players in the field of AI.

The conference also had a strong focus on a researcher-practitioner perspective. The relevance of AI to practitioners was evident, with about one third of attendees being science communication practitioners. Their contributions enriched the lively discussions after presentations and during coffee breaks. This culminated in the panel discussion featuring two science communication practitioners and two researchers (including the author of this review), who discussed the challenges in

the interaction between science communication research and practice. The panel agreed that AI would change both, but the research might struggle to keep up with the current developments in the field of AI. Additionally, the discussion touched on how AI might change science itself, such as the potential for vaccines to be developed automatically in the future, which would further complicate science communication.

In the panel discussion and in discussions alongside the conference it became clear that our view on AI was a very social scientific one since many studies focused on generative AI, e.g., large language models such as ChatGPT, while technologies such as automated driving played a lesser role. One of the conference highlights was the improv theater during the conference dinner, which reflected the day's scientific exchanges. While 253 desserts were eaten (kudos to the organizers for keeping track of such hard facts), the improv theater encouraged us to consider the role of creativity and culture, and the extent to which these can be automated. AI applications also supported the conference itself. For instance, ChatGPT generated panel titles based on submitted titles, which were then edited by the conference organizers. Additionally, AI tools created visuals for postcards based on the abstracts, and the conference summary was generated automatically. Thus, the feeling of being surrounded by AI and the challenge of disentangling what AI means for science communication as well as science communication research — not only regarding the topic of research but also regarding how research is done and presented at conferences — were both hugely present.

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