



AI and information science: a thematic issue

DOI: <https://doi.org/10.47989/ir31265357>

Introduction

Perhaps it was not surprising that a call for papers on generative AI systems and information science should attract 44 submissions, given that the topic attracts such attention not only in the scholarly press, but also in the daily news and trade publications. Dealing with so many submissions has tested our voluntary system to the limits, with referees and copyeditors performing magnificently to get papers into production: they have our sincere thanks.

The papers taken together document the field of information science broadly, grappling with what it means to study how people seek, evaluate, and use information when the systems mediating that activity are themselves generating, filtering, and shaping the information in question. That is a genuinely new situation, and the research gathered here reflects both the intellectual energy it has released and some of the conceptual difficulties it has exposed.

AI tools and applications in information work

The opening section addresses AI tools and applications in information work, and it covers considerable ground. Two papers examine the use of AI research assistants, Scite and Perplexity in one case ([de Souza et al.](#)), Elicit and Consensus in another ([Gidakovic, et al.](#)), for literature retrieval and synthesis, raising questions about the quality of open access sources that these systems draw upon and the extent to which commercial interests shape what information is found. [Korkeamäki's study](#) of journalists identifies four distinct categories of generative AI use in story creation, from task planning through to drafting and editing; the findings are important for tool designers, and theoretically useful as a contribution to task-based models of information interaction. [Lykke et al.'s workplace study](#) of an AI-based semantic search tool is similarly grounded: users found the tool useful but encountered difficulties with domain knowledge requirements and the opacity of AI-assigned metadata, findings that underline the continuing importance of AI literacy as a workplace competency rather than merely an educational aspiration.

User behaviour and trust in AI systems

In the second section, on user behaviour and trust; [Mai and Sør](#) draw on Wittgenstein, Coeckelbergh, and Dennett, arguing that when users treat LLM responses as meaningful, they are engaging in something that resembles but is categorically distinct from the kind of meaning-making that occurs in human communication. The shift from document retrieval to answer provision, they contend, relocates the work of interpretation and evaluation to users who lack the conventional resources (source attribution, authorial intention, contextual grounding) that normally support such work. [Fang and colleagues' study](#) of social bot literacy on Sina Weibo and Li and colleagues' experiment on anthropomorphic chatbot design approach similar territory from different disciplinary directions; the finding that perceived social presence mediates trust in human-like chatbots is consistent with the CASA paradigm but raises its own ethical questions about whether such effects should be deliberately engineered. [Yu et al.](#) identify “LLM nomads” as users who switch between different LLMs, finding that switching behaviour depends on factors such as ease of user. [Savolainen's content analysis](#) of Reddit discussions about chatbot credibility

provides a useful empirical counterweight to more experimental work: ordinary users are more sceptical than optimistic, and hallucination is the phenomenon that most consistently undermines confidence; a finding that has direct implications for how information professionals advise their communities.

Educational and learning contexts

Section three turns to educational and learning contexts. [Archambault and colleagues](#) make the case for friction in AI-mediated information seeking, arguing that the efficiency gains AI delivers come at a cost to the intellectual virtues, curiosity, thoroughness, intellectual humility, that information literacy education is meant to cultivate. The typology they develop, mapping friction types on to intellectual virtues and design principles, is the kind of practically-oriented, conceptual work that educators can actually use. In their paper [Maphosa and Tlomatsana](#) review the use of generative AI tools to support students' research activities, noting the impact of such tools on information discovery and personalised learning. [Liu and Ai's study](#) of older adults using conversational AI is a useful complement: for users who face real barriers to digital participation, the reduced friction that AI affords is not a vice but an affordance. The two papers are not in contradiction, but they do suggest that friction is normatively complex in ways that a simple efficiency critique does not capture. [Pizhuk and Lomakina's study](#) introduces a dimension that most AI-and-education research simply ignores: what does critically reflective AI use look like in a high-risk information environment where the manipulation of information is a deliberate weapon? Their typology of AI use practices, critically reflective, hybrid, instrumental-control, and low integration, is methodologically careful and substantively important.

Information quality and credibility

Section four addresses information quality and credibility. [Hocenski and colleagues' study](#) of AI detection tools is timely, if sobering: detection accuracy is high for English but poor for Croatian, which is a reminder that the linguistic biases baked into AI systems extend to the tools designed to scrutinise them. [Savolainen's Reddit study](#), already noted, belongs here as much as in the trust section, reinforcing the point that credibility assessment is both a cognitive process and a social one. [Udoh and colleagues' FAIRS framework](#) attempts something more ambitious: a comprehensive conceptualisation of algorithmic fairness in information access, integrating metrics, context, bias, and user perspectives. Whether it succeeds is a question to be tested empirically, but the framework is well-grounded and fills a genuine gap.

The professional and organizational impact of AI

The fifth section, on professional and organisational impact, contains perhaps the sharpest ideological contrast in the issue. [Kavak's study](#), which asks LLMs themselves what the future of libraries looks like, is methodologically unusual, using AI as an analytical instrument rather than merely a study object, and produces findings characterised by what the author calls paradigmatic convergence across models: a shared vision of libraries as dynamic, hybrid, personalised, AI-literate institutions. [Olson's paper](#) adopts a different perspective, arguing that AI implementation and vendor consolidation are turning academic librarians into franchise operators, executing systems they neither own nor control. The empirical basis of market concentration data, documented content filtering, and AI cataloguing accuracy figures is uncomfortable reading. Both papers are in the same section, and they should be read together. [Sousa's paper](#) on the FATE principles offers a framework for navigating between the optimistic and critical poles, embedding fairness, accountability, transparency, and ethics into AI-driven workflows; the finding that accountability and transparency are procedurally more developed than fairness and ethics will surprise no one who has worked in institutional settings. [Sergio Silva's paper](#) deals with the impact of information security on decision making in organizations, noting that AI-

based security systems can improve decision making, but that issues of trust, transparency, and accountability remain significant. [Sharma and Sharma](#), take a different tack, exploring the AI-human behaviour involved in investment decisions. They note that human oversight is still important and that regulatory procedures will be necessary if trust in such systems is to be developed.

Theoretical and methodological perspectives

The final section addresses theoretical and methodological questions, and it is where the issue's long-term significance may be greatest. [Krakowska's paper](#) revisits Wilson's model of information behaviour through the lens of falsifiability, arguing that it can be rendered empirically testable within AI-mediated environments. This is a substantive methodological contribution: the discipline needs to know whether its foundational models can generate falsifiable predictions about human-AI information interaction, or whether they will have to be substantially revised or replaced. [Oliveira's paper](#) on the shift from search engine optimisation to what he terms generative engine optimisation maps the emerging landscape of informational visibility in generative search environments with theoretical precision; the authority loop model he proposes is a genuine addition to the conceptual vocabulary of information retrieval. [David An's](#) evolutionary tracking of LLM outputs in healthcare disparities research is more modest in its theoretical ambitions but demonstrates a useful methodological approach for longitudinal comparison across models.

[The paper by Maceviciute and Wilson](#), which closes the theoretical section, reviews twelve review articles on AI and information behaviour published between 2018 and 2025. The picture that emerges is one of a field responding energetically but somewhat unevenly to a rapidly changing landscape: domain-specific studies proliferate, but theoretical development lags; AI literacy and trust dynamics remain under-theorised; longitudinal and cross-cultural research is largely absent. These are not trivial omissions, and they are noted here not to diminish the work represented in this issue, which addresses many of them, but to provide an honest assessment of where the field stands.

What this collection does not yet provide, and what the field has not yet achieved, is a coherent theoretical account of what information behaviour looks like when the information is not retrieved but generated, when the source is not attributed but constructed, and when the system doing the construction has no stake in whether the result is true. That is the problem the papers in this issue are circling, from different angles and with different tools. That they have not solved it is not a criticism. It is a description of where we are, and where the next phase of work needs to go.

Professor T.D. Wilson

Guest editor

Special issue on AI in Information Science

Table of contents

1. AI Tools and Applications in Information Work

- o Work-place user engagement with a semantic AI-based search tool
Marianne Lykke, Ann Bygholm, Tanja Svarre
- o Uses of generative AI and related information interactions in journalistic story creation process
Laura Korkeamäki
- o Assessing open access scholarly journals for integration into artificial intelligence research assistants
Sanja Gidakovic, Heather Moulaison-Sandy, Jenny Bossaller
- o Generative artificial intelligence analysis for the elaboration of a conceptual definition: a comparative study using Scite and Perplexity
Jóice Cleide Cardoso Ennes de Souza, Rosana Portugal Tavares de Moraes, Elan Cardozo Paes de Almeida, Matheus Souza da Silva, Sergio Castro Martins, Fernando Henrique Silva Lisot

2. User Behavior and Trust in AI Systems

- o Social bot literacy and responses to bot-generated information in AI-mediated environments: the roles of self-efficacy and perceived threat
Wei Fang, Chen Nie
- o Searching for answers: meaning-making in AI-infused information seeking
Jens-Erik Mai, Sille Obelitz Søre
- o Modelling user trust in chatbots: the role of anthropomorphic cues and social responses in information services
Jueming Li, Sanghee Kweon
- o LLM nomads: an exploration of why users alternate among different LLMs
Shuting Yu, Jian Cheng, Jie Cheng, Yakai Gong
- o From curiosity to confidence: exploring investor behaviour in the age of generative AI
Animesh Kumar Sharma, Rahul Sharma

3. Educational and Learning Contexts

- o A sociotechnical typology of AI use in educational information practices under conditions of war
Olha Pizhuk, Halyna Lomakina
- o The use of generative AI tools for students' research support within higher education institutions' libraries: a systematic literature review
Mfowabo Maphosa, Cyril Tlomatsana
- o The case for friction in AI-mediated information seeking and learning
Susan Gardner Archambault, Priya Kizhakkethil
- o How to make AI a true gateway to digital life for the elderly? – Key factors and empowering pathways for the continuous use of conversational AI among older adults
Yuqing Liu, Yuqing Ai

4. Information Quality and Credibility

- o The credibility of information generated by AI chatbots: an analysis of online discussions in Reddit
Reijo Savolainen
- o Verification of AI-generated content

Ines Hocenski, Tomislav Jakopec, Josipa Selthofer

- o FAIRS: a framework for rethinking algorithmic fairness in the context of information access

Emmanuel Sebastian Udoh, Xiaojun Yuan, Abebe Rorrissa

5. Professional and Organizational Impact

- o Operating the franchise: vendor consolidation, algorithmic mediation, and the remaking of academic librarians as platform administrators for digital capitalism

Mike Olson

- o AI-generated predictions for library futures: a comparative large language model analysis

Ali Kavak

- o Artificial intelligence in information security: impact on organisational decision-making

Sérgio Silva

- o Data curation in academic libraries: navigating the AI labyrinth through the FATE principles

Nuno Sousa

6. Theoretical and Methodological Perspectives

- o Dialogic information retrieval and the falsifiability of Wilson's model: towards a framework for AI-mediated information behaviour

Monika Krakowska, Magdalena Zych

- o From the click race to the citation game: a conceptual exploration of the shift from search engine optimisation to generative engine optimisation

Uriel de Oliveira

- o Evolutionary perspective of large language models on shaping research insights into healthcare disparities

David An

- o Gaps in artificial intelligence-related information behaviour research: a review of reviews

Elena Maceviciute, Thomas D. Wilson