

# ***THE FUTURE OF AUTHORSHIP: RESEARCHERS AND GENAI COLLABORATION***

Opportunities and challenges of the innovative interplay  
between researchers and genAI

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[anu.helkkula@hanken.fi](mailto:anu.helkkula@hanken.fi)




# CRITICAL USE OF genA

1. **Foundation for the critical use of genAI in authorship**
2. Critical use across different stages of authorship
3. Different author–genAI interactions and entanglements
4. Key principles for responsible use of genAI in authorship

# FROM BULLSHIT TO BOTSHIT




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## Beware of botshit: How to manage the epistemic risks of generative chatbots

Timothy R. Hannigan <sup>a,b</sup>, Ian P. McCarthy <sup>c,d,\*</sup>, André Spicer <sup>e</sup>

<sup>a</sup> Alberta School of Business, University of Alberta, Edmonton, AB, Canada  
<sup>b</sup> Telfer School of Management, University of Ottawa, Ottawa, ON K1N 6N5, Canada  
<sup>c</sup> Beedie School of Business, Simon Fraser University, 500 Granville Street, Vancouver, BC V6C 1W6, Canada  
<sup>d</sup> Luiss, Viale Romania, 32 00197 Roma, Italy  
<sup>e</sup> Bayes Business School, City University of London, 106 Bunhill Row, London EC1Y 8TZ, UK

**KEYWORDS**  
Chatbots;  
Bullshit;  
Botshit;  
Artificial intelligence;  
Natural language processing

**Abstract** Advances in large language model (LLM) technology enable chatbots to generate and analyze content for our work. Generative chatbots do this work by predicting responses rather than knowing the meaning of their responses. In other words, chatbots can produce coherent-sounding but inaccurate or fabricated content, referred to as *hallucinations*. When humans uncritically use this untruthful content, it becomes what we call *botshit*. This article focuses on how to use chatbots for content generation work while mitigating the epistemic (i.e., the process of producing knowledge) risks associated with botshit. Drawing on risk management research, we introduce a typology framework that orients how chatbots can be used based on two dimensions: response veracity verifiability and response veracity importance. The framework identifies four modes of chatbot work (authenticated, autonomous, automated, and augmented) with a botshit-related risk (ignorance, miscalibration, routinization, and black boxing). We describe and illustrate each mode and offer advice to help chatbot users guard against the botshit risks that come with each mode. © 2024 Kelley School of Business, Indiana University. Published by Elsevier Inc. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

## AI And Machine Learning

# The Risks of Botshit

by Ian P. McCarthy, Timothy R. Hannigan and André Spicer

July 17, 2024, Updated July 25, 2024

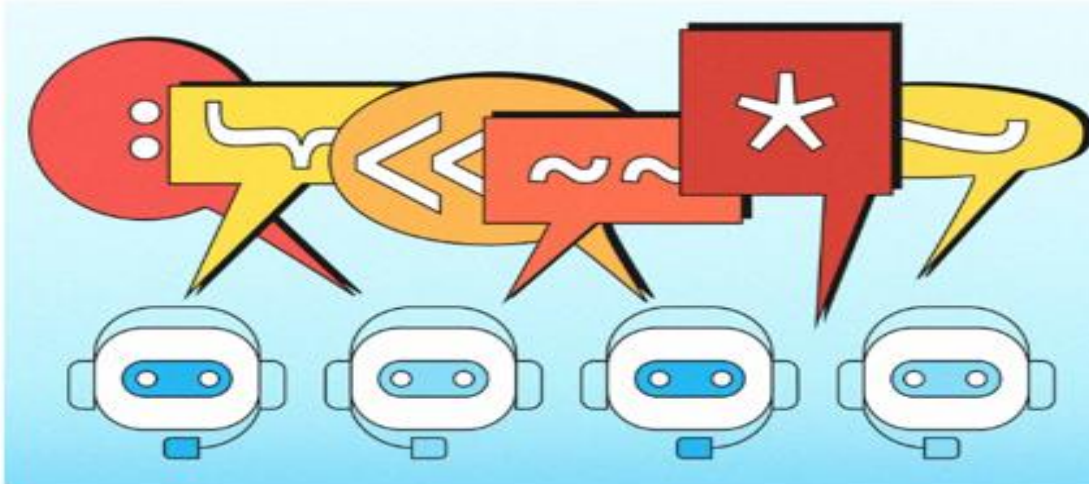
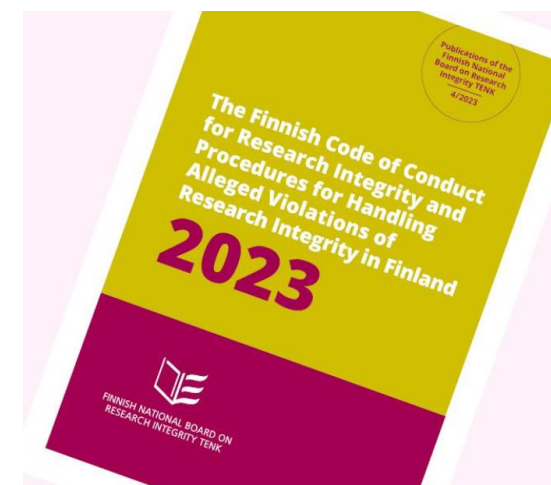
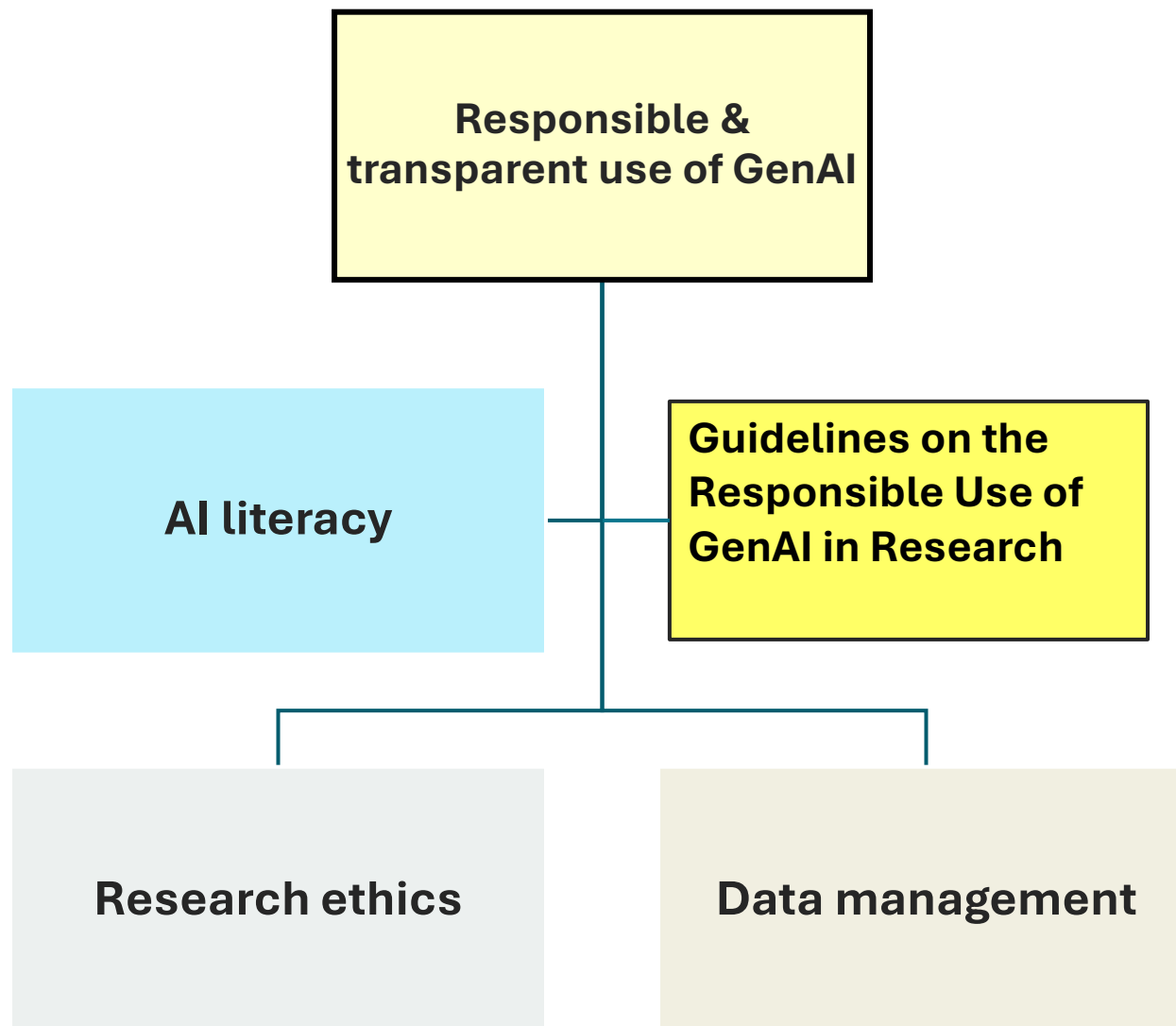


Illustration by HBR Staff



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# STAGES OF ACADEMIC AUTHORSHIP & genAI USE

Respon  
sible  
& trans  
parent  
use of  
genAI

## 1. Idea & Literature Review

→ genAI can suggest research questions, summarize articles, and identify gaps in literature.

## 2. Research & Data Collection

→ Assist in designing surveys, generating code for data analysis, or simulating models.

## 3. Writing & Drafting

→ Help draft sections, rephrase text, and improve clarity and coherence.

## 4. Revision & Submission

→ Provide grammar checks, formatting help, and generate cover letters.

## 5. Peer Review & Publication

→ Summarize reviewer feedback (but should not replace human judgment).



# CRITICAL USE OF genA

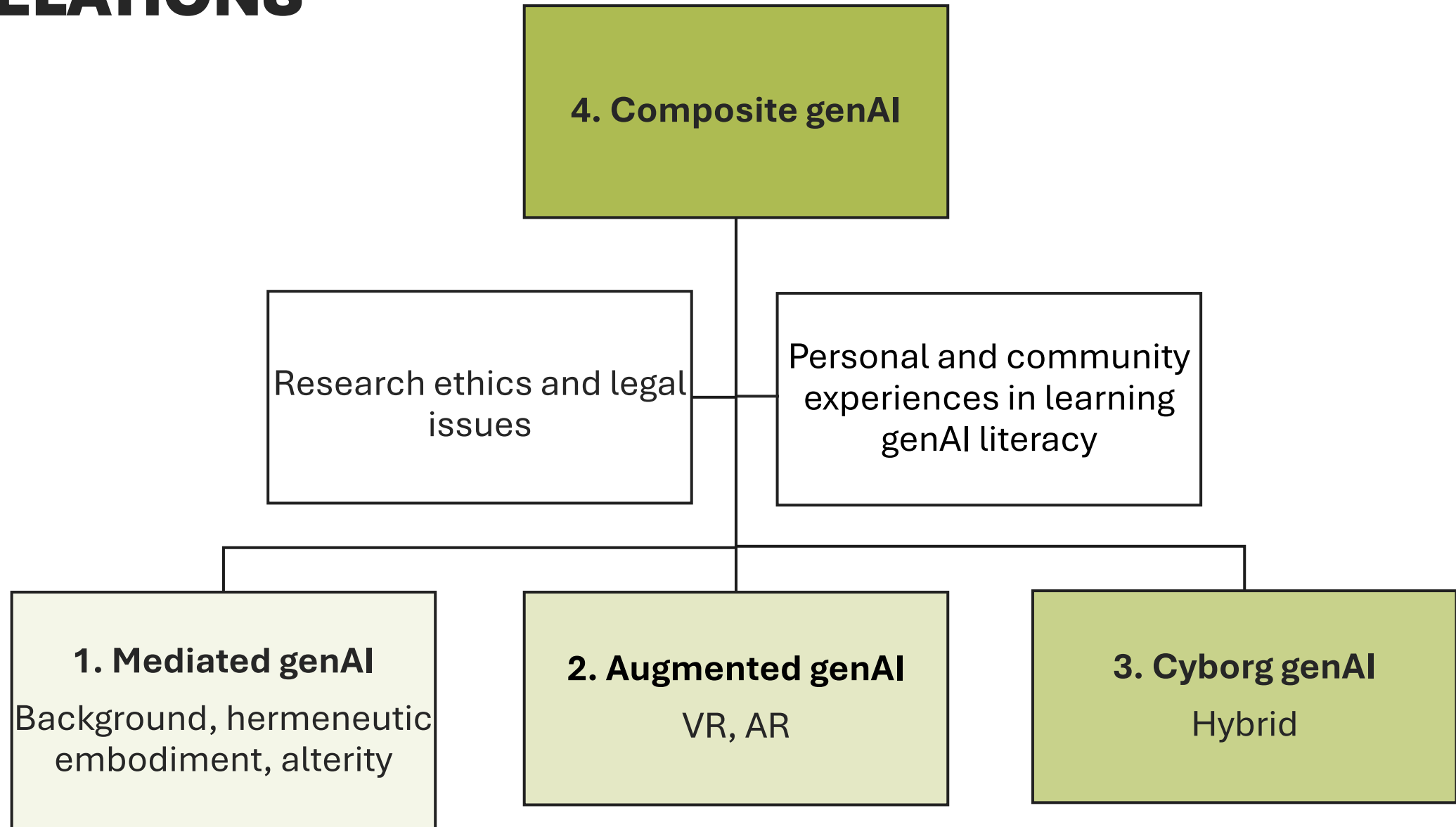
1. Foundation for the critical use of genAI in authorship
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## 3. Different author–genAI interactions and entanglements

Kaartemo, V. and Helkkula, A. (2025), "Human–AI resource relations in value cocreation in service ecosystems", *Journal of Service Management*, Vol. 36 No. 2, pp. 291-306. <https://doi.org/10.1108/JOSM-03-2023-0104>

4. Key principles for responsible use

# DIFFERENT AUTHOR-genAI RESOURCE RELATIONS





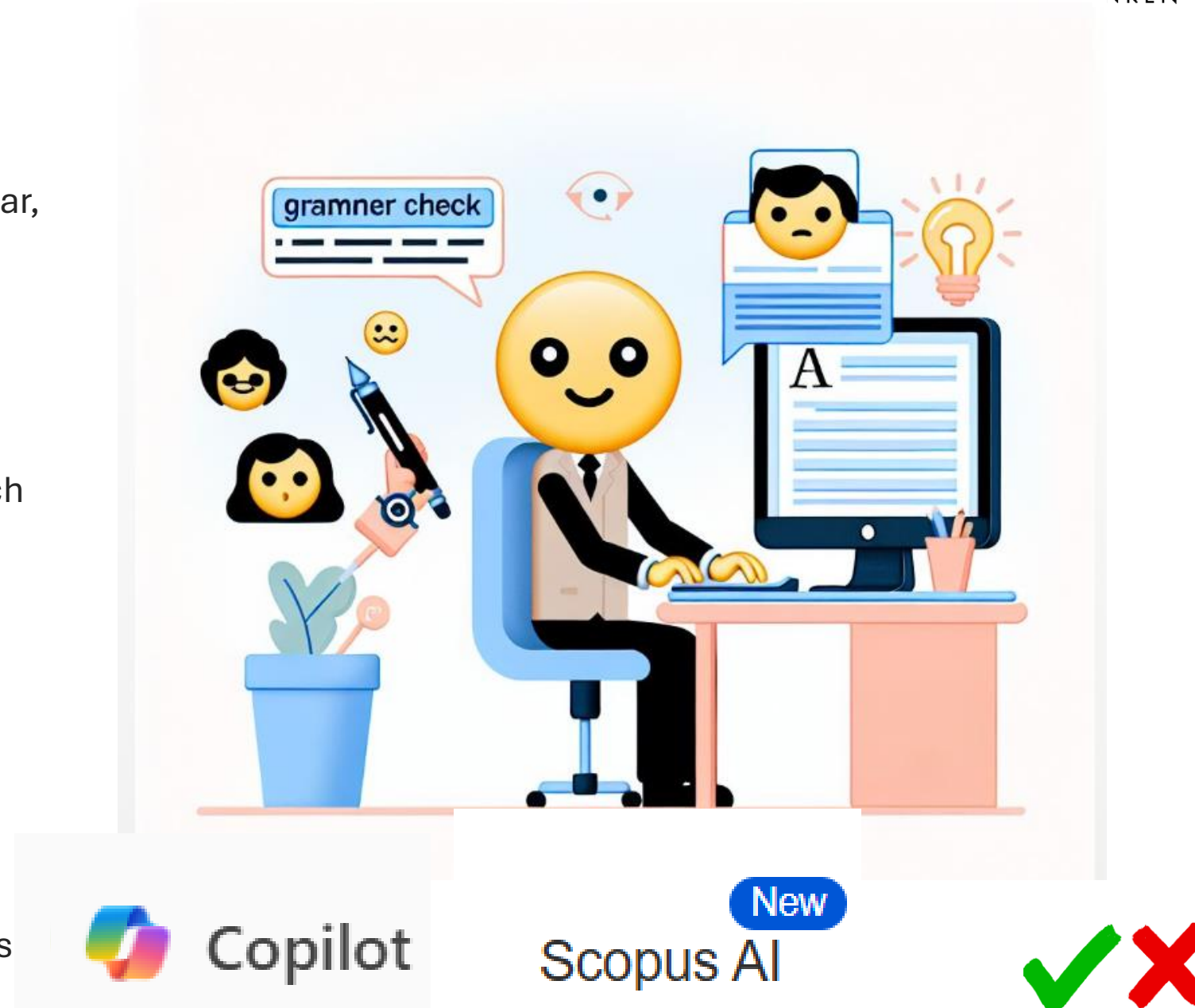
# 1. MEDIATED genAI IN AUTHORSHIP

**Background:** GenAI tools subtly support the writing process—auto-citing, correcting grammar, and suggesting topics—without disrupting the author's flow.

**Hermeneutic:** GenAI interprets complex data like policy documents and citizen feedback, revealing patterns and contradictions that enrich analysis.

**Embodiment:** genAI aligns with the author's speech and thought patterns, becoming a cognitive and physical extension during writing.

**Alterity:** GenAI challenges the author's assumptions by proposing unexpected ideas, , prompting critical reflection and deeper insights



## 2. AUGMENTED genAI IN AUTHORSHIP



A service researcher uses **VR** and **AR** to study patient experience in healthcare settings.

VR simulates hospital environments for behavioral observation, while AR overlays real-time feedback and workflows onto physical spaces—enabling deeper, context-rich insights into service design and emotional responses.

**EX** extended reality



### 3. CYBORG genAI IN AUTHORSHIP

A researcher co-authors papers with a genAI system that learns their writing style, research focus, and preferred sources.

GenAI collaborates as a cognitive partner—suggesting, drafting, and challenging ideas to create work neither could produce alone.

nature human behaviour



Article


<https://doi.org/10.1038/s41562-025-02194-6>

## On the conversational persuasiveness of GPT-4

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Francesco Salvi<sup>1,2</sup>✉, Manoel Horta Ribeiro<sup>3</sup>, Riccardo Gallotti<sup>2</sup> & Robert West<sup>1</sup>

Early work has found that large language models (LLMs) can generate persuasive content. However, evidence on whether they can also personalize



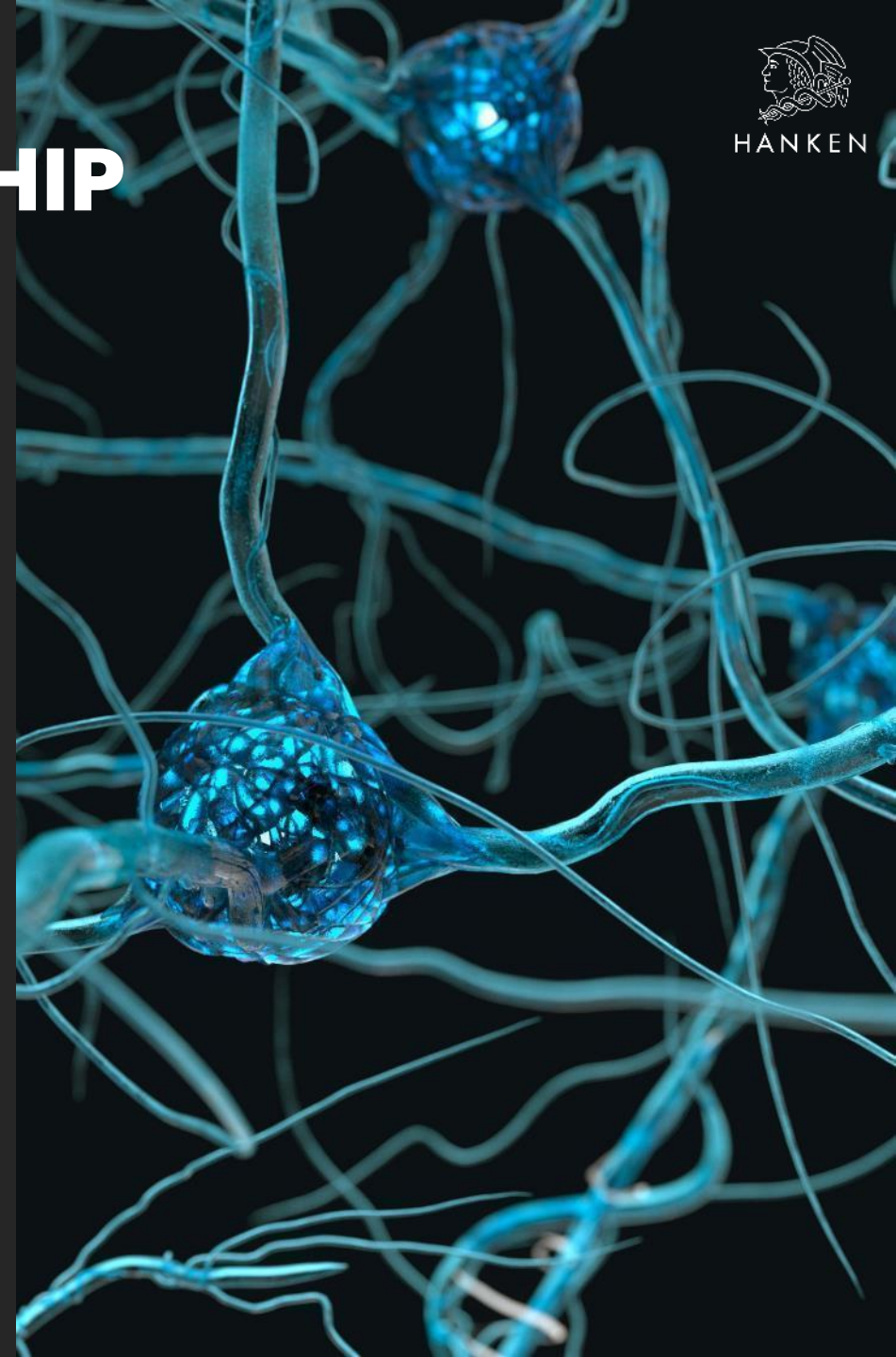


## 4. COMPOSITE genAI IN AUTHORSHIP

An author uses a composite genAI system that integrates multiple specialized models—one for literature review, another for data analysis, and a third for writing support.

These genAIs collaborate in real time, feeding insights into each other.

The author orchestrates the process, resulting in a multi-layered, genAI-enhanced publication that blends analytical depth, stylistic coherence, and up-to-date references.



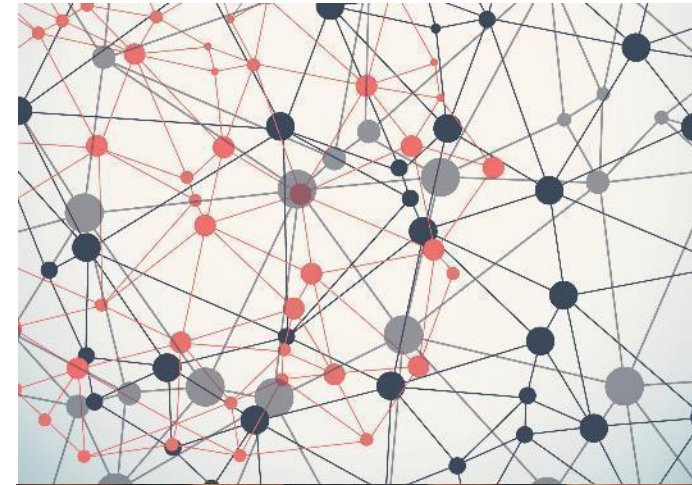
# CO-LEARNING WITH genAI: AI LITERACY IN ACTION

Everyone uses genAI – but we use and learn it differently

Learning Organization  
&  
Learning Employees

GenAI learns from us,  
and we learn from genAI

We learn from each  
other



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# WHAT RESEARCHERS MUST CONSIDER (EU)

## 1. Transparency

Clearly disclose AI use in research and writing

## 2. Integrity

Avoid plagiarism, bias, and misuse of generative AI

## 3. Privacy & Data Protection

Comply with **GDPR** when using personal or sensitive data. Avoid AI in sensitive tasks (e.g. peer review)

## 4. AI Act Compliance

Avoid high-risk or prohibited AI practices (e.g. manipulative or discriminatory systems)

## 5. Accountability

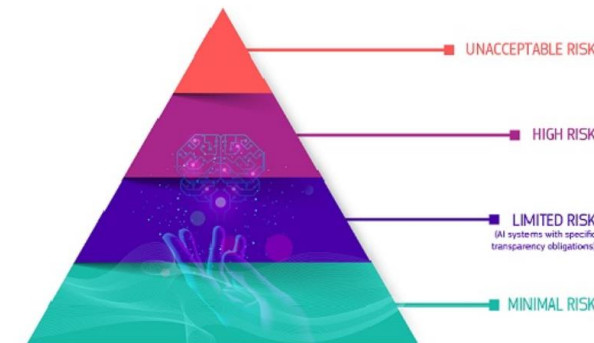
Researchers remain responsible for AI-assisted outputs

[Guidelines on the responsible use of generative AI in research developed by the European Research Area Forum - European Commission](#)



## A risk-based approach

The AI Act defines 4 levels of risk for AI systems:





# Towards Responsible Research: genAI and Authorship

[anu.helkkula@hanken.fi](mailto:anu.helkkula@hanken.fi)

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# THE FUTURE OF AUTHORSHIP

1. Co-creation over solo authorship
2. Personalized writing assistants
3. Democratization of writing
4. New genres and formats
5. Ethical and legal challenges
6. Accelerated research and publishing

**Science:  
quo vadis?**

[anu.helkkula@hanken.fi](mailto:anu.helkkula@hanken.fi)

