THE FUTURE OF AUTHORSHIP: RESEARCHERS AND GENAI COLLABORATION

Opportunities and challenges of the innovative interplay between researchers and genAI

Research Service Days, Tampere 21.8.2025

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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

EU GDPR COMPLIANT

HANKEN

Living guidelines on the RESPONSIBLE USE OF GENERATIVE AI IN RESEARCH

ERA Forum Stakeholders' document

First Version, March 2024

Responsible & transparent use of GenAI

AI literacy

Guidelines on the Responsible Use of GenAI in Research

Research ethics

Data management

Publications of the Finnish National Board on Research Integrity TENK 4/2023

The Finnish Code of Conduct for Research Integrity and Procedures for Handling Alleged Violations of Research Integrity in Finland

2023

FINNISH NATIONAL BOARD ON RESEARCH INTEGRITY TENK

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STAGES OF ACADEMIC AUTHORSHIP & genAI USE

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Responsible & transparent 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).
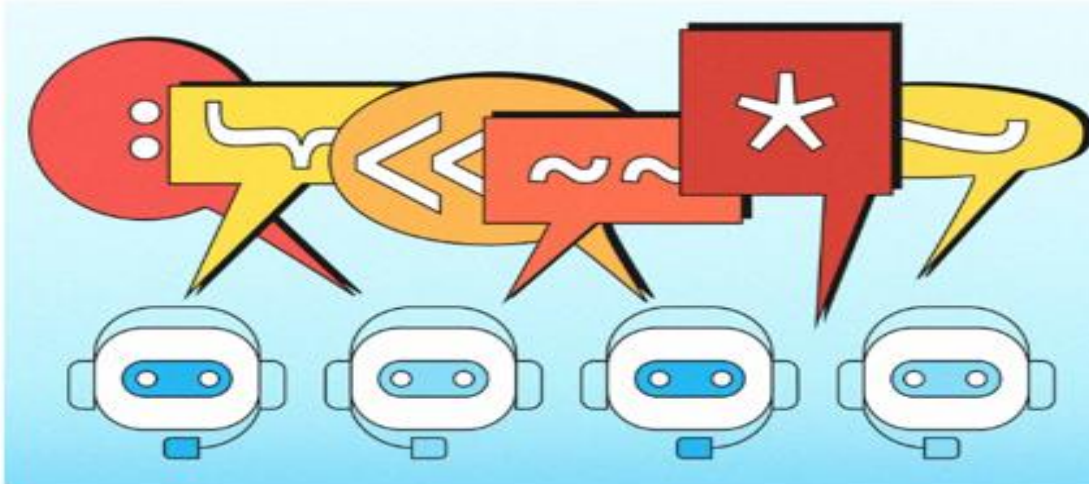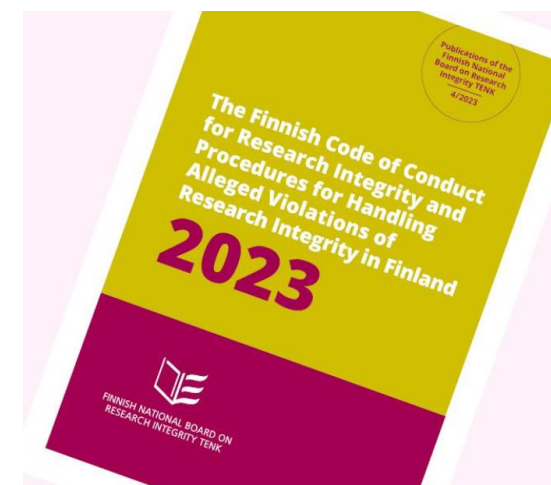
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4. Key principles for responsible use

DIFFERENT AUTHOR–genAI RESOURCE RELATIONS

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4. Composite genAI

Research ethics and legal issues

Personal and community experiences in learning genAI literacy

1. Mediated genAI

Background, hermeneutic embodiment, alterity

2. Augmented genAI

VR, AR

3. Cyborg genAI

Hybrid
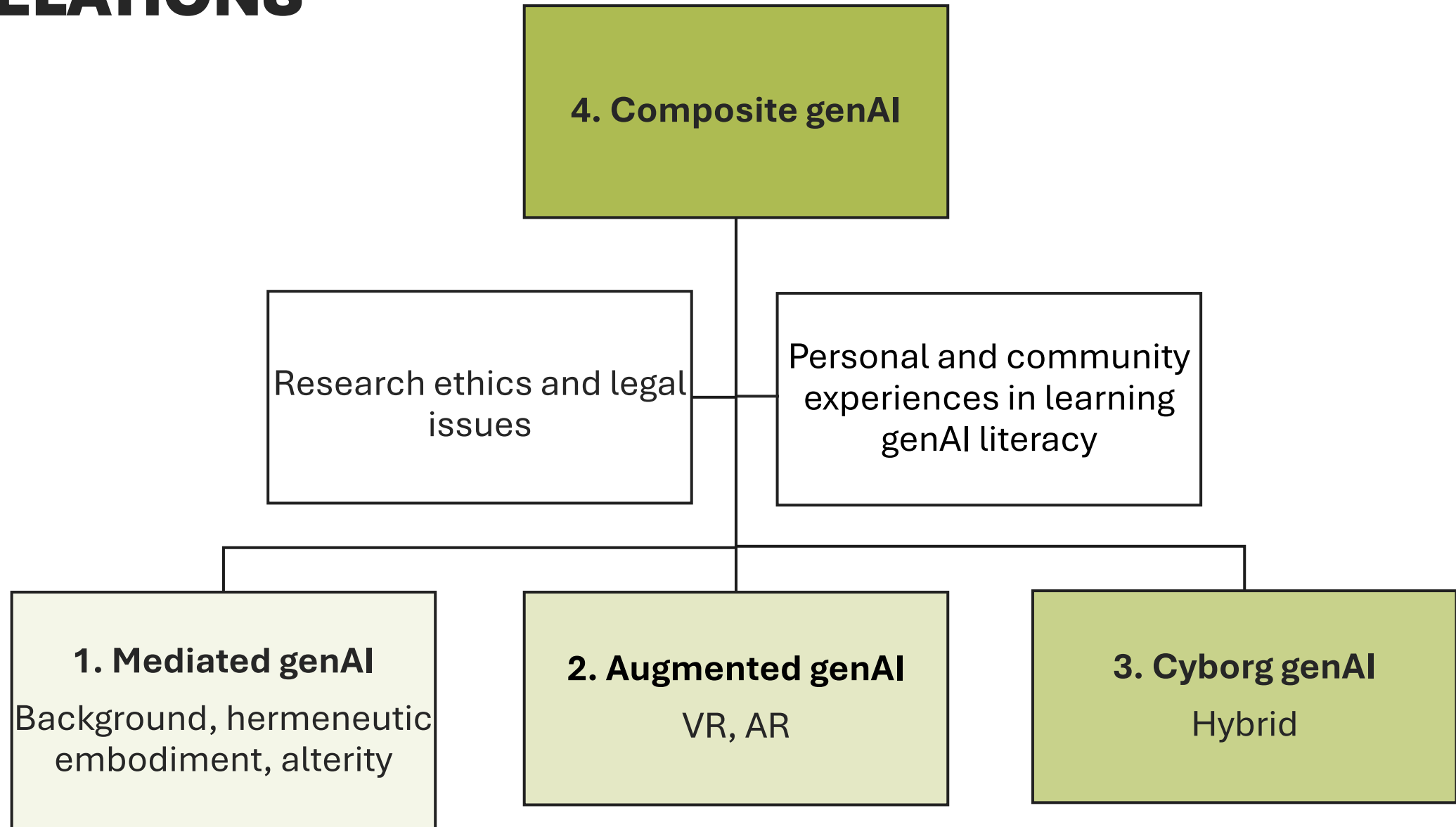
1. MEDIATED genAI IN AUTHORSHIP

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
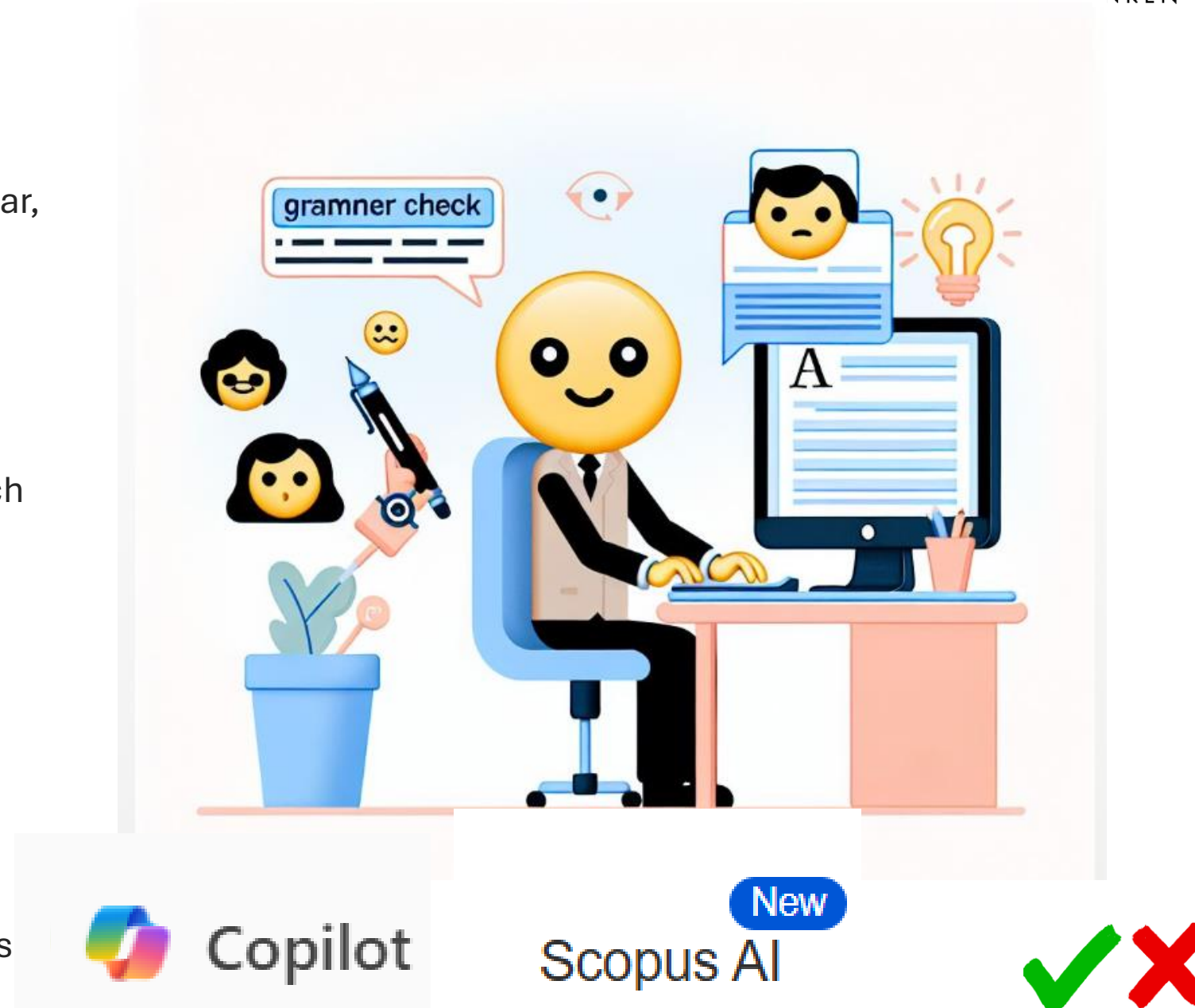
2. AUGMENTED genAI IN AUTHORSHIP

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.

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.
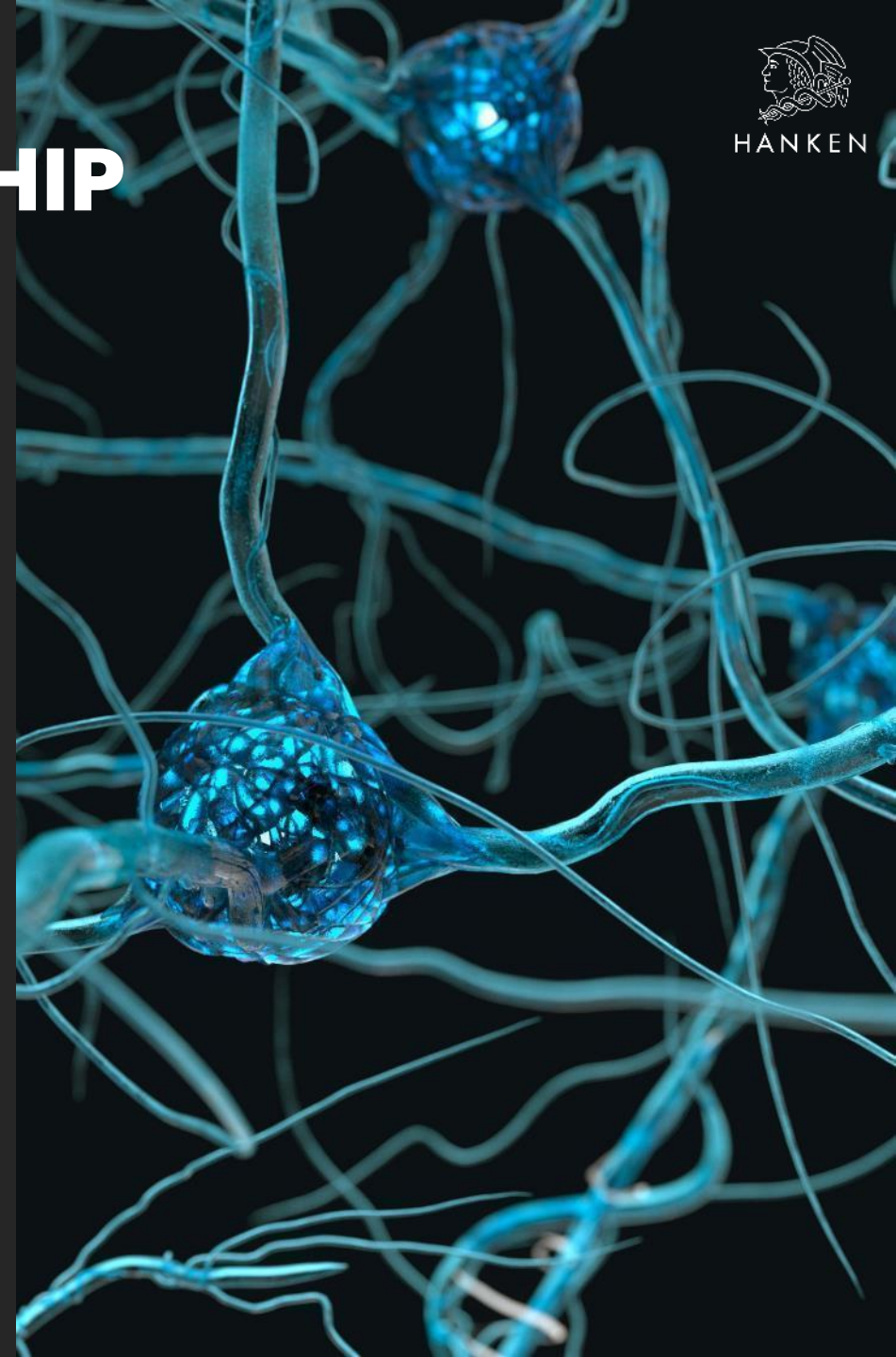
CO-LEARNING WITH genAI: AI LITERACY IN ACTION

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
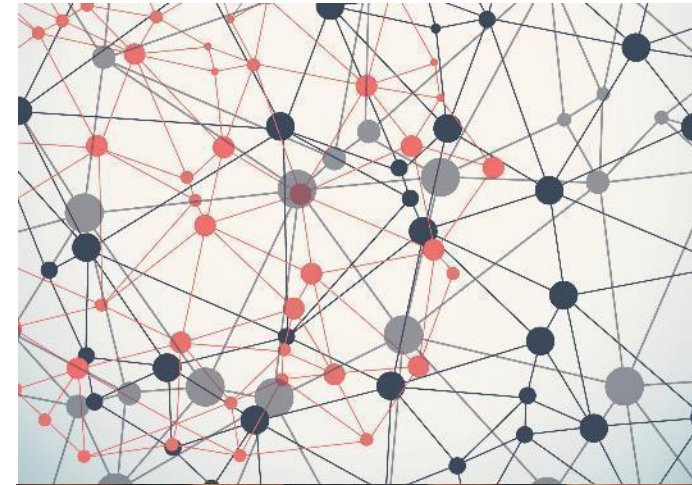
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WHAT RESEARCHERS MUST CONSIDER (EU)

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

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A risk-based approach

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

UNACCEPTABLE RISK

HIGH RISK

LIMITED RISK
(AI systems with specific transparency obligations)

MINIMAL RISK
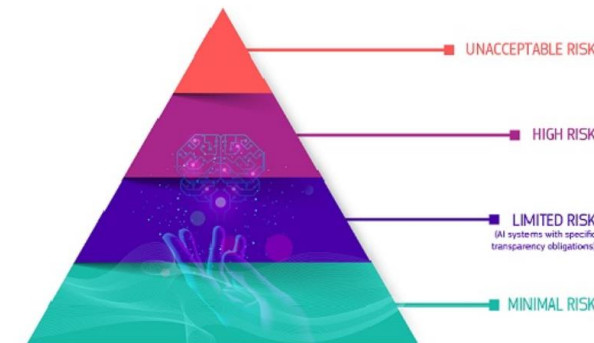
Towards Responsible Research: genAI and Authorship
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THE FUTURE OF AUTHORSHIP

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?

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