Artificial Intelligence – Challenges for Research Results and Scientific Publishing

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Introduction

• Exponential growth in the use of AI in science and academia

• Al as a tool for analysis, writing, and review

• Ethical, technical, and methodological challenges

Opportunities of AI in Science

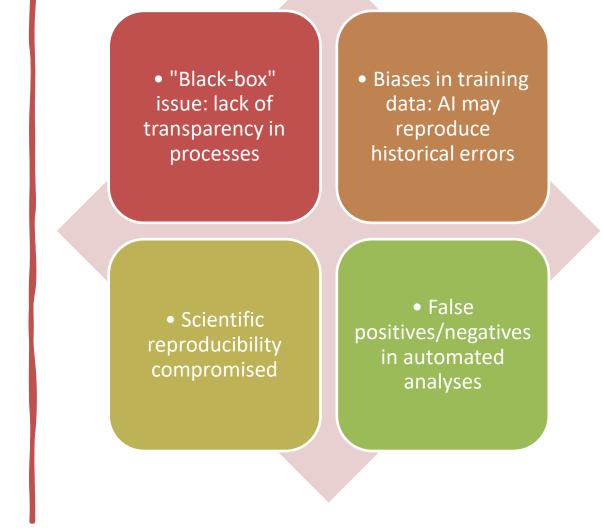
• Automation of literature review

• Hypothesis generation from large datasets

Assisted writing and translation

 Optimization of statistical analysis

Methodological Challenges



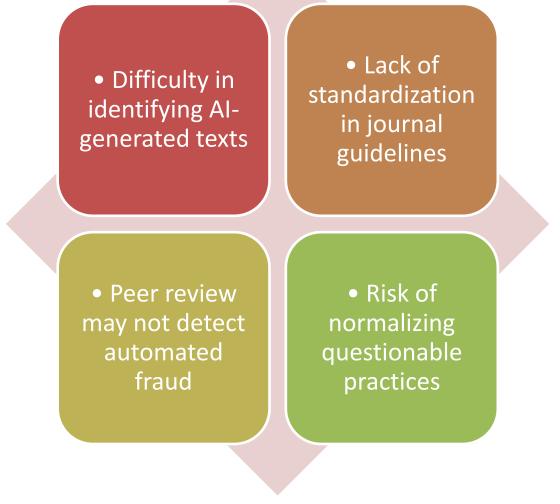
Ethical Challenges

 Authorship and plagiarism: who is the true author when Al contributes?

• Scientific integrity: misuse of Al to generate false results

 Access inequality: not all researchers have equal access to AI tools

Challenges in Scientific Publishing



Journal Positions on Al

• Some journals require disclosure of AI use

• Others prohibit AI as coauthor

• Increasing use of Algenerated text detectors

• Trend towards specific editorial policies

Possible Pathways

Transparency in Al use: declare how it was used
Interdisciplinary collaboration:
Clear institutional

 Interdisciplinary collaboration: ethics, information science, technology

 Clear institutional policies

Conclusion

• Al is a powerful tool, but must be used responsibly

• The challenge is not to avoid AI, but to integrate it ethically and critically

 Ensure that scientific values remain: truth, rigor, transparency, and equity