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THE ETHNOGRAPHIC AI: EXPLORING THE FUTURE OF ACADEMIC WRITING WITH ARTIFICIAL INTELLIGENCE

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Abstract

As artificial intelligence (AI) tools continue to advance at an unprecedented pace, their impact on higher education and academic writing is becoming increasingly profound. This paper presents an auto-ethnographic exploration of the integration of AI tools in academic text production. Drawing inspiration from Carolyn Ellis's seminal work on autoethnography, the study employs a self-reflective approach to examine the author's experiences with a diverse array of AI tools for research and academic writing. The title alludes to the title of Ellis's key publication "The Ethnographic I" while also pointing to the new territory of future academic writing processes with strong assistance of AI tools. The investigation strives to unpack various aspects of AI as a transformative factor in academic text production. It explores the usage of AI tools in different phases of writing academic texts. In doing so, it highlights affordances and limitations of exemplary AI tools for academic writing. Furthermore, the investigation explores ethical implications of AI-assisted academic writing, including issues of authorship, academic integrity and responsible use of AI. It also discusses the key findings in terms of consequences for introducing students to academic writing.

Keywords: *Artificial intelligence, autoethnography, academic writing, higher education.*

1. Introduction

Given the rapid advancement and integration of artificial intelligence (AI) technologies, academic writing is undergoing a profound transformation. As AI tools become increasingly sophisticated and accessible, they are reshaping not only how we produce academic texts but also how we conceptualize the very nature of scholarly writing and knowledge production (Bozkurt, 2024; Limburg et al., 2023; Perkins, 2023; Simon et al., 2024; Stracke et al., 2024). In the context of higher education, the advent of AI tools “triggered dystopian panic, utopian-naïve glorification, and heated debates on written examination forms such as term papers and theses” (Gröpler et al., 2024, 408). While concerns about technology-enabled plagiarism and academic dishonesty predated AI tools, their sudden widespread accessibility and unprecedented capabilities started the debate about the boundaries between legitimate technological assistance and academic misconduct afresh.

The emergence of generative AI tools, particularly large language models like ChatGPT, has sparked "excitement, fear, and uncertainty" in academic writing (Bozkurt et al., 2024, 489). The rapid pace of technological advancement has outstripped higher education institutions' ability to provide timely guidance on academic integrity and research ethics. While guidelines and institutional policies are beginning to appear in German academia (e.g., PROFiL & Schreibzentrum der LMU, 2024; Simon et al., 2024; Gimpel et al., 2023), their relevance risks obsolescence by the time of publication.

From another perspective, the EU Artificial Intelligence Act (EU Artificial Intelligence Act, 2024) adds pressure to higher education institutions and their members. The regulation explicitly requires any organization providing or deploying AI for their processes to ensure AI literacy of all actors involved. AI literacy is, according to the regulation, a multidimensional construct that combines the capacity for informed implementation of AI tools with a critical awareness of their opportunities, risks, and potential adverse effects.

Against this backdrop, this study explores the future of academic writing with AI tools, with a special focus on authorship, academic integrity and responsible use of AI. The study aims to refine our understanding of how AI tools transform the lived experience of academic writing: How do scholars navigate this new terrain of academic text production with AI tools?

As all of this is mostly unchartered territory, the study addresses these questions through an auto-ethnographic lens, drawing methodological inspiration from Carolyn Ellis's seminal work on reflexive research practices (Ellis 2004). By positioning myself as both researcher and subject, I examine my own journey of integrating various AI tools into the writing process of this academic paper. Results will then be discussed in terms of consequences for introducing students to academic writing.

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2. Academic writing in transition

Generative AI tools that use large language models and natural language processing presently transform academic writing practice in great speed and towards unknown horizons. There is widespread agreement that this is not a transient trend but a long-lasting change that is only beginning (e.g. Bozkurt, 2024).

2.1. AI-assisted academic writing

AI tools can assist in practically every phase of an academic writing process, i.e. generating ideas and first drafts, doing literature reviews, analyzing data, structuring and presenting research results, or editing and shaping the text regarding language style and voice, usually with a high quality (e.g. Bozkurt 2024, Elstad & Eriksen 2024, Gröpler 2023, Limburg et al. 2023). Advantages of AI-assisted academic writing are usually seen in the potential of AI tools to enhance effectiveness and efficiency, especially for non-native speakers of English. In addition, AI tools can help to overcome writer's block. Moreover, AI tools potentially promote inclusivity as the AI tool can act as a personal tutor, giving personalized feedback and thus stimulate creativity and help to keep up motivation (Bozkurt, 2024, Limburg et al., 2023; Maphoto et al., 2024).

But the same authors also report tremendous risks in AI-assisted writing processes. They highlight the bias, discrimination and lack of diversity inherent in all large language models due to their biased training material. In addition, they point to the risk of misinformation including so called "hallucinations" (information bearing no relationship with reality) and to a potential increase in educational inequality due to commercial interests entering the field in form of premium versions of AI tools that incur license fees. A potential negative impact for thinking capabilities and for academic integrity could be yet another risk (for the risks in detail s. Simon et al., 2024).

In addition to the potential/risk assessment the discourse on AI's role in academic writing has centered on the 'tool versus agent' debate. While the tool perspective frames AI tools as advanced instruments under human direction – analogous to traditional writing aids but with enhanced capabilities – the agent perspective acknowledges AI's capacity for autonomous reasoning, suggestion-making, and even challenging human assumptions during the writing process. Researchers arguing from an agent perspective often talk about human-AI "cocreation" (Bozkurt, 2024) or "collaboration" (Maphoto et al., 2024). The tool perspective is dominant in the German discourse (PROFiL & Schreibzentrum der LMU, 2024; Simon et al., 2024; Stracke et al., 2024). The 'tool versus agent' debate often goes hand in hand with anthropomorphic attribution. Humans tend to ascribe humanlike qualities such as consciousness, understanding, and empathy to AI systems despite their fundamental limitations. This anthropomorphization tendency, documented from early experiments with Weizenbaum's (1966) ELIZA to contemporary interactions with generative AI tools, persists even when AI users know of the artificial nature of their interaction (Simon et al., 2024).

2.2. Authorship and academic integrity revisited

AI-generated texts presently cannot be detected reliably (Gröpel et al., 2024; Khalil & Er, 2023; Perkins, 2023). There seem to be certain expressions that happen to appear in high numbers since the advent of generative AI (e.g. "delves into") but such word analysis does not allow for valid use of AI detection (Kobak et al., 2024). Furthermore, AI-generated text is not copyright-protected. So if AI generated verbatim text is used in a research paper, it does not constitute plagiarism. However, such incorporation of AI-generated text without declaration of AI usage is considered academic misconduct, infringing on academic integrity. As AI tools have been adopted quickly for writing research papers in a competitive, 'publish or perish' university culture academic authorship and integrity must be reconceptualized (Bozkurt, 2024).

Some unusual publications with renowned publishers have highlighted the need for such a new discussion. On the one hand, research articles, without declaration of AI usage, contained accidentally typical AI conversation text such as "Certainly, here is a possible introduction for your topic" in the main body of the published article (Nikolic et al. 2024). On the other hand, with a clear intent to act with academic integrity in another published article, ChatGPT was stated as a co-author (O'Connor & Chat GPT, 2023)[1]. Revisiting criteria to claim authorship it became clear that AI-tools cannot fulfill the criteria of being fully accountable for all aspects of the work (e.g. Bozkurt, 2024). Major publishers thus currently rule out AI as an author (e.g. Nature, 2023).

However, the question remains how using AI can be declared transparently so as to comply with academic integrity standards such as "honesty, trust, fairness, respect and responsibility" (Nikolic et al., 2023). Some initial academic guidelines advocated for full documentation of all 'conversations' with AI tools that were part of the text production process. It soon became evident that such total transparency is not feasible, amongst others by sheer quantity. Publishers now provide declaration templates that

[1] Both examples are now changed by the publisher but the misconduct respectively misconception can still be traced back.

summarize AI use and - most importantly – include a statement of the author taking full responsibility for all aspects of the text. Other researchers suggest more nuanced statements depending on the AI use in each paper, e.g. the “Academic Integrity and Transparency in AI-assisted Research and Specification (aiTARAS) Framework for acknowledging and disclosing the use of generative AI in scholarly writing” (Bozkurt, 2024).

Another approach to foster academic integrity in times of AI-assisted academic writing and to provide orientation for the academic community is a framework of responsibility. Researchers, lecturers, and students each bear distinct responsibilities, with researchers being accountable for maintaining academic integrity and transparent authorship practices, while lecturers must develop their own AI literacy and create appropriate learning environments for AI integration. Students, meanwhile, are responsible for developing both AI literacy and academic writing competencies, maintaining accountability for their writing processes, and ensuring proper attribution and documentation when using AI tools. All groups need to actively and continuously engage in critical reflection about their use of AI tools (Brommer et al., 2023).

3. Autoethnography of a writing process using artificial intelligence

As a researcher confronted with the potential and the challenges of generative AI tools I chose an autoethnographic research approach, investigating my own process of writing this academic paper with AI tools. This approach allows for a nuanced exploration of many of the above-mentioned dimensions of AI-assisted academic writing and is part of the critical reflection on AI usage for research that is currently needed in higher education.

3.1. Autoethnography as research method

Autoethnography is a qualitative research method that combines elements of autobiography and ethnography, where researchers systematically analyze their personal experiences to understand broader cultural phenomena. As conceptualized by Ellis (2004), it represents a reflexive approach where the researcher's own experiences serve as primary data, connecting the personal to the cultural through detailed self-observation, including reflective thoughts, doubts and, generally, emotions. This autoethnographic research project is based on my personal experience during the different phases of writing this paper from Oct. 2024 to Feb 2025, using various AI tools. I document my experience in research notes and expand it in retrospect, with self-reflective exploration.

3.2. Autoethnography: Navigating the jagged technological frontier[2]

The autoethnographic data is presented through two vignettes, following established conventions in autoethnographic methodology.

3.2.1. “Cutting edge or failure?” – negotiating academic integrity. As I approach my final year at university before retirement, I find myself reflecting on the miraculous timing of AI's emergence in academia. Technological breakthroughs have shaped my entire career path – much like when the Internet led me toward pursuing a PhD after two decades of professional work. Now AI is advancing at an even more remarkable pace. I've been bouncing around ideas for my last conference paper, and suddenly it hits me – why not dive into AI tools for academic writing? Perfect timing since I'm mentoring BA students on their theses. Plus, I could circle back to autoethnography, a method I employed earlier in my academic life. But then the doubts creep in. Using AI for a published paper – am I crossing a line here? The university's ChatGPT guidelines are full of "don'ts," and conference rules are either extremely vague or basically threatening. Part of me thinks, "Why risk my reputation now?" Especially since autoethnography isn't exactly mainstream in German academia, and let's face it, I've never considered myself a particularly gifted writer. But wait – maybe AI could help with the writing part? And honestly, how can I guide my social work students through using AI if I haven't really dived in myself? The more I think about it, the more it makes sense. Besides, if someone at the end of their career won't push these boundaries, who will?

3.2.2. “Claude & I are nearly done” - Writing an article with more ease. I'm curious how this writing process with AI tools will differ from my previous experiences. While AI can help with brainstorming and research questions, I've deliberately chosen not to use it for those stages – I fear losing my academic stance, my ownership of the text. My first AI engagement was crafting conference abstracts. After having to decline one conference for personal reasons, I was amazed at how quickly I could rework my abstract elsewhere, maintaining my ideas while avoiding any double submission concerns. I explored tools like Hesse.ai and Scopos AI for the literature review, and I was initially captivated by how quickly I could grasp the research landscape. Yet I found myself lost in a seemingly endless sea of publications, many themselves AI-generated. I felt oddly relieved when I finally found a paper explicitly stating it was

[2] The title of my autoethnography is inspired by the title of Dell’Acqua et al. (2023)

written without AI assistance. Is writing more efficient with AI? Yes and no. It's brilliant for polishing rough sentences into precise academic English and helping with those perpetual writing challenges – like crafting that one opening sentence. However, the endless possibilities for iterations and revisions can become overwhelming, especially for a perfectionist like me. While I generally maintain a critical eye when reviewing Claude's suggestions, I've learned you can't let your guard down. My habit of last-minute writing once led me to overlook a classic ChatGPT exaggeration in the final sentence of an abstract (it got accepted nevertheless…). AI's greatest contribution? Reducing the solitude of writing and helping to fight doubts! Even if it risks anthropomorphizing, having 24/7 access to feedback, phrasing suggestions, or sentence starters is simply brilliant. The emotional valleys I still experience with every writing project, even after years of experience, feel less deep with Claude by my side.

4. Discussion

For critical reflection, I employ Brommer et al.'s (2023) responsibility framework for AI-assisted research, examining (1) AI's impact on academic integrity principles and (2) the selection, use, and control of AI tools.

(1) AI tools both support and challenge academic integrity principles. They foster deeper reflection on authorship and integrity practices, even for experienced academics. The advent of generative AI necessitates reconsidering established principles of good academic practice - future standards may shift from personal sentence drafting to author verification and endorsement. However, AI tools can compromise research transparency. Their internal mechanisms remain opaque, and comprehensively documenting all prompts, decisions, and refinements proves impractical, necessitating new metrics for adequate transparency.

(2) Selecting appropriate AI tools presents challenges amid rapidly evolving options and changing usage policies. For this study, Claude was chosen over ChatGPT due to data protection considerations and perceived superior text suggestions, though this preference warrants further investigation. For literature reviews, specialized tools like Hesse.ai, Consensus, and Scopus AI were preferred over general-purpose AI due to their access to verified academic sources. Quality control involved maintaining critical distance and verifying language usage independently. Time pressure emerged as a significant risk factor, potentially compromising the necessary critical oversight.

5. Conclusions

This study showed that generative AI tools are fundamentally transforming academic writing practices. The findings suggest that students need structured opportunities to explore AI-assisted writing across all academic writing courses, given the complexity of these tools and the ongoing transformation of academic practices. This approach not only reflects responsible academic teaching but also aligns with European higher education institutions' need to comply with the EU AI Act.

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