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ERROR IMAGINATIONS: HOW GERMAN LAY USERS NEGOTIATE RISKS OF GENERATIVE AI ERRORS IN POLITICAL INFORMATION SEARCHES

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Generative AI (GenAI) applications, such as ChatGPT and Google Gemini, are gaining popularity as tools for a wide range of information-seeking purposes, including political information (IU Internationale Hochschule, 2024). However, GenAI's known error tendency of generating believable-sounding but incorrect responses, including misleading, nonsensical, or biased outputs, poses particularly significant issues in sensitive fields like politics (Ferrara, 2024; Zhang et al., 2023). Current research addressing these issues often problematizes the risks of GenAI-generated content, highlighting how political misinformation adversely affects individuals and society (Barassi, 2023; Hamed et al., 2024; Williamson & Prybutok, 2024). Research in computer science is mainly concerned with the prevention and identification of harmful responses through auditing and adversarial testing (Bhardwaj & Poria, 2023; Hagendorff, 2023; Li & Sinnamon, 2023; Santy et al., 2023; Zhuo et al., 2023). Despite these improvement efforts, end users will continue to encounter GenAI errors, as no AI system can be flawlessly correct in all cases while also handling the ambiguity and complexity of real-world inputs (Banerjee et al., 2024; Floridi, 2025). Yet how lay users subjectively interpret and make sense of these errors remains largely unexplored. I argue this perspective is important for three reasons.

First, the discourse on GenAI and other AI technologies follows narratives of enchanted determinism (Campolo & Crawford, 2020), which has captured contemporary imaginations of the technology (Ananny, 2024). This vagueness is partly intentional, as GenAI companies use ambiguous language as a strategic tool to obscure the true capabilities and risks of these models. This leaves room for subjective interpretations through simplified magical narratives (Nagy & Neff, 2024; Suchman, 2023). Such ambiguity can foster unrealistic expectations or wrong beliefs about the technology's reliability and impact, which could shape how lay users perceive and interact with GenAI errors.

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Second, lay users rarely engage with technologies as designers and developers anticipate. Instead, they come to their own conclusions about their limits and risks (Inie et al., 2024). Subjective interpretations of algorithmic systems directly influence how end users engage with them and “what these imaginations in turn make possible” (T. Bucher, 2017, p. 40). Conceptualizing algorithms as *experience technologies*, these conclusions emerge from users' relational engagement with technological artifacts (Cotter & Reisdorf, 2020; Swart, 2021). Although lay users may struggle to articulate their interactions with AI systems, they engage with them reflexively and often develop anticipatory strategies to navigate, resist, or mitigate their adverse effects (E. L. Bucher et al., 2021; Lomborg & Kapsch, 2020).

Third, reflexive engagements with algorithmic systems are often activated when they err or fail to provide users with desired otcomes (Swart, 2021). According to Possati (2024), technological errors prompt users to reflect critically on the systems they engage with, acting as safeguards by revealing limitations. When GenAI errors are noticed, the discrepancy between the enchanting narratives surrounding the technology and its actual performance become apparent. I argue that these confrontations offer valuable insights into underlying perceptions, and broader expectations surrounding AI.

However, these reflective moments reveal a fundamental tension. Because lay users cannot directly observe how or why GenAI errors occur, they must negotiate errors through imaginatively theorizing causality and consequence. Drawing from T. Bucher’s (2017) concept of *algorithmic imaginaries*, I call these ongoing negotiations *error imaginations*, conceptualized as means through which lay users subjectively anticipate risks and manage AI's fundamental opacity. Informed by critical algorithm studies (Barassi, 2023; Munk et al., 2022), specifically Rettberg’s (2022) approach of algorithmic failures as a research method, I investigate how German lay users construct these narratives regarding GenAI errors in political contexts. To that end I ask:

RQ: What are the subjective narratives that lay users construct regarding the causes, and consequences of real or perceived GenAI errors in the context of political information searches?

To address my research question, I conducted a pilot study comprised of two focus groups (N=24) in September 2025 with German university students (female=13, male=9). Germany represents a theoretically relevant case given its strong regulatory tradition regarding informational integrity and high expectations for source reliability (Beck, 2018). Students came from interdisciplinary backgrounds (UX design, law, sustainability management), all had prior GenAI usage experience. Each focus group lasted 80 minutes on average and had two parts. First, a semi-structured discussion explored participants' GenAI usage, understanding of error causes, and perceived consequences in political contexts. Second, a scenario-based approach presented vignettes featuring mock GenAI responses to political queries. Scenarios were chosen based on AI Forensics and Algorithm Watch's (2023) error taxonomy: factual errors (nonsensical) and evasion (refusal), which their audits identified as particularly prevalent in German election-relevant information contexts. For each scenario, participants viewed the visual materials and discussed their interpretations, speculated on error origins, evaluated potential consequences, and considered behavioral responses.

Data analysis followed the framework of Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2006, 2023), which aligns well with examining participants' *error imaginations* as RTA acknowledges the researcher's active interpretive role rather than assuming themes simply emerge from data (Byrne, 2022). Findings represent a first iterative thematic analysis of focus group discussion field notes, capturing preliminary mapping of participants' error interpretations, attributed causes, and perceived consequences.

The analysis revealed two overarching themes that address how participants negotiate and make sense of GenAI errors in political information search contexts. Most participants had no direct experience of using GenAI for political information, yet articulated vivid imaginations about error causes and consequences which led to the behavioral risk mitigation practice of *anticipatory non-use*. Participants expressed concerns over being manipulated unknowingly and imagined errors would trigger direct belief change in others through GenAI's perceived super-human persuasive power, reflecting broader AI narratives of enchanted determinism (Campolo & Crawford, 2020). In negotiating GenAI's fallibility, participants reproduced industry framings casting errors as naturalized technical limitations or user mistakes, deflecting liability and obscuring corporate accountability.

Participants' avoidance of GenAI for political information was premised on projected rather than experienced risks, creating a self-reinforcing cycle in which error imaginations remain uncorrected by direct engagement. This finding highlights a paradox: while non-use functions as individually rational risk mitigation, it collectively sustains imagined rather than experiential knowledge of GenAI errors. As Possati (2024) argues, technological errors should function as reflexive safeguards, yet their disenchanting potential remains inaccessible to those who refuse engagement. Consequently, users become dependent on enchanting narratives rather than developing situated algorithmic epistemic vigilance (Sperber et al., 2010).

These findings underscore the need for approaches to AI literacy and governance that move beyond purely technical solutions, instead creating structured opportunities for lay users to develop experiential knowledge of GenAI's actual limitations.

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