



Supervisors

Marta Sabou, WU Wien
Laura Koesten, Uni Wien
Hajo Boomgaarden, Uni Wien

Digital Gaslighting? Epistemic Strain in Scaled and Synthetic Communication Environments

The Project

In digitally mediated communication environments, public epistemic actors operate under conditions in which little content can be taken at face value. Media and AI literacy therefore become indispensable for individuals whose role depends on forming, communicating, and revising well-informed opinions within democratic discourse. At the same time, emerging characteristics of scaled and synthetic communication such as **isolation in hyper-personalised realities**, **LLMs confidently producing incorrect outputs**, and **persistent forms of testimonial injustice against minoritised voices strain their epistemic agency**. Given their resemblance to **known gaslighting patterns**, these conditions risk turning healthy scepticism and intellectual humility into dysfunctional doubt, with consequences for both individuals and public debate.



Research Methods + Interdisciplinary Approach

- Grounded in theories of epistemic violence and gaslighting from philosophy, psychology, and sociology, this project develops a **conceptual definition** of epistemic strain informed by digital affordances and case studies.
- Building on this foundation, a mixed-methods approach combines qualitative inquiry and computational modelling to **empirically examine** how epistemic strain unfolds in lived experience and structural communicative dynamics.
- Finally, an operationalisable framework of epistemic strain informs the **development of technical interventions and non-technical practices** supporting epistemic agency through speculative design, design thinking, and knowledge engineering.



Project Contribution

- **Literature:** Existing concepts such as institutional or moral gaslighting are probed for their applicability in synthetic and scaled communication environments. Attention is drawn to the other side of healthy scepticism in such epistemic contexts, where it may turn dysfunctional.
- **Society:** Explicating the phenomenon of gaslighting dynamics underlying epistemic strain and their related harms provides language to recognise affected individuals and legitimises critical reflection on policy and platform responsibilities.
- **Technology:** Problematic effects of scaled and synthetic technological affordances are systematically understood. By addressing these, this project explores how to meaningfully avoid techno-solutionism by allowing for technical interventions while remaining attentive to non-technical alternatives.