
FWO ALGEPI PROJECT - T1.1 Concept Note

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This document represents an initial output from the collaborative efforts of the FWO project on **Understanding Algorithmic Gatekeepers and Promoting Epistemic Welfare (ALGEPI)**. It stems from Work Package 1 (WP1), '**Conceptualising Epistemic Welfare and Algorithmic Gatekeepers**,' led by the KU Leuven Center for IT and IP Law. All consortium partners contributed to Task 1.1 of WP1, aimed at developing "normative theories underpinning epistemic welfare." This summary is a consecutive study that follows the publication of the **Glossary of Key Terms**. It encapsulates Task 1.1's findings, presenting an agreement on a conceptual framework for Epistemic Welfare with a **concept note** for a common theory on Epistemic Welfare.

Structured to offer a comprehensive overview, the document begins with a working definition of **Epistemic Welfare** created by the consortium, which builds on the original work of Klaudia Majcher (2020).¹ We argue that in our overarching mission to comprehend, safeguard and scrutinise the current fast-changing digital environment with its positives and negatives, the research community, policymakers and the general public are in dire need of a fairly novel conceptual framework. This is the reason why ALGEPI is bringing the critical and overarching concept of Epistemic Welfare to the discussion table. In a nutshell, ALGEPI project aims to advance discussions on the necessity, understanding and application of Epistemic Welfare, with a broader mission to pioneer technical and organisational "epistemic welfare by design" measures as a prerequisite to safeguarding the epistemic rights and well-being of digital users.

"Epistemic Welfare" stands as a cornerstone concept for understanding how individuals and groups interact with knowledge in today's digital society. It encompasses the necessary conditions and capabilities that enable people to exercise their epistemic agency—essentially, the equitable access to and distribution of knowledge, and the tools to engage with and produce knowledge in a manner that is transparent, ethical, and accountable. This concept goes beyond merely having access to information; it includes the ability to influence and contribute to the production, modification, and dissemination of knowledge within various communities and societal contexts. It recognizes that

¹ Majcher, K. (2020). *Coherence between EU Data Protection and Competition Law in the Digital Market* [PhD thesis]. Vrije Universiteit Brussel.

knowledge is more than information; it is deeply intertwined with individual experiences and perceptions.²

The Need for a New Concept Amidst Digital Transformation

The digital era has ushered in significant changes for the actors involved in the information sphere. The roles traditionally held by nation states as information gatekeepers are increasingly being assumed by private entities and individual users, with the former playing quasi-public roles and the latter facilitating widespread information dissemination.³ This shift, coupled with the digitization-induced power imbalances between data subjects and collectors, calls for a re-evaluation of our approach to information management.⁴ The initial optimism surrounding digital advancements, celebrated for democratizing access to information,⁵ has increasingly been tempered by concerns over negative outcomes⁶ such as the spread of disinformation/misinformation, information flooding,⁷ news avoidance,⁸ heightened polarization, the emergence of echo chambers,⁹ targeted (political and commercial) content, AI-powered manipulation tactics,¹⁰ deceptive design practices (also known as 'dark patterns'),¹¹ and censorship issues.¹²

² For more information on the definition of Epistemic Welfare and relevant concepts, see, "What is Epistemic Welfare? A Glossary of Key Terms" at <https://www.algepi.com/what-is-epistemic-welfare-a-glossary-of-terms/>

³ De Gregorio, G. (2022). The Law of the Platforms. In *Digital Constitutionalism in Europe: Reframing Rights and Powers in the Algorithmic Society* (pp. 80-122). Cambridge University Press.

⁴ Balkin, J. M. (2015). The Path of Robotics Law. *California Law Review*, 6(45), 52–54.

⁵ Volokh, E. (1995). Cheap Speech and What It Will Do. *Yale Law Journal*, 104, 1805. Also see, Doyle, G. (2015). Why ownership pluralism still matters in a multi-platform world. In P. Valcke, M. Sükösd, & R.G. Picard (Eds.), *Media Pluralism: Concepts, Risks and Global Trends*. Palgrave MacMillan.

⁶ Hasen, R. L. (2018). Cheap Speech and What It Has Done (to American Democracy). *First Amendment Law Review*, 16(Symposium Issue).

⁷ Andrejevic, M. (2013). *Infoglut: How too much information is changing the way we think and know*. Routledge. Also see, Wu, T. (2017). Is the First Amendment Obsolete? Columbia Public Law Research Paper No. 14-573..

⁸ See, for example, Toff, B., et al. (2024). Five things news media can do to respond to consistent news avoidance. Reuters Institute for the Study of Journalism. At: <https://reutersinstitute.politics.ox.ac.uk/news/five-things-news-media-can-do-respond-consistent-news-avoidance>

⁹ Ross Arguedas, A., et al. (2022). Echo chambers, filter bubbles, and polarisation: a literature review. Reuters Institute for the Study of Journalism.

¹⁰ Yildirim-Vranckaert, E. O. (2023). The Right to Construct Yourself and Your Identity: The Current Human Rights Law Framework Falls Short in Practice in the Face of Illegitimate Interference to the Mind. *American Journal of Law & Medicine*, 49(2-3), 267-285.

¹¹ Gray, C. M., et al. (2018). The dark (patterns) side of UX design. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).

¹² Yildirim-Vranckaert, E. O. Digital Darkness: Gaza's Struggle for Light in the Information Age, KU Leuven Center for IT and IP Law. At <https://www.law.kuleuven.be/citip/blog/digital-darkness-gazas-struggle-for-light-in-the-information-age/>

Thus, algorithmic gatekeeping practices could result in an *epistemic crisis*¹³ and create further amplification in the already existing *epistemic injustice*, impacting the way of just “distribution and access to knowledge, information, and the resources necessary for understanding and articulating one’s experiences.”¹⁴ This phenomenon may be created by several contributing factors, including the following:¹⁵

- **Control Issues:** Algorithms govern what content is shown, recommended, and prioritized, significantly influencing what information reaches users.
- **Biased Algorithms:** There's a risk of algorithms favouring certain content or viewpoints, potentially amplifying some voices while suppressing others.
- **Economic Influences:** Content that generates more engagement and revenue may be prioritized, reflecting tech companies' commercial interests over public informational needs.
- **Transparency Issues:** A lack of clarity around content recommendation mechanisms leaves users unaware of potential biases.
- **Impact on Public Discourse:** Algorithmic curation significantly influences public opinion, political discourse, and exposure to diverse perspectives.
- **Ethical Considerations:** Decision-makers face ethical obligations to ensure fairness, diversity, and accountability in algorithmic processes.

Consequently, these challenges highlight the urgent need for a nuanced framework that extends beyond the traditional paradigms of the information ecosystem, pointing out the complex realities of the digital age.

Epistemic Welfare - Bridging Gaps in the Digital Discourse

Epistemic Welfare emerges as a holistic concept that extends beyond (but includes) traditional concepts of freedom of expression, diversity, and fairness to encompass a

¹³ “Epistemic crisis refers to a profound disruption in the established methods and norms of generating, validating, and trusting knowledge within a society, particularly affecting democratic societies that rely on informed citizenry and transparent governance.” For more information on the definition of epistemic crisis, see, “What is Epistemic Welfare? A Glossary of Terms” at <<https://www.algepi.com/what-is-epistemic-welfare-a-glossary-of-terms/>>. Also see, Dahlgren, P. (2018). Media, Knowledge and Trust: The Deepening Epistemic Crisis of Democracy. *Javnost - The Public*, 25(1–2), 20–27.

¹⁴ For more information on the definition of epistemic injustice, see, “What is Epistemic Welfare? A Glossary of Terms” at <<https://www.algepi.com/what-is-epistemic-welfare-a-glossary-of-terms/>>

¹⁵ This framework is based on the framework of epistemic injustice in research and academia created by Lund et al. Lund, R., et al. (2022). Epistemic governance of diverse research practices and knowledge production: an introduction. *Critical Studies in Education*, 63(5), 535-548.

wide array of rights and values. It aims to safeguard the agency¹⁶ and autonomy¹⁷ of individuals and groups against the backdrop of digital challenges. Along with the abovementioned rights and values, this concept integrates (non-exhaustively) epistemic justice, privacy, self-determination, and mental autonomy, addressing the threats to the integrity of information and the autonomy of its recipients posed by the digital age.

The Importance of Epistemic Welfare:

In the context of digital transformation, the significance of *Epistemic Welfare* as an encompassing concept becomes increasingly apparent. It is crucial for fostering a well-informed and respectful public discourse, essential for the well-being of individuals and the health of democratic societies. By advocating for media pluralism, epistemic justice, diversity of thought, and redefining (traditional) media taxonomy, *Epistemic Welfare* seeks to ensure that the information ecosystem supports a vibrant and critical public discourse, thereby reinforcing the democratic fabric in an era of algorithmic gatekeeping. Crucially, this underscores the need for a human-centred approach that prioritises serving individuals' needs, fosters a trust-based relationship between users and technology, and ensures that technology acts as a facilitator of *Epistemic Welfare* rather than a barrier.¹⁸

ALGEPI - Advancing Epistemic Welfare Concept

The FWO ALGEPI Project, a four-year initiative focused on fundamental research, leads the effort to address the challenges posed by algorithmic gatekeepers to *Epistemic Welfare*. By harnessing expertise from communication science, computer science, and legal studies, the project aims to create a comprehensive framework for examining algorithmic gatekeeping's intricate impacts on our knowledge ecosystem. It strives to deepen our understanding of *Epistemic Welfare*, investigating the changing power dynamics in the digital realm and the influence of algorithmic gatekeepers on our epistemic health.

¹⁶ “Epistemic agency refers to the capacity of individuals or groups to proactively, deliberately, and autonomously engage with, contribute to, and influence the processes of knowledge production, modification, and dissemination within specific epistemic communities or broader societal contexts.” For more information on the definition of epistemic agency, see, “What is Epistemic Welfare? A Glossary of Terms” at <https://www.algepi.com/what-is-epistemic-welfare-a-glossary-of-terms/>

¹⁷ “Epistemic autonomy refers to an individual's right to freely seek and understand knowledge without outside interference.” For more information on the definition of epistemic autonomy, see, “What is Epistemic Welfare? A Glossary of Terms” at <https://www.algepi.com/what-is-epistemic-welfare-a-glossary-of-terms/>

¹⁸ Stephanidis, C., et al. (2019). Seven HCI Grand Challenges. *International Journal of Human-Computer Interaction*, 35(14), 1229-1269.

As it progresses beyond its initial year, the ALGEPI Project refines its theoretical approach, analyses interactions among digital actors, and identifies the conditions that either facilitate or obstruct *Epistemic Welfare*. Its objective is to formulate practical strategies and guidelines, based on thorough legal and policy analysis, to ensure algorithmic systems promote *Epistemic Welfare*. The project's broader mission includes enhancing scholarly and public debate and pioneering technical and organisational "epistemic welfare by design" approaches as a prerequisite to safeguarding the epistemic rights and well-being of digital users.