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EDITORIAL FOR THE TOPICAL COLLECTION "POSTPHENOMENOLOGY IN THE AGE OF AI: PROSPECTS, CHALLENGES, OPPORTUNITIES"

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Topical Collection: Postphenomenology in the Age of AI: Prospects, Challenges, Opportunities

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While the topic of AI is not entirely new to postphenomenology (Mykhailov & Liberati, 2022; Wellner, 2022), the rapid advancement of this technology within the last few years has introduced many challenges for which we currently lack answers. For example, the classical notion of alterity relations is under pressure: we must now ask whether AI systems count as "quasi-others" in a more radical sense than earlier technologies, and if so, how our relation to them is mediated (Kudina, 2021; Laaksoharju et al., 2023; Penttilä & Mertanen, 2025). Or the other example, postphenomenology emphasizes that technologies mediate experience in selective ways—revealing some aspects of the world while hiding others—this effect is strongly intensified and often made opaque by modern AI. The deep learning "black box" problem indicates that we cannot fully trace how AI systems mediate or transform phenomena (Friedrich et al., 2022). The list of these issues could be extended further.

While today's philosophy of technology encompasses a wide variety of approaches, the present topical collection is primarily focused on the postphenomenological school of thought for several important reasons.

First of all, postphenomenology has demonstrated its power in multidisciplinary, cross-disciplinary, and transdisciplinary research, showing how its method can be useful for solving complex issues that require multiple angles of observation (Benjamin et al., 2021). Among those topics, we can mention, for example, the medical domain, where postphenomenological approaches have been employed to investigate how medical technologies mediate patient–physician relationships and influence the moral decision-making domain (Kudina & de Boer, 2021). Or education—where postphenomenology has been integrated with learning sciences to analyze how machine learning tools and AI tutors mediate students' epistemic agency and embodiment (Adams, Catherine; Turnville, 2018; Jubien, 2014; Wellner & Levin, 2024). Or environmental studies, where postphenomenology informs understanding of how sensing technologies reconfigure human perception of ecological systems, or even of other planets (Rosenberger, 2008). More recently, postphenomenology has entered the AI and human–machine interaction discourse, addressing issues of algorithmic mediation, value dynamism, and technological intentionality (Mykhailov & Liberati, 2023; Redaelli, 2025). The point of cross- and multidisciplinary approaches is crucial for today's discussions on AI, as this landscape remains dynamic and draws on scholars from diverse domains. In this sense, to provide a proper perspective on the issues related to artificial intelligence, it is crucial to draw on the multidisciplinary perspectives that postphenomenological methodology is rooted in.

The other important point for this current collection is the issue of the totality of technology. Beginning with early existential philosophers of technology like Heidegger and Jaspers, philosophers started to think about the boundaries of our technologies and, more importantly, how technologies are impacting every area of human life. This theme reappears in early postphenomenology as well. Starting with the writings of Don Ihde (1979), who based his analysis heavily on Heideggerian philosophy of technology, and moving towards more recent postphenomenologists who demonstrate how new technologies influence our practices (Liberati, 2022), values (Kudina & Verbeek, 2018; Wellner & Mykhailov, 2023), moral behaviors (Verbeek, 2006), and even our connection to transcendence (Aydin & Verbeek, 2015; Mykhailov, 2023). Of course, AI is not an exception. Today, we are witnessing the ubiquity of this technology as it enters literally every domain of our lives, transforming our mundane behaviors, workflows, and other routines, including relationships, emotional bonds, and even erotic interactions.

As we mentioned earlier, many postphenomenologists have begun analyzing AI from various perspectives. Although these studies offer deep philosophical insights into AI-human relationships from a postphenomenological viewpoint, we still lack a more systematic approach to AI, especially considering the recent boom of LLMs.

With this idea in mind, the current topical collection seeks to frame this dynamic landscape not only by providing answers but also, more importantly, by asking new questions about our interaction with AI, its role in the future of humanity, and possible ways to design, regulate, and better understand this technology through postphenomenological lenses. All this makes this collection of particular significance not only for the discussions inside postphenomenology itself but also for contemporary philosophy of technology and other cross- and multidisciplinary domains that can contribute from philosophical insight on novel technologies.

The present topical collection consists of 7 papers. Each paper covers a specific domain currently being transformed by AI and offers a postphenomenological reflection on it. Below, I will briefly describe each paper to help the reader of this collection understand where to begin and the key points each paper aims to reach.

The first paper in this topical collection is written by Soraj Hongladarom and Auriane van der Vaeren, titled "ChatGPT, Postphenomenology, and the Human-Technology-Reality Relations." (2024). The authors challenge a traditional anthropocentric view of hermeneutic activities by proposing the inclusion of LLMs as new hermeneutic agents capable of 'interpreting' and 'understanding' text through reading and generating output. When we receive an output from LLMs, this output is not just a neutral reflection of reality 'as-it-is', rather it is a result of complex interpretational activity processed by the LLM itself. This development creates a new situation where we have a hermeneutic agent that differs slightly from humans. On one hand, this approach questions the anthropocentric perspective that remains strong in AI discussions, while on the other hand, the paper explores a deeper question: how can the output of hermeneutic activity created by LLMs help humans understand the world around us? Following this question, we observe that although LLMs' interpretation of reality is similar to humans', several conceptual differences still exist. By examining these differences, the authors demonstrate that today's LLMs are transforming the traditional hermeneutical 'interpretation-understanding' structure and, in doing so, influence how we comprehend and make sense of the reality we live in.

The second paper included in the present topical collection is written by Stefania Matei and entitled "Generative artificial intelligence and collective remembering: The technological mediation of mnemotechnic values" (2024). In her paper, Stefania Matei analyzes how AI (LLMs in particular) is changing our practices of remembering and forgetting, and so transforming the way the past is revealed to us. Compared to previous technologies, such as encyclopedias or search engines, which provided fixed chunks of information about particular historical events, LLMs offer a flexible interpretation of the past, often personalized and tailored to a specific user based on their conversation history, preferences, etc. This creates a different image of the time continuum where the past, instead of being a rigorous and fixed structure, becomes more fluid, thought-provoking, engaging, and flexible. According to Matei, the result of this transformation is that new kinds of mnemotechnic values come into play. These values transform the way we interact not only with the past but also with the present and the future, as well as the ways we remember and forget.

The next paper is written by Selin Gerlek and Sebastian Weydner-Volkmann entitled "Materiality and Machinic Embodiment: A Postphenomenological Inquiry into ChatGPT's Active User Interface" (2025). This article continues an important line of postphenomenological research related to screens and interfaces as mediums of our interactions with digital technologies. Focusing on ChatGPT's active User Interface, authors analyze how this technology changes the way we interact with the technological other. The authors claim that the structure and operational elements of GPT's interface mediate the user's engagement with this technology. What is more critical is that, although technically speaking, the human other is missing in this communication, we still transfer our conversational habits — such as greetings, politeness, etc. — to conversations with AI. This turns the whole interaction with technology

from a formal, functional transfer of information into a complex, personal, and existential exchange, as, at the end of the day, the things that we are sharing with LLMs on the daily basis are not only technical or routine elements, but something that we value, something that represents an integral part of our individuality.

Luca Possati, in his paper "Mediation and Anti-Mediation: Re-Evaluating the Role of AI Breakdowns and Anomalies in Postphenomenology," (2024) gives an alternative angle on the postphenomenological notion of technological mediation. Possati claims that today's postphenomenology, due to its over-reliance on Heiddeger's tool-being analysis, does not pay proper attention to such significant phenomena as technological breakdowns. Although breakdowns are an essential part of every technological lifecycle, there is little literature in postphenomenology dedicated to this subject. With this in mind, Possati introduced the notion of 'anti-mediation' to address this gap and reflect on technological anomalies that remain underrepresented. Turning to AI breakdowns as a productive material for a philosophical reflection, Possati develops an early research on the role of the breakdowns in our digital world, showing how errors and failures in AI ecosystems are something that can show us the limitations of this technology and, at the same time, enrich our interaction with these digital environments.

The next paper is written by Galit Wellner and titled "A Postphenomenological Guide to AI Regulation" (2024). This is a pioneering manuscript that seeks to apply and demonstrate the efficiency of postphenomenology in the AI regulatory domain. While the relationship between postphenomenology, policymaking, and regulation remains underrepresented, Galit Wellner shows its importance, especially in today's globalized AI world. Emphasizing this relationship opens new opportunities for postphenomenological methodology by showing how the methods applied in postphenomenology could benefit today's AI regulations. Apart from that, based on the postphenomenological notion of human-technology relations, Wellner develops so-called "future-proof" legislation, which aims to equip policymakers with better tools for effective policymaking in a fast-changing domain of AI applications.

Marco Pavanini's "Postphenomenology and Human Constitutive Technicity: How Advances in AI Challenge Our Self-Understanding"(2024) explores new possibilities for postphenomenology by drawing on the work of Peter Sloterdijk and Bernard Stiegler. In this sense, Pavanini aims to provide a more ontological perspective to postphenomenology and, at the same time, to apply it to novel AI applications. Considering this, the present manuscript argues that technology plays a foundational role in shaping the human lifeform, extending beyond merely affecting our experience and relationship with the world to also impacting our evolutionary trajectory from an onto-anthropological perspective.

The final paper of this topical collection is written by Hamed Yaghoobian and entitled "The Writer In-between: A Post-phenomenological Analysis of Large Language Models (LLMs) and their Implications for Writer-Tool Relations" (2025). This manuscript analyzes different writing media to show a new 'mediation' angle that LLMs introduce to our writing techniques. In particular, Yaghoobian focuses on the reciprocal role of writing technologies, claiming that not only LLMs but all writing technologies contribute to the process and content of writing. The proposed framework invites moving towards a less humanist ontology that embraces new potentialities for AI-human relations.

As readers can see, the scope of the topics in this collection is quite broad. However, all of them are connected by the application of the postphenomenological methodology to various forms of today's AI systems. I hope this topical collection can foster a deeper and more timely dialogue about the role and value of AI in human-technology relationships and, at the same time, offer a different perspective on the questions that our modern world is concerned about, such as whether AI is a threat or an opportunity, how our lives will evolve over the next few years, and

how AI might transform human nature in the future. I believe that all these questions are urgent and sound. I also think that postphenomenology can provide a balanced answer without falling into extremes. The latter seems valuable for today's world, which is so overwhelmed by the temptations of simple answers and radical worldviews.

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References

Adams, Catherine; Turnville, J. (2018). Doing Postphenomenology in Education. In C. Aagaard, Jesper; Friis, Jan Kyrre Berg O; Sorenson, Jessica; Tafdrup, Oliver; Hasse (Ed.), *Postphenomenological Methodologies: New Ways in Mediating Techno-Human Relationships* (pp. 3–25). Lexington Books.

Aydin, C., & Verbeek, P. P. (2015). Transcendence in Technology. *Techné: Research in Philosophy and Technology*, *19*(3), 291–313. https://doi.org/10.5840/TECHNE2015121742

Benjamin, J. J., Berger, A., Merrill, N., & Pierce, J. (2021). Machine learning uncertainty as a design material: A post-phenomenological inquiry. *Conference on Human Factors in Computing Systems - Proceedings*, *14*. https://doi.org/10.1145/3411764.3445481

Friedrich, A. B., Mason, J., & Malone, J. R. (2022). Rethinking explainability: toward a postphenomenology of black-box artificial intelligence in medicine. *Ethics and Information Technology*, *24*(8), 1–9. https://doi.org/10.1007/S10676-022-09631-4

Gerlek, S., & Weydner-Volkmann, S. (2025). Materiality and Machinic Embodiment. *Journal of Human-Technology Relations*, *3*, 1–15. https://doi.org/10.59490/JHTR.2025.3.7387

Hongladarom, S., & Van Der Vaeren, A. (2024). ChatGPT, Postphenomenology, and the Human-Technology-Reality Relations. *Journal of Human-Technology Relations*, *2*(1), 2. https://doi.org/10.59490/JHTR.2024.2.7386

Ihde, D. (1979). *Technics and Praxis: A Philosophy of Technology*. Springer. https://doi.org/10.1007/978-94-009-9900-8

Jubien, P. (2014). Postphenomenology, Smartphones, and Learning: Students and Teachers in Higher Education. In *Sage Research Methods Cases Part 1*. SAGE. https://doi.org/10.4135/978144627305013512947

Kudina, O. (2021). "Alexa, who am I?": Voice Assistants and Hermeneutic Lemniscate as the Technologically Mediated Sense-Making. *Human Studies*, *44*(2), 233–253. https://doi.org/10.1007/S10746-021-09572-9/FIGURES/3

Kudina, O., & de Boer, B. (2021). Co-designing diagnosis: Towards a responsible integration of Machine Learning decision-support systems in medical diagnostics. *Journal of Evaluation in Clinical Practice*, *27*(3), 529–536. https://doi.org/10.1111/JEP.13535

Kudina, O., & Verbeek, P. P. (2018). Ethics from Within: Google Glass, the Collingridge Dilemma, and the Mediated Value of Privacy. *44*(2), 291–314. https://doi.org/10.1177/0162243918793711

Laaksoharju, M., Lennerfors, T. T., Persson, A., & Oestreicher, L. (2023). What is the problem to which AI chatbots are the solution? AI ethics through Don Ihde's embodiment, hermeneutic, alterity, and background relationships. In Thomas Taro Lennerfors & Kiyoshi Murata (Eds.), *Ethics and Sustainability in Digital Cultures* (pp. 31–48). Taylor and Francis. https://doi.org/10.4324/9781003367451-4

Liberati, N. (2022). Reflections on an Externalized Digital Imagination. *Foundations of Science*, *27*(2), 407–410. https://doi.org/10.1007/S10699-020-09768-9

Matei, S. (2024). Generative artificial intelligence and collective remembering. The technological mediation of mnemotechnic values. *Journal of Human-Technology Relations*, *2(1),* 1-22. https://doi.org/10.59490/JHTR.2024.2.7405

Mykhailov, D. (2023). Mediation and Transcendence: Balancing Postphenomenological Theory of Technological Mediation with Karl Jaspers's Metaphysics of Ciphers. *Human Studies*, *46,* 405-422. https://doi.org/10.1007/S10746-023-09666-6

Mykhailov, D., & Liberati, N. (2022). A Study of Technological Intentionality in C++ and Generative Adversarial Model: Phenomenological and Postphenomenological Perspectives. *Foundations of Science, 28*, 841-857. https://doi.org/10.1007/S10699-022-09833-5

Mykhailov, D., & Liberati, N. (2023). Back to the technologies themselves: phenomenological turn within postphenomenology. *Phenomenology and the Cognitive Sciences*, *24,* 1295-1314. https://doi.org/10.1007/S11097-023-09905-2

Pavanini, M. (2024). Postphenomenology and Human Constitutive Technicity: How Advances in AI Challenge Our Self-Understanding. *Journal of Human-Technology Relations*, *2*(1), 1–25. https://doi.org/10.59490/JHTR.2024.2.7377

Penttilä, A., & Mertanen, M. (2025). Reconsidering Alterity of Ihde's Garden: A Conceptual Critique. *Human Studies*, *48,* 571-584. https://doi.org/10.1007/S10746-024-09779-6

Possati, L. M. (2024). Mediation and Anti-Mediation : Re-Evaluating the Role of AI Breakdowns and Anomalies in Postphenomenology. *Journal of Human-Technology Relations*, *2*(1), 1–18. https://doi.org/10.59490/JHTR.2024.2.7381

Redaelli, R. (2025). Intentionality gap and preter-intentionality in generative artificial intelligence. *AI and Society*, *40,* 2525-2532. https://doi.org/10.1007/S00146-024-02007-W

Rosenberger, R. (2008). Perceiving other planets: Bodily experience, interpretation, and the mars orbiter camera. *Human Studies*, *31*(1), 63–75. https://doi.org/10.1007/S10746-007-9078-1

Verbeek, P. P. (2006). Materializing morality: Design ethics and technological mediation. *Science, Technology and Human Values*, *31*(3), 361–380. https://doi.org/10.1177/0162243905285847

Wellner, G. (2022). Digital Imagination, Fantasy, AI Art. *Foundations of Science*, *27*, 1445–1451. https://doi.org/10.1007/s10699-020-09747-0

Wellner, G. (2024). A Postphenomenological Guide to AI Regulation. *Journal of Human-Technology Relations*, *2*(1), 1–18. https://doi.org/10.59490/JHTR.2024.2.7397

Wellner, G., & Levin, I. (2024). Ihde meets Papert: combining postphenomenology and constructionism for a future agenda of philosophy of education in the era of digital technologies. *Learning, Media and Technology*, *49*(4), 656–669. https://doi.org/10.1080/17439884.2023.2251388

Wellner, G., & Mykhailov, D. (2023). Caring in an Algorithmic World: Ethical Perspectives for Designers and Developers in Building AI Algorithms to Fight Fake News. *Science and Engineering Ethics*, *29*, nr. 30. https://doi.org/10.1007/S11948-023-00450-4

Yaghoobian, H. (2025). The Writer In-between: A Post-phenomenological Analysis of Large Language Models (LLMs) and their Implications for Writer-Tool Relations. *Journal of Human-Technology Relations*, *3*(1), 1–18. https://doi.org/10.59490/JHTR.2025.3.7398