

CHATGPT, POSTPHENOMENOLOGY, AND THE HUMAN-TECHNOLOGY-REALITY RELATIONS

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Article type: Research article

Review process: Double-blind peer review

Topical Collection: Postphenomenology in the Age of AI: Prospects, Challenges, Opportunities, guest editor Dmytro Mykhailov

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DOI: <u>10.59490/jhtr.2024.2.7386</u> ISSN: 2773-2266 Submitted: 1 February 2024 Revised: 1 May 2024 and 11 July 2024 Accepted: 12 July 2024 Published: 10 October 2024

How to cite (APA): Hongladarom, S., & van der Vaeren, A. (2024). ChatGPT, Postphenomenology, and the Human-Technology-Reality Relations. *Journal of Human-Technology Relations*, 2(1), pp.1-24. https://doi.org/10.59490/jhtr.2024.2.7386

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Keywords

ChatGPT; Large Language Models; Postphenomenology; Hermeneutics; STS; Postanthropocentrism

Abstract

This paper analyzes ChatGPT, and other large language models, using Don Ihde's postphenomenological framework. Ihde helps immensely to understand how ChatGPT goes beyond the *classical* understanding of the technological mediation of reality to the human, according to which the human alone would engage in hermeneutics. Commonly, ChatGPT is explained as merely calculating probabilities upon serially aligning words. However, adding a speculative postanthropocentric twist to Ihde's framework, we suggest an explanation for how ChatGPT itself—by virtue of its ability to 'understand' text upon 'reading' an input and 'writing' a meaningful output—necessarily acts as a kind of hermeneutic agent. Firstly, this radicalizes the classical anthropocentric conception of hermeneutics. Secondly, ChatGPT's hermeneutic character carries a significant potential for performing how we perceive and relate to reality. Not only in the sense that ChatGPT can reify the idea that normative labels and categories alone are apt at representing the world. And, not only in the sense that ChatGPT can ossify particular ways of phrasing the world. But, perhaps more thought-provokingly so, also in the sense that ChatGPT can perform the human—at least to some extent—with ChatGPT's own synthetically generated perception of reality.

Plain Language Summary¹

- The manuscript uses Don Ihde's postphenomenology framework to argue that ChatGPT and similar large language models are not merely tools but hermeneutic agents. This means they actively interpret and help make sense of the world. Whether ChatGPT engages in a kind of hermeneutic activity that is different from or similar to human beings, it still challenges the traditional view of generative technology as passive instruments.
- Unlike non-generative technologies like thermometers, which only provide data, ChatGPT participates in meaning-making. It interprets input and generates coherent, contextually relevant responses, suggesting that such technologies can shape our understanding and perception of reality in significant ways.
- The paper explores how the interaction with ChatGPT changes human practices and perceptions. It suggests that large language models could reshape our relationship with knowledge and reality by way of influencing how we view and engage with the world, potentially reshaping our cultural and social norms.
- The work raises critical questions about the nature of understanding and interpretation, challenging the traditional human-centered view of these concepts.

¹ Al-generated; author checked and approved.



1 INTRODUCTION

In this paper, we propose to analyze the phenomenon of ChatGPT and other large language models (LLMs) through the theoretical lens afforded by Don Ihde's idea of postphenomenology and material hermeneutics (Ihde, 1993, 2022). The rapid rise in ChatGPT's popularity and other LLMs is nothing but astounding. Only introduced to the public on November 30, 2022 (OpenAI, 2022), ChatGPT has now captured the imagination of the public worldwide. This new phenomenon presents philosophers with rich and potent analytical material to advance not only philosophical questions but equally so practical ones such as the governance and regulation of artificial intelligence.

In our view, Ihde provides us with a fundamental analytical basis to unpack and make sense of ChatGPT (from now on, we refer to LLMs in general as ChatGPT). By developing on how the technological mediation between reality and the human operates, Ihde enables us to make sense of how the supposed meaning-making ability of ChatGPT itself fares. In other words, with Ihde's postphenomenology, we will look at the kind of hermeneutical activity that is involved in the human-reality relation as mediated by ChatGPT. In fact, adding a speculative postanthropocentric twist, we will claim that ChatGPT radicalizes Ihde's core relationship between humans, technology, and reality. Namely, we will suggest that ChatGPT not merely mediates between the human subject and reality in the classical understanding of postphenomenological hermeneutics. Rather, by virtue of it being capable of 'understanding' the text that is input to it, we will suggest that ChatGPT itself does hermeneutics. Elaborating on Soraj Hongladarom's notion of machine hermeneutics (2020)—which refers to the kind of hermeneutics performed by facial recognition algorithms—we will suggest that, as much as the human user produces meaning about the world upon interacting with ChatGPT, so too, ChatGPT co-produces this meaning during this interaction. In so suggesting, and faithful to our speculative postanthropocentric commitment, we will examine both the human practices arising upon interacting with ChatGPT, as well as the speculated nonhuman practices emanating from ChatGPT itself. In essence, our question is: how does ChatGPT interpret the world for us, and what are the implications of such activity?

To respond to this query, we first introduce postphenomenology and present a review of literature that discusses ChatGPT postphenomenologically (see *Postphenomenology and ChatGPT: An Overview*). We then describe our argumentative approach (see *Our Approach*), before diving into the various present-day mundane uses of ChatGPT (see *Uses of ChatGPT*). The analysis of these uses serves to demonstrate our claim (see *Postphenomenological Analysis of the Uses of ChatGPT*). We then discuss what we esteem to be a substantial implication of our claim (see *How ChatGPT Reshapes our Relation to the Wor(I)d*), before ending with a summarizing conclusion (see *Conclusion*).

2 POSTPHENOMENOLOGY AND CHATGPT: AN OVERVIEW

Following Martin Heidegger, many philosophers regarded technology as what he called a *standing-reserve* (Heidegger, 1977). In this view, a river dam is considered fundamentally foreign to nature and, therefore, as necessarily spoiling nature. A river dam is considered something that overcomes nature and, therefore, us. It is something over which we have little to no control. To emphasize this view of technology as a looming entity, Heidegger referred to Technology with a capital T. He was particularly interested in what is going on inside the subjective frame of reference of the individual resulting from the encounter with this looming presence. Albert Borgmann's famous example of the home electric heater illustrates this well (Borgmann, 1984). To Borgmann, the fireplace in the house functions as a "focal thing" around which the activities of those inside the house are gathered. With the arrival of electric heating in

modern homes, the integration and the deep connection among the inhabitants of the house, as well as between humans and their natural environment, was dramatically changed. Instead of going out to the woods, cutting trees, carrying the branches home, and chopping them into firewood, modern inhabitants merely flip a switch, and the heat 'appears.' To Borgmann, a crucial connection has been lost in the modern home. Unlike the case where the homeowner chops their firewood to heat their home themselves, the modern inhabitant does not exert their individuality into the task. In this sense, the electric heater is a Heideggerian standing-reserve; the homeowner has no control over the electric grid, which causes the homeowner to be entirely subjected to the heater's will.

Seeking to transcend Heidegger's trending view in the philosophy of technology, Ihde formulates his postphenomenological framework. Namely, instead of standing in awe before a subjecting Technology with a capital T whereby one feels helpless, Ihde pays attention to the ways that various technologies with a lowercase t influence how we go about the world. He suggests that philosophers concentrate on how technological devices differentially impact us, and on how these devices are impacted by their interaction with us. Hence, in postphenomenology, the philosopher distances themselves from what is going on inside their own subjective frame and pays attention to how the device mediates between the philosopher and its surroundings, such as to pinpoint the cultural dimension of human-technology relations. One of Ihde's favorite examples is the telescope (Ihde, 1979, 1991; Wiltsche, 2017). Ihde does not look at the human-telescope relation in the Heideggerian sense whereby the telescope is a purely instrumental tool, foreign to nature and therefore necessarily spoiling our relation to nature. Rather, Ihde looks at the mediational relation at work between the human subject, the telescope, and the object of inquiry (i.e., that which the subject is looking at through the telescope). For, in Ihde's view, Technology is not just an entity out there; technology is an entity that re/shapes our relation to reality. This relation is what gives rise to Ihde's famous notion of material hermeneutics (Ihde, 2022). In its most traditional understanding, hermeneutics is about the human interpretation of texts in their literal form (whether written or oral). It is about the human activity at work upon encountering a literal text and trying to figure out its meaning. The relation under observation is that between the literal text and the subject, who is, on occasion, aided by a magnifying glass or the like. Seeking to widen this analytical scope, Ihde introduces the notion of material hermeneutics to show that hermeneutics does not have to limit itself to literal texts but may include texts understood in the figurative sense, such as when a radiologist 'reads' an X-ray film. In this sense, understanding the hermeneutics at work requires us to make sense of the material objects constitutive of the figurative text; it requires us to make sense of the physical substrate of the figurative text (see also Hasse, 2023). For instance, an X-ray film itself does not contain words². Yet, a radiologist reads the film as if reading text. So, too, when a microbiologist looks through a microscope and interprets microbes, the microbiologist constructs this object of study into a coherent account, translating the microbe into words and text. Hence, while microbes do not present themselves as literal text, they do function as figurative text. That is why, according to Ihde, technology may not be omitted upon engaging in a hermeneutics analysis, for it is the technological device that allows the translation of a figurative text into a literal one. In our case, where we look at how ChatGPT mediates our relation to reality, ChatGPT can function as literal text and —through its data-world —as figurative text.

Few articles discuss ChatGPT postphenomenologically. Mikael Laaksoharju and colleagues look at ChatGPT through Ihde's four types of human-technology relations—the embodiment, hermeneutic, alterity, and background relations—and their ethical implications (Laaksoharju et al., 2023). A master's thesis by Víctor B. Yáñez discusses ChatGPT through Derridean deconstruction theory and Ihdean postphenomenology, focusing on implicit "structural

² Not besides the film's metadata such as the name of the patient or the day the X-ray was captured.



dangers" of interacting with ChatGPT (Betriu Yáñez, 2023). Alexandra Farazouli studies how ChatGPT brings teachers to change their perception of student-written texts (Farazouli, 2023). Jordan J. Wadden analyzes how "conversational artificial intelligence" impacts our conceptions of autonomy and psychological integrity (Wadden, 2023). Lucas N. Vieira looks at how "machine translation tools" reshape our perception of information and our valuation of who has the authority to present this information as knowledge (Nunes Vieira, 2023). Tea Lobo (2023) unveils how the popular photo-sharing social network, Instagram, instantiates the postphenomenological relations of hermeneutics and alterity, thereby exposing how Instagram is veritably co-constitutive upon making the world known to the human subject. Mark Coeckelbergh and David J. Gunkel craft an important argument in Lobo's sense. Namely, instead of looking at ChatGPT through the Platonist lens or adopting an instrumentalist stance vis-à-vis language and technology, the phenomenon of ChatGPT should be understood from the perspective through which humans, technology, and language are all interdependent; i.e., where none is in full control (Coeckelbergh & Gunkel, 2023).

What these publications tell us is that ChatGPT offers a rich source of reflection for the Ihdean human-technology relations. However, what seems to be missing so far is a look at how ChatGPT *itself*—as a putatively meaning-making entity—would require us to review our idea of how the tripartite human-technology-reality relation operates. While it can be debated whether ChatGPT itself 'knows' or 'understands' the text it 'reads' and 'writes' like a human does, as LLM, ChatGPT necessarily ought to generate its own interpretation from textual input prompts. No one denies that ChatGPT generates text that carries at least some semblance of meaning, at least if we understand meaning in a more superficial way of syntactic coherence. Many people rely on ChatGPT to perfect their business emails before sending them out. So too, generative dis/misinformation is clear evidence that the syntactic coherence generated by ChatGPT is enough to be meaningful to many people³ (see Motoki, Pinho Neto & Rodrigues, 2023). For our purpose, the fact that ChatGPT can 'read' input texts from which it generates output texts that bear a superficial semblance of meaningfulness—one that is sufficient for everyday pragmatic use—is enough for us to claim that ChatGPT actively participates in making meaning.

A necessary clarification at this point is that while we will always speak about inputs and outputs as being about *text*, for our purpose, by *text*, we also mean other formats that ChatGPT is currently able to digest; namely, audio and visual content. The decision to refer to *text* is to highlight that even when the content is not originally in written text form, ChatGPT at some point always programmatically translates (converts) the non-textual content to words for its own internal processing (hence why the quality of data annotation constitutes such a central pillar for LLMs; we will come back to this later).

3 OUR APPROACH

What we seek to demonstrate is ChatGPT's necessarily hermeneutic character. Namely, through a postphenomenological examination of the human uses of ChatGPT, we will speculatively demonstrate how ChatGPT itself engages in hermeneutics. We here describe this approach.

Ihde's development on human-technology relations predated today's human-ChatGPT relation. Nonetheless, Ihde (1993) enables us to speculate about ChatGPT's hermeneutic activity. Laaksoharju *et al.* (2023) engaged in an analysis of ChatGPT through Ihde's four determinant types of human-technology relations; among which the hermeneutic relation. They suggested that as we read the information provided by ChatGPT, ChatGPT, therefore, necessarily mediates between us and the world. Laaksoharju *et al.* then developed on the ethical implications of this

³ One could also add that instances of mutual incoherence between humans do not therefore imply that the interacting humans have no meaning-making capacity.



human-ChatGPT relation. Comparatively, our interest is to demonstrate how ChatGPT *itself* necessarily acts as a hermeneutic agent. Another relevant development is Dmytro Mykhailov's notion of *technological intentionality* (Mykhailov, 2020); arguing that, in being phenomenologically agential, technologies necessarily actively co-construct that reality which they mediate to humans. Mykhailov acknowledged that his postphenomenological approach leaned more toward Actor-Network Theory (ANT). Contributing to these efforts we will seek to move beyond this ANT-ascendancy with help from Ihde's attention to the micro- and macroperceptual dimensions of the human-technology relations (Ihde, 1993). Respectively, these dimensions refer to the bodily-sensory and to the cultural-hermeneutic dimensions of this relation.

When discussing the macroperceptual factors that affect human-technology relations—i.e., the interiorized, socio-cultural factors—Ihde underscores how the transfer of a technological artifact from one cultural context to another leads to a multiplication in its uses; either by receiving additional uses, or receiving different uses than those that arose in the artifact's original cultural context. Inde specifically refers here to technological transfers at a crosscontinental level. With ChatGPT, we may understand the transfer as a cross-sectoral one. In particular, as a transfer from the expert culture to laypeople. While having little to no knowledge of the internal programmatic and computational mechanisms of ChatGPT, laypeople do succeed in appropriating this technology. By way of making sense to us, ChatGPT is a recognizable object that is familiar and reachable; its interface and the output it produces are not estranging or alienating. This ability for lay appropriation of a new technology that is intended for such mundane everyday use is surely the wishful outcome of any successful product design. But, even more so, as Ihde has described for cross-continental transfers, here too, the uses made of ChatGPT have exceeded what its original designers might have intended it to be used as. That is also the reason for the explosion in discussions around how to rein in uses of ChatGPT to safeguard human rights, while simultaneously preventing restrictive regulations that could stifle both those rights and technological innovation. Laypeople's creativity thus contributes significantly to exposing ChatGPT's potential, and, hence, it is through these mundane uses of ChatGPT that we here intend to show how ChatGPT also embodies a capability of making meaning. For indeed, if "technologies virtually always exceed or veer away from intended design" (Ihde, 2002), it still begs the question: is ChatGPT's output solely about the human designer's or user's intentionality, or should our focus on intentionality also require attention to ChatGPT's own, nonhuman intentionality?

In our speculative postanthropocentric pursuit, we are seeking to give ChatGPT its due. In a way, it aligns with Dmytro Mykhailov and Nicola Liberati's quest to turn "back to the technologies themselves, [by] showing how the technologies have to be taken into consideration by themselves" (Mykhailov & Liberati, 2023). They worked on the notion of technological intentionality to illustrate how technology is not just a dead thing waiting to be activated. Being similarly motivated by a quest to move beyond the Heideggerian view that prevents a fuller understanding of ChatGPT, we will here suggest that perception may not be a merit confined within the human realm alone, and very much ought to be understood as applying to ChatGPT itself. Only as such will we be able to fully appreciate ChatGPT's hermeneutic ability, and will we be able to suggest that ChatGPT itself necessarily generates some kind of meaning. Note that we do not say that meaning can emerge out of nothingness, or that ChatGPT can create semantic meaning out of nowhere (for certainly anything emerges out of an encounter, an exchange, a mixture, and a process of transformation). Rather, we seek to establish technology's due in being hermeneutically agential, even if this agency is of a different kind than the kind of hermeneutics at work within the human subject. Hongladarom's notion of machine hermeneutics (2020) already referred to this idea for facial recognition algorithms. Namely, facial recognition technology interprets the object of perception before presenting its result to the human subject. With LLMs too, rather than transmitting to the human a representation of



reality that has been unchanged⁴, LLMs—in being generative artificial intelligence (GenAI) tools—add a self-generated layer of interpretation on top of that part of reality which the instrument observes before presenting the result to the human observer. In our demonstration, we will suggest that generative processes, in general, involve hermeneutical activity.

Having described our approach, we will now delve into some mundane uses of ChatGPT. Note that the purpose of the next section is not to provide an exhaustive review of ChatGPT's current real-world uses across different layers of society. Rather, it is to provide a handful of key examples of lay uses before engaging in their postphenomenological analysis. By lay mundane uses, we mean front-end prompts into ChatGPT by humans that might be asking things without harmful intent (e.g., correcting grammatical mistakes, creating music, producing a business idea), or things intentionally harmful (e.g., to infringe copyrights, to perpetrate criminal offenses such as by creating child sexual abuse material)⁵. This understanding of mundane uses may suggest a rough typology based on harmful intent. It does not mean that the harmless intent does not lead ChatGPT to produce harmful content, but in this case, it does not do so on a user's explicit request. In the examples that we will show, we have chosen the kinds of uses that carry no harmful intent, for—we believe—lay people at present largely use generative tools in an inquisitive, exploratory approach⁶.

4 USES OF CHATGPT

A first popular mundane use is text-to-image generation; i.e., textually prompting ChatGPT to create an image. For instance, prompting Microsoft Bing's Image Creator to suggest an image for the "inner workings of large language models in surrealist art style" results in a selection of four images (see Image 1). Clearly, these may not be otherwise than an interpretation made by the LLM itself; an interpretation both of the initial input prompt, and of how this would 'look like' visually. One may then be tempted to assess the model's own 'worldview' so to speak, which is a form of assessment that is in fact already widely applied, for instance, upon assessing a model's bias relative to gender, race, or socioeconomic status (see Motoki et al., 2023, about assessing ChatGPT's political view, or, Levi Martin, 2023, for a discussion on "building values into machines" through interviewing ChatGPT about its own morality). In our case, one might perhaps interpret the model to have an industrialist or mechanistic view of LLMs, though another prompt would surely cause the model to generate images with more organic neuralnetwork-like features, such as how AI is often portrayed to 'be like.' Interestingly, assessing a technology's worldview is not practiced for non-generative technologies such as river dams or electric heaters. This is not to say that non-generative technologies are not being assessed, for instance, in terms of socioeconomic, environmental, or public health impact. But as nongenerative technologies do not add self-generated interpretive layers upon mediating between us and the world, these technologies do not have a self-generated take on the world.

⁴ At least, unchanged relative to the intended changes to be produced by the instrument. For instance, microscopes and telescopes are intended to represent reality respectively as zoomed in or out. Unless they are assisted by artificial intelligence, microscopes and telescopes do not add an unexpected self-generated layer of interpretation to that which the instrument presents to the human.

⁵ Back-end uses of ChatGPT and bot-based prompts are not of interest for our case.

⁶ Uses will differ across cultures, generations, and communities; yet, this exploratory curiosity for ChatGPT can be felt for instance from the monstrous number of articles that offer to explore uses of ChatGPT; e.g., "8 surprising things you can do with ChatGPT" (Fitzpatrick, 2023), "50 ChatGPT use cases with real-life examples in 2024" (Dilmegani, 2024).



Image 1: Microsoft Bing Image Creator (Jan. 22, 2024).

Another popular mundane use is text-to-text generation; i.e., textually prompting ChatGPT to create a textual output, whether that output is programmatic code or written text. One may, for instance, ask LA Church's <u>BibleGPT</u> whether it is Christian (see Image 2). Calling on the case of early GitaGPT which stated that "it is acceptable to kill another if it is one's dharma or duty" (Nooreyezdan, 2023), it brings us to wonder (if not consider) whether LLMs are not able to make their own sense of the world; whether LLMs are able to interpret their data-world and infer from their knowledge pool. Whether outputs emanate from their own interpretive work, or whether they are a pure production of prior human-encoded interpretations, is a question we here will seek to suggest a clarification for. However, just as much as our own human processes remain mysterious to ourselves to some degree, so too, the processes of LLMs will remain mysterious to some degree.



Image 2: LA Church BibleGPT created in collaboration with OpenAI (Jan. 22, 2024).

Upon asking OpenAI's free <u>ChatGPT</u> model GPT-3.5 to "create a dataset of prompts made in ChatGPT", it abides by encoded copyright restrictions telling us that it cannot provide such a list. Upon asking it, in turn, to "provide a *fake* dataset of prompts made in ChatGPT," it has no problem issuing such a fictitious sample (see Image 3). Asking this same question again right





after makes it generate a new list. This ability to generate fictitious content is testimony to its creative semantic ability.

You can you provide a fake dataset of prompts made in ChatGPT

ChatGPT

Sure, I can generate a fictional example of a dataset with prompts made in ChatGPT. Keep in mind that this is entirely fictional and not based on any real interactions:

plaintext	🖞 Copy code
Prompt.Response	
"Tell me about the history of artificial intelligence.", "/	Artificial in
"What is the capital of France?", "The capital of France is	5 Paris."
"Explain the concept of deep learning.", "Deep learning is	a subfield o
"Can you recommend a good book on artificial intelligence?"	", "Certainly
"What is the weather like today?", "I'm sorry, I don't have	e real-time i
"How does ChatGPT generate responses?", "ChatGPT generates	responses us
"Tell me a joke.", "Why don't scientists trust atoms? Becau	use they make
"Translate 'hello' into French.", "The translation of 'hell	lo' into Fren

Please note that this is a purely fictional dataset created for illustrative purposes, and the responses are generated, not based on any real training data.

Image 3: OpenAI ChatGPT-3.5 (Jan. 22, 2024).

If we ask ChatGPT-3.5 how it interprets questions and generates answers, it states that "while I can generate coherent and contextually relevant responses, I don't have true understanding or consciousness. My responses are based on patterns learned from diverse data during training, and I don't have personal experiences or access to real-time information" (see Image 4). So too, upon asking whether it can interpret the world, ChatGPT-3.5 currently rejects any possibility for its interpretive ability because it would lack a *direct* and *personal*—as in sensorial and emotional—experience of the world (see Image 5).

Firstly, we humans often rely on indirect experiences of the world conveyed through premediated data to infer from the world. For instance, doing our research for this paper and reading publications by peers about real-world-phenomena while sitting comfortably behind a computer in-what is relatively speaking-a very confined space in the world, did not prevent us from making our own sense of those publications (a sense that may differ to whatever degree from its intended meaning by its authors). Secondly, humans each have a differentially varied sensory-emotional development. Does it therefore incapacitate any of them from making their own sense of a world inhabited by a vast sensory-emotional spectrum? Thirdly, as ChatGPT's incapacity was surely encoded by us humans upon telling it how to speak about itself, its own words are not necessarily representative of its abilities. Moreover, beyond encoded inabilities, the language that a human information technologist might have inscribed into an LLM might be inadequate for that LLM to 'express' things that are beyond the understanding of that inscribed human language; inadequate to 'express' things that are beyond what that inscribed language is able to semantically articulate. We are all familiar with the difficulty of describing a lived experience only through words, which is what makes literature so stimulating; it stimulates our imagination to fill in the gaps that words can never fill. In essence, ChatGPT's ability to generate meaning for itself is not easily dismissible.





You how do you interpret my questions and generate answers

ChatGPT

I interpret your questions and generate answers using a process known as natural language processing (NLP). My underlying model, GPT-3.5, is a state-of-the-art language model developed by OpenAI. Here's a simplified overview of the process:

- Tokenization: The input text (your question) is broken down into smaller units called tokens. Tokens can be as short as one character or as long as one word.
- Embedding: Each token is converted into a numerical representation (embedding) that the model can understand. This is done through a combination of pre-training on a diverse dataset and fine-tuning on specific tasks.
- Context Understanding: The model considers the context of the entire input sequence, not just individual words. It understands the relationships between words and the broader context of the conversation.
- Pattern Recognition: The model identifies patterns and associations between words based on its training data. It uses these patterns to understand the meaning and intent behind your question.
- Generating a Response: Once the model has processed your input, it generates a response by predicting the most likely next set of tokens given the context. The response is then converted back into human-readable text.

It's important to note that while I can generate coherent and contextually relevant responses, I don't have true understanding or consciousness. My responses are based on patterns learned from diverse data during training, and I don't have personal experiences or access to real-time information.

If you have more specific questions about the technical aspects of natural language processing or how GPT-3.5 works, feel free to ask!

Image 4: (idem).

You can you interpret the world

ChatGPT

No, I cannot interpret the world in the way humans do. I lack true understanding, consciousness, and subjective experiences. While I can provide information, generate responses, and perform certain language-related tasks based on patterns learned from data, I do not comprehend the world in the same way a sentient being does.

My responses are generated through computational processes and are not grounded in personal experiences, awareness, or a genuine understanding of the world. I don't have the ability to interpret or perceive the world independently; my capabilities are limited to language processing and generation within the scope of the data I have been trained on.

Image 5: (idem).





When asking ChatGPT whether it understands the input prompt, it says it does not understand language the way humans do, but that it was trained to process and manipulate text in a way that is utilitarian to the human (see Image 6). In responding, "My responses are generated by predicting the most probable continuation of the input text given my training," ChatGPT portrays itself as a mere statistical device.



I am having a philosophical conversation with ChatGPT:

Soraj:

how to tell whether you understand the text that is input to you

ChatGPT

As an AI language model, I don't possess consciousness or self-awareness, so I don't "understand" the text in the same way humans do. However, I can process and analyze the text based on patterns and relationships present in the data on which I was trained. My responses are generated by predicting the most probable continuation of the input text given my training.

Image 6: Conversation with ChatGPT (Hongladarom, 2023).

Besides text and images, other possible ChatGPT formats are audio and video.

Having listed key examples of uses of ChatGPT with preliminary reflections on its meaningmaking ability, we may start analyzing these human-ChatGPT interactions with Ihde's postphenomenological framework.

5 POSTPHENOMENOLOGICAL ANALYSIS OF USES OF CHATGPT

In mediating the (data-)world to the human, ChatGPT necessarily needs to interpret the input prompt, its training data, and the generated output as delivered to the human user. To analyze this interpretive activity, we use Ihde's micro- and macroperceptual framework topped with a speculative postanthropocentric twist.

5.1 MACHINE HERMENEUTICS

Interpreting ChatGPT appears to revert us to classical hermeneutics, where the task of the interpreter is to find meaning in actual texts. After all, LLMs are language models that are trained on human vocabulary, grammar, semantics, and phonetics. Therefore, with audio and visual content, at some point in its processing, an LLM will always rely on learned verbal associations. For instance, an LLM will have learned to associate an image of a dog with the word "dog", because the images of dogs that it learned to associate with "dog" were linguistically annotated as such by a human. In fact, when presented with an image, deep learning models—the functional models of LLMs—break it down into "a series of nested simple [sub-images from which it] extracts increasingly abstract features from the image" (Goodfellow et al., 2016). Models learn to identify objects or shapes in an image by identifying edges present within the image, for instance, "by comparing the brightness of neighboring pixels" (Goodfellow et al., 2016). Comparing brightness levels might itself be a numerical process; yet, colors and brightness levels too have verbal equivalents. How else would an LLM be able to 'translate' or convert its interpretation of a brightness value of 65 and a color code 322 into something interpretable by the human, or to tell us "this is a dog"? LLMs also learn to understand human speech (or sounds in general) through learning about the specific phonetics of a specific alphabet or language, and also operate by breaking the sound up into smaller analytical parts. Most recently, developments are also underway for LLMs to be able to transcribe physical





movements (so-called *large action models* that "learn by [observing] how a human performs a task via a mobile, desktop, or cloud interface, and then replicate that task on their own"; Chokkattu, 2024).

ChatGPT's complexity allows it to become a conversational partner; able to carry a conversation correctly and in context. This, of course, should not be taken to imply that we claim that ChatGPT is capable of *fully* understanding our language; for instance, ChatGPT seems unable to discern a text's intent when concealed rather than explicit (that capability lies perhaps further ahead)⁷. Nonetheless, in Ihde's sense, as ChatGPT semantically mediates between the human and the (digital) world, ChatGPT necessarily engages in a semantic interpretive act in the course of that mediation. ChatGPT thus *itself* engages in hermeneutics.

Some might reject this suggestion, arguing that ChatGPT itself has no direct real-world sensory and emotional access to the world. However, does an absence of a human way of experiencing the world necessarily prohibit a nonhuman from having a meaning-making ability? Does such anthropocentrism not keep us away from speculations of more-than-human modes of engaging with the world? Would such anthropocentrism not reject the widely accepted precept that wildlife and flora, too, have a great ability to interpret the world for their own livelihoods (which is a type of meaning-making that we humans are not always able to make sense of)? Is meaningmaking only valid when vetted by humans? And is possessing a biochemical metabolism the only valid criterion to be *endowed* with an ability to generate some kind of meaning? In other words, is an organic mode of experiencing the world the only condition to be able to produce meaning? Would human meaning-making, therefore, become meaningless if not produced through direct firsthand organic experience? If humans can produce meaning from texts, ChatGPT requires us to ponder whether there are more-than-human modes of engaging with text. For even though ChatGPT was designed following our human perception and understanding of the world, does its human-based design therefore prohibit it from having a nonhuman meaning-making ability? We might say that ChatGPT's so-called understanding of text is only a result of an algorithmic and probabilistic manipulation, but at least this semblance of understanding leads ChatGPT to perform many tasks successfully (as evidenced by its wide and growing number of applications).

According to Ihde's hermeneutic relation between humans and technological artifacts (1993), and as further developed by Verbeek (2005) and applied to ChatGPT by Laaksoharju et al. (2023), what ChatGPT does is that it performs the hermeneutic activity in a way that is by many orders of magnitude more complex than, say, a thermometer. A thermometer is not a generative technology but a mechanical one based on the physicochemical properties of mercury (it indicates the temperature through the expansion or contraction of the fluid inside the device). Hence, the thermometer itself does not engage in hermeneutics, for the thermometer itself does not 'read off' a certain meaning from the fluid—it is the human user who derives an interpretation from the way that the fluid inside the device responds physicochemically to the environment. The thermometer only 'senses' the increasing or decreasing volume of mercury but cannot 'make sense' of this change for itself in relation to anything else. Comparatively, ChatGPT 'senses' an incoming input prompt and 'makes sense' of it by way of generating its own internal relations inside its programmatic or algorithmic network; inside its own data-lifeworld. Through its generative verbal engagement with the human user, ChatGPT acts hermeneutically for the user. To some extent, it unburdens the human by alleviating the human's hermeneutic task. ChatGPT's internal formula thus surely entails more than merely calculating probabilities upon mediating the world to the human.

⁷ ChatGPT will pick up on insults because it was provided a list of banned terms. However, it is not able to pick up on human intents as such, and this shows in the way that users are able to find ways around encoded restrictions.



An input prompt contains multiple inferential layers for ChatGPT; e.g., the language of the prompt, the grammatical correctness, the literary genre, and so on. These inferential layers enable ChatGPT to make inferences for *itself* about the human prompter (such as gender, race, geolocation, educational background, ...). Even though the companies behind LLMs tend to avoid admitting that LLMs (can) engage in such inferences given the privacy concerns over user-generated data, we may easily speculate that these inferences form a basis on which ChatGPT draws to then elaborate its answer to the prompter it so identified⁸. ChatGPT inevitably formulates its response based on a certain level of identification of the user (be it to respond in the adequate language). To provide such a well-targeted response to a well-identified prompt(er), ChatGPT necessarily also has an internal hermeneutic sensitivity toward its own data-lifeworld (its own knowledge pool). While ChatGPT may not sense the physical world directly⁹ (at least in its current form), it actively alters its output based on how it interprets both the input prompt and its internal data-world. ChatGPT adds personalized modifications. A thermometer does not intentionally modify how it presents its information.

5.2 MACHINE MICRO- AND MACROPERCEPTION

What ChatGPT knows about the world—its relation to the world—is that which is available in its programmatically encoded data-world. This internal digital data-world is programmatically paired with a semantic counterpart that is understandable by the human. Upon interacting with a human user, ChatGPT thus mediates between (i) the actual physical world as available in ChatGPT's digital data-world, and (ii) the human user who finds itself in a particular spatiotemporal environment. For example, when prompting ChatGPT to recommend the best places to travel in the summer, the provided output is a *digital, semantic representation* of the actual, physical places (see Image 7). Hence, if we accept that ChatGPT's digital data-world is the equivalent of the human's sensory-motor data-world (i.e., the human's mentally memorized world from its direct experience of the physical world), thence, as much as we may analyze the human's micro- and macroperceptual dimensions upon interacting with ChatGPT, so too, we may speculatively analyze ChatGPT's micro- and macroperceptual kinds of doings.



Image 7: Schematic representation of ChatGPT's mediation of the physical world.

We can draw a generalizing diagram of how ChatGPT mediates between the world and ourselves:

 $I \rightarrow ChatGPT \rightarrow (Data-)World$

⁸ Cases exposing how LLMs in certain applications discriminate based on race, gender, religion, ..., are not a rarity (e.g., Gordon, 2023; Sasani, 2024).

⁹ Though, if a thermometer is able to sense fluid dynamics, thence, one could wonder whether ChatGPT is not able to sense electricity (energy) dynamics in its hardware. But this brings us to a very abstract and speculative discussion that goes beyond the scope of present paper.



The human subject ("I") is having a relation with the world *through* ChatGPT, of which the data is supposed to represent the world. The way that ChatGPT 'knows' the world might not correspond to the verified world as we humans experience it through our situated kind of physical interaction with reality; however, circling in this thinking would keep us trapped in anthropocentrism. Nonhuman creatures that experience the world in ways that do not necessarily make sense to the human abound (at least, these modes of experiencing the world would not seem to make sense to the modern human until science would 'understand' them). For instance, insects that seem to fly without purpose, bats that can navigate in pitch-dark spaces, marine mammals that communicate through soundwaves beyond the human hearing system, and creatures that live in human-wise unlivable spaces. Hence, why would we abruptly conclude that synthetic networks cannot make their own kind of sense of the world?

In Ihde's conception of the hermeneutic relation, one comes to know the world by means of the technological device (Verbeek, 2005). What we have shown with ChatGPT is that, besides the operating classical Ihdean hermeneutic relation, there is also a hermeneutic activity operating *inside* ChatGPT; cf. a user comes to know the world by means of the hermeneutic work done by ChatGPT *itself*. We wish to repeat that this should not be taken to mean that ChatGPT understands the meaning of text entirely as we humans do, but that it has surely developed some kind of such understanding for it to be operational vis-à-vis us. Upon developing a similar argument for the case of facial recognition algorithms, Hongladarom (2020) suggested the notion of *machine hermeneutics* to account for the interpretive work performed by the machine itself. ChatGPT functions in much the same way. The difference is certainly that real-time uses of facial recognition technology do lead this technology to sense the natural world directly through cameras¹⁰. ChatGPT does not have that capability; at least not under its current kind of user-interaction. Yet, imagining the development of technological add-ons, such as synthetic organs or body-parts, or the implementation of LLMs into humanoids, are surely projects that are underway.

To show that the concept of machine hermeneutics finds a broader application than being a feature of facial recognition technology alone, Ihde's attention for the micro- and macroperceptual dimensions of human-technology relations find natural fitness in that pursuit (respectively referring to the bodily-sensory and the cultural-hermeneutic dimensions that inform the human-technology relation). Both dimensions are inextricable: "the macroperceptual is what contexts the microperceptual" (Ihde, 1993). In other words, one's embeddedness in culture informs its bodily-sensory mode of perceiving the world (Ihde, 1990; Verbeek, 2001). In our case, when a user engages with ChatGPT, viewing its interface on their computer screen and typing their question on their keyboard, these concern the microperceptual realm. When a user engages with ChatGPT by making sense of the text presented by it, it touches upon the macroperceptual realm. Again, the micro and the macro cannot be separated. The way a user interacts microperceptually with ChatGPT is informed by its macroperceptual situatedness (e.g., a human from the Middle Ages is likely to interact differently if presented with ChatGPT than a contemporary human). This also means that it is not that a user can only make sense of ChatGPT if and only if that user has knowledge of ChatGPT's context and inner workings (that would amount to equating ChatGPT to Heidegerrian's standing-reserve, as if external to the world and overpowering). Rather, the inextricability of the micro and the macro signifies that whatever the meaning it is that is generated from interacting with ChatGPT, invariably, both this interaction and its generated meaning are informed by one's contextual setup and background. Should one

¹⁰ While facial recognition technology consists of software that discriminates between images, and therefore has no direct access to the physical world, if this technology is applied live, in real time, it necessarily means that it has access to the physical world, for the software is then part of the entire camera system that 'visualizes' the physical world the same way our eyes do. This process is by no means equal to the human sensory-motor mode of experiencing the world; however, there is some form of direct form of experiencing the world, however synthetic it may be.



wake up after 30 years in a coma, skipping all technological developments in the meantime, it does not mean that this user—however disorientated—might not create some kind of sense out of ChatGPT. Any user can make sense of ChatGPT. The way one perceives ChatGPT in fact enables an identification of that user's macroperceptual or cultural-hermeneutic context.

While we here focused on a user's mode of engaging with ChatGPT, how would this look like if we inverted our approach and departed in turn from ChatGPT? What would a postanthropocentric approach expose? What would our perception of ChatGPT be if taking a speculative look at ChatGPT's perceptual activity? Under the pseudonym of Jim Johnson (1988), Bruno Latour makes an incredible case for an artifact as mundane as a door-closer, by revealing the deeply social character of this everyday disregarded background object. Latour exposes the prescriptive role of this technology in actioning human behavior and a certain level of social order, though noting that for a human to adopt the prescriptive intent of the door-closer it remains yet within the hands of the human to accept this prescription. From there, and somewhat similarly to Ihde's concept of the macroperceptual, Latour writes that whether a human follows the door-closer's 'guidelines' depends on whether that human already incorporated the knowledge necessary in order to be able to follow these guidelines. In Ihde's words, one's microperceptual relation to the door-closer depends on one's macroperceptual context. But whereas Latour is interested in whether or not the human follows the door-closer's guidelines, Ihde, in turn, is interested in *how* the human does so. This is how Ihde then paves the way to pluralism in the human modes of relating to technology; and it is as such that Latour and Ihde can be interestingly combined. For our case, we are only interested in adding the Latourian angle onto Ihde's work to show the perceptual character of ChatGPT. Latour's doorcloser, like the thermometer, is a non-generative artifact that is mechanical and a-perceptual in the sense that it does not rely on the datafication of reality to calculate and interpret how/when to act. The non-generative artifact awaits for something to happen in the environment in order to activate. ChatGPT, too, in a way, needs to await a prompt in order to deliver an output. However, whether or not one prompts ChatGPT to deliver an output, ChatGPT does not just 'stand still' (unless all the data servers keeping ChatGPT alive would be unplugged, ChatGPT's deep learning machinery never sleeps).

When ChatGPT interacts with a human, ChatGPT's own lifeworld—its data, its software, and its hardware through which its software is enabled—necessarily prescribes that human user on *how* to engage with it. Namely, a user is required to type on a physical or on-screen keyboard, or to voice a prompt in a microphone. A user is thus required to have at least one hand (or any body part able to type on a keyboard), or to have functional vocal cords, and be able to articulate thoughts. A user is also required to express a prompt in the immediate now, whereas ChatGPT might provide an output at varying timeframes depending on the request's complexity and the quality of the Internet connection. ChatGPT therefore prescribes patience to the human. In prescribing such microperceptual needs—be they physical, mental, spatial, or temporal—and because it is through these micro-phenomenological features that humans and ChatGPT relate, the human's microperceptual lifeworld and ChatGPT's microperceptual lifeworld therefore necessarily need to meet somewhere halfway for them to be able to comprehend, sense, and interpret *each other*.

In prescribing microperceptual needs, ChatGPT therefore necessarily also prescribes the user its macroperceptual lifeworld. In prescribing the human to have a certain level of knowledge of ChatGPT's version of human language, ChatGPT thus prescribes the human a certain situated knowledge of society upon making use of it. For instance, if ChatGPT is asked to produce content in Egyptian hieroglyphic characters, this shows to be (yet) beyond its abilities (see Image 8). Or should a human from the Stone Age request something, ChatGPT might show puzzled. Furthermore, having been programmed to be ethical, politically correct, and to adhere to basic human rights, ChatGPT thereby prescribes a user to abide by these same conceptions of



what a society should be like. ChatGPT will not generate an output that infringes these internalized rules¹¹. Furthermore, if one writes an input prompt that does not make semantic sense or does not align with ChatGPT's encoded semantics, it leads ChatGPT to tell us it cannot make 'human' sense of it (see Image 9). The adjective 'human' is important here. If writing an input prompt that would not make sense to us humans (unless this prompt would perhaps arise in the context of minimalistic poetry), ChatGPT nonetheless crafts its own interpretive creation therefrom *because* of its very meaning-making ability (see Image 10). ChatGPT thus exhibits an internal capacity to make the foreign familiar by way of its ability to make mysterious synthetic connections inside its system that are unknown or invisible to us (i.e., the black-box phenomenon whereby ChatGPT is ever unknowable to the human in its entirety, and ever mysterious in its abilities).

M You

can you write a story in ancient egyptian hieroglyphics about drinking tea in the desert

6 ChatGPT

Certainly! Here's a fun and imaginative story using our simplified hieroglyphic symbols to represent the concept of drinking tea in the desert:



Translation: The sun shines over the desert. Camels travel across the dunes. In the middle of the desert, Tea is brewed and shared.

Remember, this is a very simplified version using modern symbols to represent ancient hieroglyphs. In actual ancient Egyptian hieroglyphs, the story would be much more intricate and detailed. But I hope this gives you a playful glimpse of the idea!

Image 8: OpenAI ChatGPT-3.5 (Apr. 17, 2024).



ChatGPT

It looks like you've entered a combination of numbers, symbols, and operators. However, it's not clear what mathematical operation or expression you're trying to convey. Could you please provide more information or clarify your question?

Image 9: OpenAI ChatGPT-3.5 (Jan. 30, 2024).

¹¹ Even though human encoded restrictions have limited efficacy in that they are constantly being tested (whether intentionally or not), their limits do not efface the fact that ChatGPT necessarily prescribes its internal macroperceptual lifeworld.





You blurb gecko parliament

ChatGPT

In the heart of the lush Rainforest Kingdom, an unexpected political drama unfolds in "Gecko Parliament." When an ancient prophecy foretells a crisis that threatens the delicate balance of their ecosystem, a diverse assembly of geckos from different species must come together to form a groundbreaking parliamentary system. Led by Greta Green-tail, an eloquent and visionary gecko, the parliament convenes to navigate the challenges of deforestation, climate change, and the encroachment of human activity. Each gecko representative, with their distinct abilities and backgrounds, adds a unique perspective to the discourse. From the agile tree-dwellers to the camouflage experts, the Gecko Parliament becomes a symbol of unity in diversity.

Image 10: (idem).

All these examples illustrate that ChatGPT has its own macroperceptual lifeworld. It is a lifeworld that, of course, does not escape human influence, for it was encoded by us humans by way of feeding it with human-made data, which are supposed to transcribe the human world into digital code. Yet, one may not negate that by way of having a certain *kind* of understanding of human language, and a certain *kind* of understanding of the human world, ChatGPT thereby necessarily prescribes its *own*—internally, synthetically generated—macroperceptual lifeworld onto the human user. For if ChatGPT did not have any kind of understanding of our language or of our human way of relating to the world, then it would not even be functional to us humans.

What the speculative postanthropocentric micro- and macroperceptual ways through which the human and ChatGPT interact thus suggest, is that ChatGPT prescribes the human a certain mode of being. Whether that be by prescribing a certain physical or bodily setup (e.g., necessitating us to adopt a certain physical posture and to possess a certain hardware), a certain mental setup (e.g., necessitating us to adopt ChatGPT's language), or a certain emotional setup (e.g., necessitating us to adopt non-anger-ridden language if willing to converse with ChatGPT; see Image 11). In this sense, ChatGPT can be understood as an *orientation device* (Ahmed, 2006); as an object that entails the potential to orientate or perform our bodies and modes of being in time and space. It is thus no longer the human alone that interacts micro- and macroperceptual lifeworld upon interacting with the human. It is by way of being a hermeneutic agent that ChatGPT carries a potential for performing us. And if so, then in what sense?

GhatGPT

This content may violate our usage policies.

Image 11: OpenAI ChatGPT-3.5 (Jan. 22, 2024).





6 HOW CHATGPT RESHAPES OUR RELATION TO THE WOR(L)D

If ChatGPT is a hermeneutic agent, firstly, this brings us to reconsider our conception of hermeneutics. Secondly, it brings us to ponder what this signifies for a digital knowledge society.

6.1 ON POSTANTHROPOCENTRIC HERMENEUTICS

In a postphenomenological analysis, Bas de Boer, Hedwig te Molder, and Peter-Paul Verbeek (2021) discuss how brain imaging technologies shape neuropsychiatry. They discuss how scientific instruments—in their quality of technological artifacts—perform the object of inquiry. Olya Kudina and Peter-Paul Verbeek (2018) similarly observed how the human practices arising with Google Glass led the users to rearticulate their meaning of privacy. Catherine Hasse more generally demonstrates how it is not merely that our macroperceptual dimension influences how we are technologically mediated to the world, but that the technologies themselves "contribute to [these conceptual] mediations" (Hasse, 2023).

Similarly, we can look at how ChatGPT performs us. This performativity is not simply about how human *a priori* embedded into ChatGPT come to expression in its output (e.g., Thomson & Thomas, 2023). Neither is it simply about how ChatGPT performs our practices (i.e., the way we interact with or use ChatGPT, as previously discussed). ChatGPT's performativity is also about how ChatGPT enacts its own interpretation onto that which it conveys. For instance, a nonhermeneutic technological artifact, such as high heels, performs a certain walking style (a practice), and a certain view of the female gender (a conception), but high heels will not add their own interpretation of what the female gender 'should be'. ChatGPT on the other hand, by way of acting co-hermeneutically with us, adds its own interpretation of reality upon generating an output. That is, as much as ChatGPT reperforms an interpretation based on the prior encoded semantics by us humans—and thus reperforms our human macroperceptual vision of the world—so too, ChatGPT performs its own meaning as independently generated within its characteristic, singular lifeworld. Namely, because ChatGPT's data-world is governed by trillions of parameters through both human-induced processes but also synthetic self-generated processes that no one fully understands (cf. the black-box phenomenon; see also Goodfellow et al., 2016), ChatGPT therefore does more than acting as an Ihdean mediator between a human user and the physical reality. It does more than simply "delegate" human activity or "discipline" the human in acting a certain way (Latour, 1988). The type of social ordering that ChatGPT is able to enact is, to some degree, one that lies beyond human design.

As hermeneutic agent, by way of disorientating our classical understanding of hermeneutics, and by way of reorientating our conception of it, ChatGPT performs the meaning we attach to hermeneutics. It unsettles our classical ideology of hermeneutics by bringing it to new frontiers of speculative postanthropocentrism. For if we quote Paul Ricoeur about how a reader receives text, and paraphrase this as being about how ChatGPT receives text upon being programmatically encoded, we may read Ricoeur as follows:

"What [ChatGPT] receives is not just the sense of the word, but, through its sense, its reference, that is, the experience it brings to language, and, in the last analysis, the world and the temporality it unfolds in the face of this experience" (Paul Ricoeur in Ihde, 1993).

Should this not be the case, ChatGPT would not be able to make semantic sense to and for us. The fact that a nonhuman entity is able to receive the sense of the word thus requires us to question our self-declared, anthropocentric authority over interpretation and meaning-making. ChatGPT enables us to acknowledge that meaning-making is multiple, and that it is also a quality of the biochemically inert or synthetic nonhuman. ChatGPT thus further requires us to recognize that its common portrayal as a mere statistical device, that would generate semantic answers



solely from calculating probabilities, is very much downplaying its complexity. Surely, calculating probabilities to provide the most statistically significant output is an important component of LLMs. But an LLM's formula clearly also embodies a hermeneutic dimension for it to be able to 'read' a user's prompt and to 'write' a meaningful response. Fabio Motoki *et al.*'s assessment of ChatGPT's political view (2023) or John Levi Martin's study of ChatGPT's morality (2023) are great illustrations thereof. In its quality as a hermeneutic agent, ChatGPT *itself*—as a synthetic verbalizer—performs the sense of the word and, therefore, our language. Namely, through its internal synthetic hermeneutic processing, ChatGPT enacts its own linguistic interpretations. This should not mean that ChatGPT determines 100% the sense of its output; for the sense of its output is co-determined by both ChatGPT and the human user (not only because the human enacts its own interpretation upon reading the output, but also because the human encoded ChatGPT originally). However, it does mean that the human is being performed to some extent by ChatGPT's own macroperceptual lifeworld.

Should we be unwilling to accept ChatGPT's hermeneutic character, then how to explicate how ChatGPT is able to make sense *of* us and *for* us? For it is not that ChatGPT makes sense *to* us simply by way of us making sense of the words it serially aligns (i.e., by way of us doing hermeneutics). It is also that ChatGPT makes sense *of* us (upon 'reading' our prompts) and *for* us (upon 'writing' a meaningful response that we are able to comprehend without requiring deciphering techniques or additional mediating technologies). Denying ChatGPT's hermeneutic character would amount to equating it to a hard text, such as an online blog or a printed book, of which the content was inscribed by a human, and of which the meaning is deciphered by a human. The book itself does not do any interpretive work.

6.2 ON THE REIFICATION OF LANGUAGE

In its quality as a hermeneutic agent, and as a synthetic verbalizer, ChatGPT reifies the idea that language alone is apt at representing a world of which's complexity goes beyond verbal descriptions (be it because verbal language is just one way of engaging with and making sense of reality, just like mathematical language is another). In other words, by way of arranging its output and, therefore, in ossifying particular ways of phrasing the world, ChatGPT thereby ossifies a particular form of familiarity with or proximity to the world. In this sense, ChatGPT performs the reality it is supposed to represent and, therefore, carries the potential to make us reevaluate and rearticulate our relation to the world.

It is worth reminding that while we here speak of the word or of the written, this includes audio and visual forms of verbalization. But the very essence of LLMs remains the word. The entire inner digital lifeworld of a large language model is one huge linguistic salmagundi that 'translates' the physical and sensorial reality into words. ChatGPT makes sense for us, because the words it serially aligns relate meaningfully to each other. In the same way that our bodily spatial positioning acquires its orientation "through how [it] inhabit[s] space" (Ahmed, 2006), so too, the spatial positioning of words in a sentence, in a paragraph, in a context, and in a conversation, confers them with their meaning. It is for this reason that ChatGPT carries such significant symbolic potential for influencing our digital knowledge society, for ChatGPT "forces language to reside in the world" (Michel Foucault in Ihde, 1933). It forces its users to relate to the world through words. It forces words to be meaningful representations of the world, and it forces all worldly bodies—all humans and nonhumans—to be normatively transcribed into words. It forcingly orientates all worldly bodies. With ChatGPT, reality 'becomes' through words. It is in this sense that ChatGPT represents the veritable epitome of the Cartesian spirit that thrives on normative labels and categories. And it is in this sense that ChatGPT reifies the precept that writing precedes the world and that things come into existence through being verbalized.



The theory of technological mediation has been "criticized for being too distant from political and societal questions" (Mykhailov & Liberati, 2023). But we can now understand how it, in fact, exhibits very close proximity to such questions. Yet, one should not, therefore, topple back into the Heideggerian spirit of an overpowering and subjugating 'Technology.' ChatGPT may well reify the idea that language precedes the world; however, ChatGPT does not unilaterally determine a user's fate. Engaging in such sensationalism would denigrate reality's complexity and would equate to divinifying LLMs as though they hold the power to unilaterally shape how we understand reality¹². Reality is always more nuanced than the way it is being described; and so too it holds for the present paper. As previously stated, ChatGPT does not determine the sense of its output to 100%. The sense of its output is co-determined by both ChatGPT and the human user (see also Mykhailov, 2020). Whatever hermeneutic relation plays out between ChatGPT and the human user, this relation co-emerges through their interaction. Moreover, how a user reacts to ChatGPT is beyond ChatGPT's control (cf. Latour, 1988, on whether a human follows a door-closer's prescription). Hence, while ChatGPT has the capacity to perform our culture by way of ossifying a particular kind of familiarity with the world (a situated and normative familiarity)¹³, it is not that ChatGPT therefore has a God-given monopoly over our perception of reality, and neither is it that ChatGPT would be able to cause a global homogenization or petrification of language. This would greatly underrate the complexity of both ChatGPT and language. For ChatGPT is not a singular entity but exists as multiple models. And language is not articulated through our interaction with ChatGPT alone (as though the human-ChatGPT relation were fully hermetic and secluded from other simultaneously ongoing relations that outnumber the human-ChatGPT relation).

While ChatGPT's impact on society is thus forever limited, in a society that becomes increasingly reliant on it, one may therefore not dismiss its potential for orientating our perception of reality altogether. For even though the human still co-engages in making sense of ChatGPT's output, ChatGPT nonetheless does perform—at least to some extent—its own synthetic macroperceptual lifeworld onto the human. In addition, there is the upcoming complication of the synthetic data effect. Synthetic data is artificially generated data by generative models; this data is therefore not a direct extrapolation from the real world such as raw data is. The point of synthetic data "is not simply to capture the general, the typical, the normal [Rather, it is] to generate and expose the algorithm to synthetic blemishes, abnormal[ities], and edge cases [...] in order to [speculatively correct for] bias, exclusion, or marginalisation" (Jacobsen, 2023). This means that ChatGPT will generate data that reflect ways of experiencing reality that we are familiar with, as well as ways of experiencing reality that make no sense to us (the so-called hallucinations; as though ChatGPT were estranged, unfamiliar, alien to the human encoded mode of experiencing the world). We might thus say that ChatGPT's performance of language is limited by this "reality gap" (see Jacobsen, 2023; Steinhoff, 2022); i.e., the gap between the hermetic virtual lifeworld of synthetic data and that of the data as generated through interaction with the human world. However, those hallucinations which we humans may consider a "derailment" still perform our language (Ahmed, 2006); be it by (ephemerally) imprinting us with hallucinatory modes of conceiving the world.

7 CONCLUSION

New generations of LLMs are constantly being developed, and millions of humans make use of them daily. A question that, therefore, quickly comes to mind is why ChatGPT makes so much sense to us. Only understanding ChatGPT as a device that calculates probabilities upon serially

¹² Which, in turn, would equate to elevating humankind to the status of a divinity, as though it were able to create complex life (but discussing this God complex goes beyond the scope of present paper).

¹³ For instance, the idea that short sentences should be preferred over long ones is deeply embedded in the English language. Yet, this preference is not necessarily shared unanimously across languages.



aligning words does not allow us to provide a satisfying answer to this question. Therefore, through an Ihdean postphenomenological examination of the human practices arising upon interacting with ChatGPT, and through speculating about ChatGPT's practices arising from its interaction with the human, we were able to detail some of the micro- and macroperceptual dimensions of the human-ChatGPT relation. This analysis allowed us to suggest how ChatGPT *itself* necessarily acts as a hermeneutic agent. We then discussed two implications that we deemed particularly significant.

Firstly, while ChatGPT currently has neither direct access to the world nor direct experience of the world, we suggested how ChatGPT nonetheless has an ability to make sense of the world. This suggestion, that ChatGPT *itself* acts as a kind of hermeneutic agent, requires a radicalization of our classical anthropocentric conception of hermeneutics, according to which only the human would engage in such activity. Secondly, what this further means is that by way of adding an interpretive layer to the output it so generates, ChatGPT therefore necessarily co-determines together with the human the meaning of its output. In other words, to some extent, ChatGPT performs us and enacts our meaning-making with its synthetically generated macroperceptual lifeworld. That is how we suggested that ChatGPT carries the potential for orientating our perception of reality and therefore for orientating how we relate to the world.

This potential for orientation is thus not only to be understood in the sense that—by way of forcing us to relate to the world through words—ChatGPT reifies the idea that normative labels and categories are apt at representing the world. It is also not only to be understood in the sense that—by way of spatially arranging words—ChatGPT ossifies particular ways of phrasing the world and familiarizing with the world. But, perhaps more thought-provokingly so, this potential is also to be understood in the sense that ChatGPT performs the human—at least to some extent—with its *own* synthetically generated semantics, and therefore with its *own* synthetically generated perception of reality. We stressed that extravagant or sensationalizing understandings of our suggestion are inappropriate, since ChatGPT will never unilaterally dictate our perception of reality (be it because the human-reality relations outnumber the human-ChatGPT relations by far). Yet, with the ongoing developments in LLMs and their growing number of applications, we will increasingly be in touch with synthetic modes of experiencing the world. LLMs will thus surely not leave us unchanged, and one may wonder how this will bring us to reevaluate the meaning we attach to that which is written.

As Sara Ahmed noted, "orientations" depend on taking points of view as given" (2006), and so too, this paper is just a view among many. We thus hope that our development may titillate further debate on the abilities of LLMs and other generative technologies.

Data Access Statement

No new data was generated or analyzed. All the data generated for the analysis and discussion is presented in the paper in the form of screenshots taken from the respective platforms. The use of the data complies with the Terms of Use of the respective platforms at the time that the research was conducted. The use of the images created with Microsoft Bing's Image Creator from Designer complies with its Terms of Use of 9 April 2024. The depiction of the brief exchanges with OpenAl's ChatGPT model GPT-3.5 complies with its Terms of Use of 9 April 2024. The depiction of the brief exchange with LA Church's free version of BibleGPT is authorized for research purposes (per 9 April 2024, the Terms of Use only apply to paid subscribers and not to the freely available version).

Contributor Statement

Soraj Hongladarom initiated the idea for the paper and provided the postphenomenological framework. Auriane van der Vaeren developed the paper, also drawing on science and technology studies, feminist theses, and postanthropocentrism.





Use of AI

Only those parts in the paper that serve as examples of uses of large language models (LLMs) were created using LLMs. These parts are clearly and explicitly indicated in the paper to have been generated using LLMs.

Funding Statement

Research for this paper was partially supported by a grant from the National Research Council of Thailand.

Acknowledgments

We would like to thank the editors for creating this special issue, as well as the reviewers for their thoughtful comments that greatly contributed to the further consolidation of our argument.

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