

Journal Pre-proof

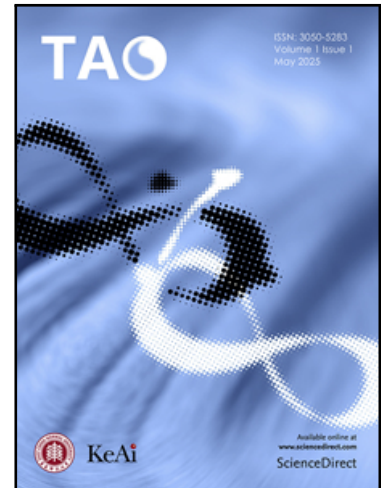
AI as the Naive Intelligibility of the Artificial

Robert Braun

PII: S3050-5283(25)00004-8
DOI: <https://doi.org/10.1016/j.tao.2025.100006>
Reference: TAO 100006

To appear in: TAO

Received date: 20 December 2024
Revised date: 30 January 2025
Accepted date: 7 February 2025



Please cite this article as: Robert Braun , AI as the Naive Intelligibility of the Artificial, TAO (2025), doi: <https://doi.org/10.1016/j.tao.2025.100006>

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2025 Published by Elsevier B.V. on behalf of East China Normal University.
This is an open access article under the CC BY-NC-ND license
(<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

Received 20 December 2024

Received in revised form 30 January 2025

Accepted 7 February 2025

AI as the Naive Intelligibility of the Artificial

Robert Braun

Institute for Advanced Studies (IHS), 1080 Vienna, Austria

Email Address: braun@ihs.ac.at

Declaration of Competing Interest

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Abstract

This paper discusses the challenges of integrating GenAI into intersubjective, object-full, language-infused embodied actions that make-up local processes of Heideggerian worlding. Addressing the GenAI challenge from a Science and Technology Studies (STS) perspective and within the context of the Anthropocene, it redefines human-GenAI interactions with the help of an ethnomethodological perspective. The paper discusses the Anthropocene in terms of a political ontology and the Anthropic condition: a representational view of the world facilitated by ontopolitical gerrymandering – introducing the cut between the world and Anthropos. A political programme, it endows Anthropos with the sovereign power of settling struggles over objectivity and truth; what and how things are in our world, what counts as real, and what counts as incoherent fiction. In this ontopolitical setting analysed with an ethnomethodological gaze, GenAI disrupts the realm of embodied actions, situated within the depth of lived space and time, filled with objects and permeated by language inferring with linguistic intersubjectivity causing incommensurability. GenAI becomes a social bullshitter concealed as sage as relations to the phenomenal field of organized objects that produce a perceived coherence become disrupted. The paper offers a radical critique of GenAI as a social bullshitter and the reduction of GenAI to naïve intelligibility by members; introducing a new analytic, that of postquantum, which challenges the foundationalist, realist, and non-relational worlding of the Anthropic condition and GenAI therein as another technological fix stabilizing the condition as the One-World world real.

Keywords

Science and Technology Studies; Ethnomethodology; Phenomenal Field; Bullshitting; Anthropocene; Political ontology

Introduction

It is an honor to have been invited to this fascinating event. Along with philosophers and physicists, Science, Technology, and Society (STS) scholars, such as myself, seem to be respected and celebrated here. This is good news.

Thinking about what Toby Walsh said in his talk, that he agrees with “the majority of experts in Artificial Intelligence (AI) and robotics” when they “predict we are likely to have built machines as intelligent as us by the year 2062” [1], I am extremely grateful that I will not be there to see what happens then. When thinking with Artificial Intelligence – and here I only refer to Generative or Transformer model AI – I will argue that it is neither artificial nor intelligent, but AI is an onto-political bullshitter concealed as sage. Academics and lay people seem to take GenAI seriously and accept unreflexively that what it tells or shows us is ‘about’ the world. This makes GenAI a world-maker [2] and quite a dangerous one at that.

First, let me offer a very brief crash course into the strand of STS I follow. Then, I will provide context as to where GenAI could be placed in our world. As at this conference a number of things, including this journal, are inaugurated, I will follow suit and inaugurate a new theory of quantum social theory, that of postquantum, which I propose as analytics to look at AI. Finally, I will follow up with my analysis of the *Tao* of AI.

Spoiler alert: **it is not a happy story.**

On Science and Technology Studies

Let me first introduce you to my STS gaze. Science and Technology Studies (STS) is a multidisciplinary and policy-oriented field with a rich and intricate, if rather recent, history [3]. It encompasses the sociology and ethnography of science and technology [4], feminist and intersectional perspectives [5][6], philosophical approaches such as post-phenomenology [7] and quantum technoscience [8]. This complex history includes approaches that explore the ontology of technology, human experience, and performative action [9] alongside more practical contributions aimed at shaping science and innovation

policy [10] While a comprehensive account of STS from its philosophical origins to its contemporary directions is beyond the scope of this discussion, a unifying theme emerges: the assertion that science and technology are socially, or even ontopolitically, constructed. This perspective argues that our technologies and social realities could have developed differently but are shaped by historical, social, cultural, and/or ontological factors. A key focus is understanding how technology socially “stabilizes” into the forms that constitute our techno-social world [11][12].

Following up on this rich critical intellectual endeavor, there are two important quotes I want to share with you. One is from the Austrian-American STS scholar Knorr Cetina who argued that, “a strong constructivist thesis, with respect to ontology, is one that shows how the world is slowly molded into shape in ever new ways through successive generations of (scientific) practice [...] and felicitously performs the reformulation of recurrent questions, the felicity condition being that reconstruction leads to new inquiries and fresh food for thought” [13] This suggests that the world is not something that is “out there” preexisting our scientific practices of observation and explanation rather, it is molded into shape, that is given form and meaning, by such practices. Put differently: (scientific) practices are worlding [14] – they constitute and institute a world. Stating it again differently, John Law – the other quote I wish to share – argues “that technoscience does its realities as well as the representations of those realities” and “that technoscience actually in all its complex multiplicity enacts worlds that are fit for its methods” [15] Both Cetina and Law contributes to the notable shift, since the early 1990s, in STS toward ontology. However, instead of engaging with traditional metaphysical discussions of Being, a “practical ontology” [16] that STSers work with emphasizes an empirical phenomenon, examining how entities and realities are enacted and stabilized in and by (scientific) practice. STS (or at least some strands of it) is an ontologically critical, reflexive endeavor.

The Anthropocene as context for discussing GenAI

Our politico-temporal context is the Anthropocene. There are several Anthropocenes, discussed in geology as ‘epoch’ or ‘event’ in the Geological Time Scale, or as an informal concept, or yet as an alternative name to colonialism, capitalism, or modernism [17][18][19][20][21][22][23]. The Anthropocene is generally defined as the acknowledgment and address of the central role of humankind, especially the Western human *Anthropos*, in the geology and ecology of the Earth’s ecosystem [24][25]. Out of the many relevant interpretations of the Anthropocene context, I would like to focus *critically* on the innovation and engineering science version of it. This is called the “good Anthropocene” [a], which suggests that the quality of human life can be maintained and improved through new technologies and a focus on sustainable innovation without environmental damage [26]. The new kid on the block this time is GenAI, which purports to solve many of our problems. This has also been frequently suggested in this conference.

A belief in technology-fixes that make our lives better and beautiful is, of course, not a new idea. Elsewhere, I have called it lyseology[27]: mobilizing science to convince policymakers and the general public that the present possesses some form of lack that should be addressed with a new technology brought to life and offered as a solution. Lyseology generates a lack in the present, suggesting that it is in the future, populated by new not yet existing engineered artifacts, that a better, lack-free world is believed to lie. Industrial designer Norman Bel Geddes, in his book titled *Magic Motorways*, which had accompanied the General Motors Futurama exhibit in 1938 that he designed, opined that “[p]eering through the haze of the present toward 1960” (p. 8), we will realize that, “[o]ne of the most helpful of modern paradoxes is that during the first 100 years of its growth, we laid waste to land, used up the cities, and bruised the face of everything we touched; now technology offers as the fruit of its maturity such things as powerful tools like rationalized techniques, precision, and teamwork” (p. 269) [28].

How surprising! Sounds like AI, doesn't it? Peering forward from 1940 to 1960! Here, there is already the precise description of the good Anthropocene '*avant la lettre*': the laying waste to everything by machinery that had enslaved people, “but now it can free the individual” (p. 269)

To better contextualize my exploration of GenAI, I would like to propose another understanding of the Anthropocene. The focus of inquiry in STS, after what is called the “ontology turn” in the social sciences [29], lies in exploring the very existence or being of objects rather than merely examining the ways we come to know pre-existing entities. As referenced above, when (some) STSers talk about ontology, it is not an exercise in metaphysics but rather questioning the assumption of a singular, foundational world independent of human or non-human relations or performances [30][31]. Worlds, as Law and Joks argued, are performatively enacted. Assuming there is only one world that marginalizes others, reducing differences to matters of perspective [32]. By revealing the political processes that frame fundamental conditions of being, this strand of STS challenges Cartesian foundationalism and its epistemic and ontological violence [33][34]. Such violence suppresses alternative ways of being, limiting the emergence of other worlds, beings, and forms of life [35]. In consequence, moving beyond the representational ontology of Western metaphysics requires, as Giorgio Agamben suggests, returning politics to its ontological roots. Politicizing depoliticized regions of reality (like the One-World world [36] that exist independent of observers and sovereign requires, as Johanna Oksala [37] following up on Foucault [38]convincingly argues, showing that ontological orders are themselves outcomes of political struggles. In this context, it becomes essential to examine how the dominant ontology (e.g., [scientific] practices or technoscientific enactments) has transformed the planet, displacing and erasing alternative ontologies in its expansion.

The Anthropic condition^[b]

Our ontological approach remains empirical and even experimental, consistent with established STS traditions that prioritize detailed examinations of how specific ontologies are practically realized. Central to this process is the concept of enactment, reflecting STS's resistance to accepting phenomena as given [39]. Thus, instead of understanding the Anthropocene as (all) humans becoming a geological force in the Earth's ecosystem [40], I would like to suggest that the Anthropocene is the specific mode in which the world is molded into shape by the onto-political practices of a metaphysical entity (itself an 'imaginary' rather than a specific type of human, categorized and fixed as Western, European, white, etc.) that is Anthropos. Put differently, it is not the pre-existing and generic 'human' that has a specific way of interacting (becoming a geological force) with another pre-existing entity, which is the Earth. There is a specific ontological politics at play in the Anthropocene that enacted the Earth as an entity complete with all objects 'within' its ecosystem as well as the metaphysical entity that is Anthropos, an entity reflexively constituted by the same politics. At the heart of Anthropogenic destruction is "ontological gerrymandering" [41][42]—the ceaseless reproduction of a fixed world and the ostensibly fixed human 'therein,' whose 'condition' would be a universal 'human condition'. This is a political program – it is the programme to enact the 'Anthropic condition' [43]. The program offers a comforting and manageable realism, both the realism of an independently existing world and the realism and sovereign power of the 'biologically' constituted Anthropos himself.

We can only trace the genealogy of the Anthropic condition as far as we have written and shared memory: the story of Genesis, the memory of the Pythagorean school, and Anaximander's fragment. The politics of the Anthropic condition is first inscribed into the world by the stories written up around the 6th and 5th centuries B.C.E by the early pre-Socratics reflecting on the limited and the unlimited that make (up) the world, as well as found in the story of Genesis. It is the manifestation of the inalienable, hegemonic, and universalist desire of Anthropos to acquire sovereign power (from God) and make all humans *forget* that other worlds may exist. I argue that the fixed human as well as the fixed 'world' are as politically fictitious (cf. 'socially constructed') as fixed properties of the same being: biological sex for example (as feminist scholars have convincingly shown) [44][45][46][47].

The Anthropocene, I suggest, is a political ontology: the ontology that has been conceived by the founders of a representational view *of* the world – the stem of onto-political gerrymandering – introducing the cut between world and Anthropos. The basis of this ontology is the Anthropic condition, a political programme endowing Anthropos with the power of settling struggles over objectivity and truth; what and how things are in our world, what counts as real, and what counts as incoherent fiction [48]. The first instance of such gerrymandering can be traced to the pre-Socratic philosophers, especially Philolaus of Croton, the first thinker self-consciously employing mathematical ideas to solve

philosophical problems [49]. His philosophy, that we have knowledge of only based on a few fragments, enacted a cut between all things that are of “human knowledge” and are contingent, and things that are “eternal, divine and pre-exist” all human intervention. This inaugurates the tradition “that clear or exact knowledge is denied to human beings in certain domains” [50]; these domains are the atemporal, the divine, but more importantly, the pre-existing, apolitical real. Thus, the Anthropocene is the enactment of the world that is ‘eternal, divine and pre-exist all human intervention’ and the ‘political animal’ *Anthropos* who may have (some) knowledge, technological and otherwise, to ‘impact’ this eternal other, the entity that is the Earth.

As an onto-political constructivist, my endeavor is to apply STS’s long-term slogan, “It could be otherwise” to the entity ‘Earth’ and to ‘*Anthropos*’. Put simply, my ontological query comprises seeking an alternative methodological reality practice that offers a new set of analytics to study the Anthropocene as political ontology and, potentially, opens towards enacting widely different forms of life. I hope my proposition, which I will introduce today, that of “postquantum” emerges as such a new set of analytics. First, a caveat: I do not like the term “quantum social theory” (QST) (the term describing the application of a quantum understanding to our social world [51][52][53] hence the ‘posting’ of quantum [54]. I will reflect on posting somewhat later. QST suggests that what physicists have explored about what they take to be the ‘real’ is applicable as a (better) metaphor [55] or (better) description [56] to the social world. Without going into the critique of physics and their imagination of ‘the real,’ I would rather avoid using quantum theory or mechanics as a concept of physics applied to the world of the social as the really ‘real’.

Apparatuses as phenomenal fields

Before we investigate ‘the otherwise’, however, another detour: on onto-political apparatuses and bullshit. Following up on what Giorgio Agamben argued in reference to Foucauldian apparatuses, I contend that apparatuses are literally anything that have, in some way, the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, and discourses of (human) beings. He also argues that “language itself [...] is perhaps the most ancient of apparatuses in which thousands and thousands of years ago a primate inadvertently let himself be captured, probably without realizing the consequences that he was about to face” [57].

Extending Agamben and Foucault via ethnomethodology, we may claim that apparatuses not only capture and orient but also constitute what Garfinkel called “perspicuous settings” – a phenomenal field of organized objects that produce a perceived coherence of such objects (linguistic objects included) [58]. Ethnomethodology is concerned with the work that makes up the “produced witnessability of ordinary facts of life” [59]. This requires that we attend to the “phenomenal field” -- a realm of embodied actions situated within the depth of lived space and time, filled with objects, inherently intersubjective, permeated by language, and shaped by the presence and absence of other beings [60]. Apparatuses,

by capturing and controlling the gestures and behaviors inscribe the phenomenal field *into* reality. I will return to this later. However, apparatuses such as GenAI exert their force through inferring with linguistic intersubjectivity causing what ethnomethodology calls incommensurability [61]: when exchange is fundamentally hobbled by misalignment. This happens when the cognitive basis of AI is uncritically accepted as its driving ideology—discussions often reach an impasse. How can dialogue continue when some participants, like GenAI, hold irreconcilable views on sociality and social organization or have no ‘views’ at all about sociality or any wider social contexts?

In a seminal paper on political discourse, Harry Frankfurt discussed the philosophical implications of ‘bullshit’ and the (political) role of bullshitters [62]. When asked why he was interested in bullshit, he answered: “I was for a long time disturbed by the lack of respect for the truth that I observed... bullshit is one of the deformities of these values” [c] Applying the concept of bullshit to our context, the inclusion of GenAI into embodied actions shaped by language creates incommensurability by *social bullshitting*. It is not the relations to the truth that GenAI lacks, as Frankfurt’s bullshitters had it, but relations to the phenomenal field of organized objects that produce a perceived coherence. Without such coherence no meaningful interaction that is the work that produces witness-ability becomes possible.

Apparatuses, as said, inscribe the phenomenal field into reality as common sense – what everybody knows [63]. Following Mike Lynch [64], we may call this (professional) ontography: the inscription of phenomenal fields in which knowing and what is known are grammatically and materially inseparable and only provisionally differentiated. Professional ontography comprises not only, as Lynch [65] discusses, investigations that aim to describe the contingent and organizationally embedded work of social agents; it is the work of agents, typically scientists but also business leaders, tech entrepreneurs who propose, inscribe, or dispute particular ontological matters. Professional ontography, then, is the work of inscribing the phenomenal field and its coherence, provisionally, into the fabric of the world. Following up on this, one of the “residues” [66] of any ontographic work is mundane ontography – the inscription of ontographic fields that members take as commonsensical and follow tacitly in their locally organized ‘work’.

AI ontography

Returning to GenAI apparatuses: they ‘work’ by generating ‘training’ data corpora of digitalized traces of activities and events. It extracts patterns from the training data, automates the classification of patterns, and predicts the probability of the recurrence of patterns in future data. With GenAI, the probable recurrence is transformed into linguistic entities, word-bits, and their semantic and semiotic contexts. One of the troubles with AI, transformer models included, is what Lucy Suchman calls a political fallacy: “when a statistical correlation between numbers within a dataset is received and accepted as causation among real entities in the world” [67] When GenAI enters the production and

accountability of ordinary society as part of the local production and natural, reflexive accountability of the phenomena of order this statistical correlation replaces the phenomenal field: social bullshitting becomes constitutive of the production of accountable social order.

AI involves data analysis in computing-intensive technologies that are being proposed as solutions. This is the good Anthropocene. It is said to be relevant for several current ills—from health care to climate emergency. However, AI is enacted as a singular and depoliticized technoscientific object, which, as we saw, is another political fallacy. It is the latest in a series of technologies that has been categorized as the good Anthropocene. But more importantly: when GenAI becomes a ‘member’ in embodied actions shaped by language incommensurability, it disrupts the work that produces witnessability: bullshitting replaces accountable (for members) social order.

This disruption is invisible as bullshit replaces the locally produced social order: the ontological politics of the Anthropic condition enters the produced coherence of the phenomenal field by GenAI. It offers comforting realism, that “what everybody knows”, and this unquestioned common-sensical Anthropic realism is now conveyed through the black-boxed stochastic technology that is GenAI. The tacit, taken-for-granted knowledge and shared understandings that individuals rely on to make sense of and navigate everyday social interactions are bullshittified: shared understandings that are assumed to be commonly known by members are not produced and sustained in local and shared ‘accounts’ [68] but offered as ready-made, stochastically given and ethnomethodological impenetrable. Bullshit is untraceable: if it is not explicit hallucination [69] or parrotization [70] it aligns well with the comforting realism of the Anthropic condition. Instead of being *accountable* (making them intelligible and understandable to others within a shared social framework) and *indexical* (deriving their significance from the specific interactional context rather than having fixed meanings) they are naively (e.g., non-accountably and non-indexically) intelligible – it is what everybody knows because they are offered in and by anthropically credible but bullshittified social contexts. Put otherwise: mundane ontography is replaced by AI ontography -- people do not produce and reproduce intelligible order; it is stochastically prefabricated for them in a naively intelligible modality.

Postquantum

This brings me to the question of the ‘otherwise’ and seeking alternative methodological reality practices (alternative ontological politics) that enact widely different worlds. First, a methodological aside. I am introducing postquantum in a similar fashion as Don Ihde, who sadly passed away a few months ago [71] and used post-phenomenology [72] as a theoretical move related to classical phenomenology. In his inquiries into technoscience, he focused on experience and concreteness while distancing the approach from romanticizing technology. His starting point is always an empirical analysis of actual technologies and their relation to embodied experience: combining the phenomenological

focus on embodiment with a pragmatic emphasis on how technologies shape and mediate that experience. It was a version of what Zahavi [73] called applied phenomenology: combining philosophical phenomenological insights with qualitative empirical investigations. As post-phenomenologists did [74], my ambition is also to bring applied phenomenology and quantum theory in conversation with poststructuralism. Hence, “postquantum” is anchored in an anti-essentialist, reflexive, relational ontology. In my version, I am inspired by the quantum focus on entanglement, non-locality, and uncertainty [75][76]; however, I suggest distancing from limiting entanglement and becoming to the micro realm only [77], and moving away from the standard quantum theory recourse to a classical worldview through collapse and/or decoherence [78][79]. I also take inspiration from the research that has brought phenomenology and quantum theory closer [80][81]. Essentially, my suggestion is to politicize the real by a postquantum approach. The starting point is the empirical analysis of how the real on all levels is enacted by specific technoscientific apparatuses.

Naïve intelligibility

What does the naïve intelligibility of the artificial mean for our understanding of both AI and its ontological politics? Politics is not only a struggle over resources and values; it is also a battle about disclosing worlds: the struggle over truth and objectivity is to realize a unique world through the ‘definition’ (naming, enacting, using a method) of what there is [82]. When the comforting realism of the Anthropic condition is conditioned by the naively (non-accountably and non-indexically) intelligible bullshit, GenAI generates our ability to trace, understand, explore, or intervene in how the ontological order of things that constitute our world was an outcome of what politics, what historical and social struggles become extremely limited and eventually impossible. If “[o]ntology is politics that has forgotten itself” [83], the Anthropic condition is written into the fabric of the world not as forgotten politics that may be questioned, breached, and traced but as AI-generated (and naively intelligible) ‘objective’ (“eternal, divine and pre-existing”) depoliticized truth.

This is the last in a long row of attempts to depoliticize ontology: to settle for once and for all the struggle of worlds constantly becoming by onto-political gerrymandering (the Cartesian cut that is also the pre-Socratic cut that is also the Genesis cut – separating, categorizing and mattering [84] Engaging critically with professional and mundane ontography affords us – both as scientists and as members of any ethnos in any local setting – to reflexively work with worlds of our own making. The task of critical inquiry is not to secure and fix ‘methods’ [85] about the ‘true’ nature of reality but to make visible the struggles over truth and objectivity; how our understanding of reality is constituted by our methods. From a postquantum positionality, the problem with GenAI is both bullshitting and the naïve, unreflexively intelligibility thereof by members. To paraphrase Frankfurt: it is the lack of respect for the ethno-methods to be observed, criticized, and analysed... bullshit is one of the deformities of the method that is making worlds.

GenAI's bullshit and its naïve intelligibility prohibit being critical toward the one-world realism and apolitical foundationalism of the Cartesian/Newtonian method [86][87] of reality enactment. Bullshit is black-boxed and purified: it presents, inter alia, entities as separated into neat categories of nature and culture, human and non-human, and establishes causal relations between them as truth [88]. A postquantum critique of GenAI points to the politics of ontology and the constituted nature of nature/culture, of human/non-human binaries, and most importantly, of the real/constructed ontopolitical gerrymandering. If, as quantum social theorist Karen Barad claims, fundamentals of the world are "spacetime-mattered" (questioning the classical Newtonian view of time as a continuous, linear flow from past to future) and the world retains the memory of its iterative reconfiguring – the political nature of the world's ontological constitution should not be 'forgotten'. From a postquantum positionality, there is no such thing as an 'ontos' that is "out there", existing in its independent, eternal, divine plenitude, waiting to be *described*; it is always performatively constituted, although not necessarily uniquely and solely by humans.

Theorized as postquantum, apparatuses are heterogeneous assemblages, instantiating patterns, structures, consisting of human and non-human emergent entities, inscribed by their reflexive members, in specific entanglements that fix entities and their relations as a particular 'way of seeing' that is called 'reality' [90]. Technoscientific apparatuses, including AI, are onto-powerful [91]: they create the conditions of possibility of being, whether of discourse or silently invested material practice, forms of spatiality, temporality, matter, and relations that define ('local,' 'observable,' 'real') conditions of political being [92]. Such apparatuses create congealments in and by which relations of exteriority, connectivity, and exclusion are configured and are 'observed' locally by the observer. A task of a postquantum critique is to be sensitive towards potential iterative reconfiguring by critically reflecting on settings, fields, interactions – (ethno)methods doing realities as well as the representations of those realities [93].

If GenAI enters the "perspicuous settings" enacted by humans and non-humans offering its bullshit, such critique becomes impossible. Not only will we not be able to trace historical practices and power relations in methods of world-making, but the 'stochastic parrot' will congeal the Anthropoc condition as mined from zillions of texts that are all similar in their methodological enactments. GenAI (and its makers) present the learning corpus and the stochastic generation of new knowledge as apolitical truth mined from representations of the gerrymandered eternal, pre-existing real [94]. This eschews the plethora of Garfinkelian 'residues' [95] (that we may search for subtle traces, interpreting the significance of underlying social practices; the 'invisible work' that sustains the shared sense of reality) that we need to assess and engage with ("interpret") critically.

Conclusion

What I have been trying to show is that GenAI is a social bullshitter of a naively intelligible

modality. It is, however, a different kind of bullshitter than that of Frankfurt's. It is not disinterested in truth but just the opposite: becoming a 'member' in interactions shaped by language. GenAI's incommensurability disrupts the work that produces witnessability. Bullshit replaces accountable social order as well as our ability to observe and analyse traces of the unnoticed or taken-for-granted practices, assumptions, and actions that do our world. It claims that from all the texts of the world it can create the TAO that no human has been yet able to see.

But, as Laozi claims, "The Tao that can be told is not the eternal Tao." The eternal Tao, if I understand correctly, comes very close to spacetime mattering [96].

In closing, I can only offer a question. When thinking about GenAI, this is what you may wish to consider. Would you want to spend your entire life re-enacting the time and again the world together with amnesic onto-political bullshitters? They forget and make forget that worlds can be enacted differently. Enactment is always the result of struggles (and not searches or prompts) over truth and objectivity, over assemblages of methods that have been crafted by people, machines, traces, more-than-human beings, spirits, angels, muses, to name a few, in a messy order of becoming [97]. Struggles may result in many things, but not solely, uniquely, and universally in an outcome of neat stochastic ordering based on numbers and formulae that the pre-Socratics introduced as the gerrymandered ontology of the Anthropoc condition some 2500 years ago. This was around the same time that the mystical figure Laozi is assumed to have lived and worked on the *Tao Te Ching*.

The choice is yours. Thank you!

Editor's Note

This perspective paper is adapted from the transcript of the keynote speech delivered by the author at the First International Forum on Quantum and Laozi, held in Shanghai, China, on July 7th, 2024. It has undergone the same rigorous peer-review process as regular submissions to ensure its quality and relevance.

Notes

[a] cf. <https://www.ecomodernism.org/>

[b] The Anthropoc condition, of which this is a very brief and simple rendering, is the topic of our current book project with Richard Randell. It is the continuation of our previous work on automobility as political ontology, see: Braun, R., & Randell, R. (2022). *Post-Automobility Futures: Technology, Power, and Imaginaries*. Rowman & Littlefield. <https://rowman.com/ISBN/9781538158852/Post-Automobility-Futures-Technology-Power>

-and-Imaginarities

[c] On Bullshit Part 1 – YouTube. www.youtube.com. 18 September 2007. Retrieved 2025-01-23.

References

- [1] Walsh, T. (2018). *2062: The World that AI Made*. Perdue University Press.
- [2] Ezrahi, J. (2012). *Imagined Democracies: Necessary Political Fictions*. In. New York: Cambridge University Press.
- [3] Sismondo, S. (2004). *An introduction to science and technology studies*. Blackwell.
- [4] Bauchspies, W. K., Croissant, J., & Restiv, S. P. (2006). *Science Technology and Society: A Sociological Approach*. Blackwell.
- [5] Åsberg, C., & Lykke, N. (2010). Feminist technoscience studies. *European Journal of Women's Studies*, 17(4), 299–305.
- [6] Hamilton, C. (2016). Sex, Work, Meat: The Feminist Politics of Veganism. *Feminist Review*, 114(1), 2–129. <https://doi.org/https://doi.org/10.1057/s41305-016-0011-1>
- [7] Ihde, D. (2009). *Postphenomenology and Technoscience: The Peking University Lectures*. State University of New York Press.
- [8] Barad, K. (2007). *Meeting the universe halfway: quantum physics and the entanglement of matter and meaning*. Duke University Press.
- [9] Law, J. (2015). What's wrong with a one-world world? *Distinktion: Journal of Social Theory*, 16(1), 126-139. <https://doi.org/DOI:10.1080/1600910X.2015.1020066>
- [10] Warnke, P., & Heimeriks, G. (2008). Technology Foresight as Innovation Policy Instrument: Learning from Science and Technology Studies. In C. Cagnin, M. Keenan, R. Johnston, F. Scapolo, & R. Barré (Eds.), *Future-Oriented Technology Analysis*. Springer.
- [11] Jasanoff, S., & Kim, S.-H. (2009). Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. *Minerva*(47), 119-146. <https://doi.org/10.1007/s11024-009-9124-4>
- [12] Jasanoff, S., & Kim, S.-H. (2015). *Dreamscapes of Modernity*. Chicago University Press.
- [13] Cetina, K. K. (1993). Strong Constructivism — from a Sociologist's Point of View: A Personal Addendum to Sismondo's Paper. *Social Studies of Science*, 23(3), 555–563. <https://doi.org/https://doi.org/10.1177/0306312793023003005>
- [14] Heidegger, M. (1962). *Being and Time*. Blackwell.
- [15] Law, J. (2008). On Sociology and STS. *The Sociological Review*, 56(4), 623-649.
- [16] Gad, C., Jensen, C. B., & Winthereik, B. R. (2019, 7 August 2019). *Practical Ontology: Worlds in STS and Anthropology*. Retrieved 25 January 2023 from <https://stsinfrastructures.org/content/practical-ontology-worlds-sts-and-anthropology>
- [17] Braje, T. (2016). Evaluating the Anthropocene: Is there something useful about a geological epoch of humans? *Antiquity*, 90(350), 504-512.
- [18] Certini, G., & Scalenghe, R. (2015). Is the Anthropocene really worthy of a formal geologic definition? *The Anthropocene Review*, 2(1), 77-80. <https://doi.org/10.1177/2053019614563840>

- [19] Chandler, D., & Pugh, J. (2021). The Anthropocene Islands agenda. *Dialogues in Human Geography*, 0(0), 20438206211017457. <https://doi.org/10.1177/20438206211017457>
- [20] Gibbard, P., Walker, M., Bauer, A., Edgeworth, M., Edwards, L., Ellis, E., Finney, S., Gill, J. L. M., Merritts, D., & Ruddiman, W. (2022). The Anthropocene is an Event, not an Epoch. *Journal of Quaternary Science*, 37, 395-399. <https://doi.org/https://doi.org/10.1002/jqs.3416>
- [21] Hamilton, C. (2020). TOWARDS A FIFTH ONTOLOGY FOR THE ANTHROPOCENE. *Angelaki*, 25(4), 110-119. <https://doi.org/DOI:10.1080/0969725X.2020.1790839>
- [22] Haraway, D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. *Environmental Humanities*, 6(1), 159–165.
- [23] Ruddiman, W. F. (2019). Reply to Anthropocene Working Group responses. *Progress in Physical Geography: Earth and Environment*, 43(3), 345–351. <https://doi.org/https://doi.org/10.1177/0309133319839926>
- [24] Crutzen, P. (2002). Geology of mankind. *Nature*, 415 (23). <https://doi.org/10.1038/415023a>
- [25] Crutzen, P. J., & Stoermer, E. F. (2000). The Anthropocene. *Global Change Newsletter*, 41, 17-18.
- [26] Larkin, B. (2013). The Politics and Poetics of Infrastructure. *Annual Review of Anthropology*, 42(1), 327-343. <https://doi.org/10.1146/annurev-anthro-092412-155522>
- [27] Braun, R. (2024). Radical reflexivity, experimental ontology, and RRI. *Journal of Responsible Innovation*. <https://doi.org/DOI:10.1080/23299460.2024.2331651>
- [28] Bel Geddes, N. (1940). *Magic Motorways*. Random House.
- [29] Heur, B. v., Leydesdorff, L., & Wyatt, S. (2012). Turning to ontology in STS? Turning to STS through 'ontology'. *Social Studies of Science*, 43(3), 341-362.
- [30] Heur, B. v., Leydesdorff, L., & Wyatt, S. (2012). Turning to ontology in STS? Turning to STS through 'ontology'. *Social Studies of Science*, 43(3), 341-362.
- [31] Woolgar, S. (2022). The Value of Strident Agnosticism: Dorothy Pawluch and the Endurance of Ontological Gerrymandering. *The American Sociologist*, 53(1), 176–187. <https://doi.org/https://doi.org/10.1007/s12108-021-09524-x>
- [32] de Castro, E. V. (1998). Cosmological Deixis and Amerindian Perspectivism. *The Journal of the Royal Anthropological Institute*, 4(3), 469-488. <https://doi.org/10.2307/3034157>
- [33] Fricker, M. (2011). *Epistemic injustice: power and the ethics of knowing*. Oxford University Press.
- [34] Wynter, S. (2003). Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument. *CR: The New Centennial Review*, 3, 257 - 337.
- [35] Barad, K. (2007). *Meeting the universe halfway: quantum physics and the entanglement of matter and meaning*. Duke University Press.
- [36] Law, J. (2015). What's wrong with a one-world world? *Distinktion: Journal of Social Theory*, 16(1), 126-139. <https://doi.org/DOI:10.1080/1600910X.2015.1020066>
- [37] Woolgar, S., & Lezaun, J. (2013). The wrong bin bag: A turn to ontology in science and technology studies? *Social Studies of Science*, 43(3), 321-340.

<https://doi.org/10.1177/0306312713488820>

- [38] Oksala, J. (2010). Foucault's politicization of ontology. *Continental Philosophy Review*, 43(4), 445-466.
- [39] Foucault, M. (1994). *The Order of Things*. Vintage.
- [40] Chakrabarty, D. (2015). *The Human Condition in the Anthropocene*. Yale UP.
- [41] Woolgar, S. (2022). The Value of Strident Agnosticism: Dorothy Pawluch and the Endurance of Ontological Gerrymandering. *The American Sociologist*, 53(1), 176–187. <https://doi.org/https://doi.org/10.1007/s12108-021-09524-x>
- [42] Woolgar, S., & Pawluch, D. (1985). Ontological Gerrymandering: The Anatomy of Social Problems Explanations. *Social problems: constructionist readings*, 32(3), 214–227. <https://doi.org/https://doi.org/10.2307/800680>
- [43] Arendt, H. (1958). *The Human Condition*. Chicago University Press.
- [44] Butler, J. (1999). Gender trouble: feminism and the subversion of identity. <http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203902752>
- [45] Haraway, D. (2013). *SF: Science Fiction, Speculative Fabulation, String Figures, So Far*. Retrieved 05.27. from <https://adanewmedia.org/2013/11/issue3-haraway/>
- [46] Massey, D. (1994). *Space, Place, and Gender*. University of Minnesota Press.
- [47] Wynter, S. (2003). Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument. *CR: The New Centennial Review*, 3, 257 - 337.
- [48] Oksala, J. (2010). Foucault's politicization of ontology. *Continental Philosophy Review*, 43(4), 445-466.
- [49] Huffman, C. A. (1993). *Philolaus of Croton : Pythagorean and Presocratic : A Commentary on the Fragments and Testimonia with Interpretive Essays*. Cambridge University Press.
- [50] Huffman, C. A. (1993). *Philolaus of Croton : Pythagorean and Presocratic : A Commentary on the Fragments and Testimonia with Interpretive Essays*. Cambridge University Press.
- [51] Barad, K. (2010). Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come. *Derrida Today*, 3(2), 240-268. <https://doi.org/10.3366/drt.2010.0206>
- [52] Murphy, M. P. A. (2021). *Quantum Social Theory for Critical International Relations Theorists*. Springer. <https://doi.org/https://doi.org/10.1007/978-3-030-60111-9>
- [53] Wendt, A. (2015). *Quantum Mind and Social Science: Unifying Physical and Social Ontology*. Cambridge University Press.
- [54] Aagaard, J., & Rosenberger, R. (2024). Experience without essentialism: on 'posting' phenomenology. *Qualitative Research in Psychology*, 1-19. <https://doi.org/https://doi.org/10.1080/14780887.2024.2355277>
- [55] Murphy, M. P. A. (2021). *Quantum Social Theory for Critical International Relations Theorists*. Springer. <https://doi.org/https://doi.org/10.1007/978-3-030-60111-9>
- [56] Wendt, A. (2015). *Quantum Mind and Social Science: Unifying Physical and Social Ontology*. Cambridge University Press.
- [57] Agamben, G. (2009). *What is an Apparatus and Other Essays*. Stanford University

Press.

- [58] Garfinkel, H. (2021). Ethnomethodological Misreading of Aron Gurwitsch on the Phenomenal Field. *Human Studies*, 44, 19-42. <https://doi.org/https://doi.org/10.1007/s10746-020-09566-z>
- [59] Wiley, N. (2019). Interview with Harold Garfinkel. *Human Studies*, 42, 165–181. <https://doi.org/https://doi.org/10.1007/s10746-019-09517-3>
- [60] Eisenmann, C., & Lynch, M. (2021). Introduction to Harold Garfinkel's Ethnomethodological "Misreading" of Aron Gurwitsch on the Phenomenal Field. *Human Studies*, 44, 1-17. <https://doi.org/https://doi.org/10.1007/s10746-020-09564-1>
- [61] Wieder, D. L. (1993). On the Compound Questions Raised by Attempts to Quantify Conversation Analysis' Phenomena Part 2: The issue of Incommensurability. *Research on Language and Social Interaction*, 26(2), 213–226. https://doi.org/https://doi.org/10.1207/s15327973rlsi2602_7
- [62] Frankfurt, H. G. (2010). *On Bullshit*. Princeton University Press.
- [63] Garfinkel, H. (1960). The rational properties of scientific and common sense activities. *Behavioral Science*, 5, 72-83. <https://doi.org/https://doi.org/10.1002/bs.3830050106>
- [64] Lynch, M. (2019). Ontography as the Study of Locally Organized Ontologies. *ZMK Zeitschrift für Medien- und Kulturforschung: Ontography*.
- [65] Lynch, M. (2013). Ontography: Investigating the production of things, deflating ontology. *Social Studies of Science*, 43(3), 444–462. <https://doi.org/https://doi.org/10.1177/0306312713475925>
- [66] Garfinkel, H. (2021). Ethnomethodological Misreading of Aron Gurwitsch on the Phenomenal Field. *Human Studies*, 44, 19-42. <https://doi.org/https://doi.org/10.1007/s10746-020-09566-z>
- [67] Suchman, L. (2023). The uncontroversial 'thingness' of AI. *Big Data & Society*, 10(2). <https://doi.org/https://doi.org/10.1177/20539517231206794>
- [68] Orbuch, T. L. (1997). People's Accounts Count: The Sociology of Accounts. *Annual Review of Sociology*, 23, 455-478.
- [69] Jones, N. (2025). AI hallucinations can't be stopped — but these techniques can limit their damage. *Nature* (637), 778-780. <https://doi.org/https://doi.org/10.1038/d41586-025-00068-5>
- [70] Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? ACM Conference on Fairness, Accountability, and Transparency (FAccT '21), New York, NY, USA.
- [71] Rosenberger, R., & Verbeek, P.-P. (2024). DON IHDE: 1934 - 2024. *Journal of Human-Technology Relations*, 2(1). <https://doi.org/https://doi.org/10.59490/jhtr.2024.2.7858>
- [72] Ihde, D. (2009). *Postphenomenology and Technoscience: The Peking University Lectures*. State University of New York Press.
- [73] Zahavi, D. (2021). Applied phenomenology: Why it is safe to ignore the epoché. *Continental Philosophy Review*, 54(2), 259-273. <https://doi.org/10.1007/s11007-019-09463-y>
- [74] Aagaard, J., & Rosenberger, R. (2024). Experience without essentialism: on 'posting' phenomenology. *Qualitative Research in Psychology*, 1-19.

- <https://doi.org/https://doi.org/10.1080/14780887.2024.2355277>
- [75] Carroll, S. M. (2019). *Something Deeply Hidden: Quantum Worlds and the Emergence of Spacetime*. Dutton an imprint of Penguin Random House.
- [76] Freire, O. (Ed.). (2022). *The Oxford Handbook of the History of Quantum Interpretations*. Oxford Academic.
<https://doi.org/https://doi.org/10.1093/oxfordhob/9780198844495.001.0001>.
- [77] Everett, H. I. (2012). *The Everett Interpretation of Quantum Mechanics: Collected Works 1955-1980 with Commentary* (J. A. Barrett & P. Byrne, Eds.). Princeton University Press.
- [78] Bohr, N. (1928). The Quantum Postulate and the Recent Development of Atomic Theory. *Nature*, 121(3050), 580-590. <https://doi.org/10.1038/121580a0>
- [79] Wallace, D. (2012). Decoherence and its role in the modern measurement problem. *Philosophical Transactions of the Royal Society A*, 370, 4576–4593. <https://doi.org/http://doi.org/10.1098/rsta.2011.0490>
- [80] Berghofer, P., Goyal, P., & Wiltsche, H. A. (2021). Husserl, the mathematization of nature, and the informational reconstruction of quantum theory. *Continental Philosophy Review*, 54, 413–436. <https://doi.org/https://doi.org/10.1007/s11007-020-09523-8>
- [81] Heelan, P. A. (2013). Phenomenology, Ontology, and Quantum Physics. *Foundations of Science*, 18, 379–385. <https://doi.org/https://doi.org/10.1007/s10699-011-9247-6>
- [82] Oksala, J. (2010). Foucault's politicization of ontology. *Continental Philosophy Review*, 43(4), 445-466.
- [83] Oksala, J. (2010). Foucault's politicization of ontology. *Continental Philosophy Review*, 43(4), 445-466.
- [84] Barad, K. (2010). Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come. *Derrida Today*, 3(2), 240-268. <https://doi.org/10.3366/drt.2010.0206>
- [85] Law, J. (2008). On Sociology and STS. *The Sociological Review*, 56(4), 623-649.
- [86] Rommetveit, K., Strand, R., Fjelland, R., & Funtowicz, S. (2013). *What can history teach us about the prospects of a European Research Area?*
- [87] Toulmin, S. E. (2013). *Cosmopolis: the hidden agenda of modernity*. Univ. of Chicago Press.
- [88] Latour, B. (1993). *We Have Never Been Modern* (C. Porter, Trans.). Harvard University Press.
- [89] Barad, K. (2018). Troubling Time/s and Ecologies of Nothingness: Re-turning, Re-memembering, and Facing the Incalculable. In M. Fritsch, P. Lynes, & D. Wood (Eds.), *Eco-Deconstruction: Derrida and Environmental Philosophy* (pp. 206-248). Fordham University Press.
- [90] Lohrey, A., & Boreham, B. (2020). The nonlocal universe. *Commun Integr Biol*, 13(1), 147-159. <https://doi.org/10.1080/19420889.2020.1822583>
- [91] Massumi, B. (2016). *Ontopower: war, powers, and the state of perception*. Duke University Press.
- [92] Braun, R., & Randell, R. (2022). *Post-Automobility Futures: Technology, Power, and Imaginaries*. Rowman & Littlefield.
<https://rowman.com/ISBN/9781538158852/Post-Automobility-Futures-Technology-Power>

-and-Imagaries

[93] Law, J. (2008). On Sociology and STS. *The Sociological Review*, 56(4), 623-649.

[94] Alowais, S. A., Alghamdi, S. S., & Alsuehaby, N. (2023). Revolutionizing healthcare: the role of artificial intelligence in clinical practice. *BMC Medical Education*, 23(689). <https://doi.org/https://doi.org/10.1186/s12909-023-04698-z>

[95] Garfinkel, H. (2021). Ethnomethodological Misreading of Aron Gurwitsch on the Phenomenal Field. *Human Studies*, 44, 19-42. <https://doi.org/https://doi.org/10.1007/s10746-020-09566-z>

[96] Zohar, D. (2022). The Tao of Quantum Management. In D. Zohar (Ed.), *Zero Distance*. Palgrave Macmillan.

https://doi.org/https://doi.org/10.1007/978-981-16-7849-3_6

[97] Law, J. (2004). *After Method: Mess in Social Science Research*. Routledge.

Journal Pre-proof