

Chat Token Vector

Questioning Models
of Language and
Neo-Structuralism
in AI

11-13 June 2025

Aula Mario Baratto
Ca' Foscari, Dorsoduro
3246 - Venice

More info and registration
unive.it/chat-token-vector

Organised by
ERC Project AIMODELS
Department of Philosophy and
Cultural Heritage
Ca' Foscari University Venice
unive.it/aimodels



Symposium

With the latest developments of AI such as Large Language Models (LLMs), language returns to the center of the stage in critical humanities, history of science and technology, and political economy. Already in the 1990s, political economy advocated for a “linguistic turn” to grasp the transformations of social relations and labour in post-Fordism (Marazzi 1996), but nobody then could foresee the degree of “linguistic automation” that is taking place today through LLMs. Ultimately, in their latent space, LLMs appear to materialise the ‘machine interlingua’ (Liu 2023) that AI practitioners, linguists, and philosophers have envisioned and cultivated since the 1950. As at the times of information theory and cybernetics, a technical paradigm appears to impose a shift in the theoretical discourse. It is urgent, therefore, to investigate the postulates underlying this second ‘linguistic turn’ driven by AI, in which language reemerges at the core of both the technical composition and philosophical concerns.

The symposium Chat Token Vector addresses the new architecture of language, labour, and social relations in what we call AI today. In current AI, language is involved in the making of a complex technosocial scaffolding and a new variant of structuralism. Language is rewritten along the vectors of statistical models in order to become computer-readable. Under this regime of knowledge production, languages but also artefacts such as images become fictitious commodities. The labour that renders these phenomena possible has been, many pointed out, made invisible. Instead of seeing data centres, cable infrastructures, venture capital, and foremost workers cleaning data, maintaining servers, and repairing hardware, we see AI. What are the actual components of the hidden production pipeline of AI? In which way is language represented and mechanised along such a global assembly line?

The format of communication known as Chat has become an interface to access not only AI but also global communication and the labour market. In LLMs, chats orchestrate the new division of labour of the platform economy, in which “work as language” is deconstructed into “microtasks” and all users become “microworkers”. The unit of this formalisation of language is the Token, that grounds the new automation of linguistics and its mobilization for profit (something that French structuralists could not even remotely foresee possible). On AI platforms, atomised individuals talk, unknowingly, to the abyss of the multidimensional space, to the space of the Vector, a novel cultural technique in which collective knowledge and culture collapse into vast statistical manifolds. Given such a complex scaffolding of social and power relations, the symposium invites papers to question the role of language and labour in the new knowledge economy of AI.

Day 1 - 11 June

14.00 - 14.15

Matteo Pasquinelli (Ca' Foscari University)
and **Amira Moeding** (Cambridge University)

Introduction: Questioning language models before and after AI

SESSION 1: Language Models in History

Chair: **Amira Moeding**

14.15- 15.30

KEYNOTE

Lydia Liu (Columbia University)

Logos and Pathos in the Calculating Machine

15.30- 15.45 Coffee break

15.45-16.45

Xiaochang Li (Stanford University)

The Crude Force of Computers: Speech Recognition and the Data of Language

16.45- 17.45

PANEL

Ksenia Tatarchenko (Singapore Management University)

Another Collective: The Russian Language Machine Fund (RLMF), or The Last Act of the Soviet Literary Cybernetics

Justine Zhang (University of Michigan)

Fantasies and histories of effortless interaction

17.45- 18.45

Leonardo Impett (Cambridge University) and **Fabian Offert** (UCSB)

Book pre-launch of "Vector Media: towards a materialist epistemology of Artificial Intelligence" (Meson Press, 2025) introduced by publisher Mercedes Bunz, King's College

19.00

SOCIAL DINNER

(open to all but not covered, Birraria La Corte, San Polo 2168)

Day 2 - 12 June

SESSION 2: Cartographies of the Vector Space

Chair: **Matteo Pasquinelli**

9.00- 10.00

Juan Luis (Gianni) Gastaldi (ETH Zurich)

Toward a Critical Formalism: Philosophical and Theoretical Effects of a Mathematical Critique of LLMs

10.00 - 11.00

Tobias Matzner (Paderborn University)

Vector Spaces, Embeddings and the Normalization of Meaning

11.00- 11.15

Coffee Break

11.15 - 12.00

Étienne Grenier (INRS Montreal)

Lost in Vectorization: Where Critical Hermeneutic Meets AI-powered Creative Sectors

12.00 - 13.00

Paolo Caffoni (University of Arts and Design Karlsruhe)

The Predictive Turn of Language: Reading the Future in the Vector Space

13.00 - 14.00

LUNCH

SESSION 3: The Political Economy of LLMs

Chair: **Matteo Pasquinelli**

14.00- 15.00

Tommaso Guariento (Ca' Foscari University Venice) *Ungrounded Speculations. The Vector-grounding Problem between Linguistics and Economics*

15.00- 16.00

Apolline Taillandier (Cambridge University)

The Politics of AI Models: Constructing Selves and Social Orders Through Programming

16.00- 16.15

Coffee Break

16.15- 17.45

PANEL

Nina Markl (University of Essex)

Managing Language, Work & Language Work

Marvin Tritschler (University of Stuttgart)

The Life of the Sign and Its Interchangeability Through Automation

Mikael Brunila (McGill University Montreal)

Cosine capital: Large language models and the embedding of all things

17.45- 18.45

Hannes Bajohr (Berkeley University)

The Latent Space of Meaning and the Novel: World Model in AI and Literature

Day 3 – 13 June

SESSION 4: The Philosophy of Language Automation

Chair: **Tommaso Guariento**

9.00 - 10.00

Jonnie Penn and **Yaqub Chaudhary** (Cambridge University)

New Parameters of Power: On LLM-based Manipulation and Control and the Specter of Strategic AI

10.00 - 10.15

Coffee Break

10.15 - 12.00

PANEL

Anna Luhn (Freie Universität Berlin)

A Matter of Disruption, a Case for Preservation: Literary Powerplay In/Against an AI Paradigm of Language

David Bering-Porter (The New School, New York)

Large Language and Models of the Other: A Semiotics of the Token

Alessandro Trevisan (Cambridge University)

Forms of Life: An Applied Investigation of LLMs through the Lens of Philosophy of Language

12.00 - 13.00 **Ann Copestake** (Cambridge University)

Meaning and Metaphor: Making sense of LLMs

13.00 - 14.00

LUNCH

SESSION 5: Humanities after Tokenization

Chair: **Amira Moeding**

14.00 -15.30

PANEL

Pierre Schwarzer (New York University)

Language, Liquidated

Aditya Nayak, Aditi Vashistha, Aakash Gautam (University of Pittsburgh)

The Birth of Synthetic Agents: From 'World as Language' to 'Agency as Language'

Luz Horne (Universidad de San Andrés)

What is not Language in Language. Literature as a Laboratory of Philosophical Anthropology in the context of LLMs

15.30 - 15.45

Coffee Break

15.45 - 16.45

Kameelah Janan Rasheed (Yale University)

Zombie Language: Reflections on Current Research in Deathbots, Griefbots, Digital Doppelgängers, and the Afterlives of Language

16.45 - 17.30

Final discussion

17.30-18.30

TOAST (free drinks and Venetian cicchetti, Archive hall)

Logos and Pathos in the Calculating Machine

Lydia Liu (Columbia University)

Whenever we are impressed by the computer's ability to calculate, manipulate symbols, or pass a Turing test, we invariably associate its superior reasoning power with intelligence. But something gets left out in these sorts of reflections: the incalculable. Even with machines, there is a place for the incalculable. For instance, what is the role of the pathological in the making of intelligent machines such as AI? I do not just mean the unpredictable, even if the incalculable may end up being unpredictable.

In my talk, I am going to address some of our deeply held convictions about logos (word, reason, tokens, etc.) and its relation to pathos (feeling or emotion) by reexamining a number of early technological breakthroughs in the postwar machine modeling of the mind and their philosophical claims. I will then revisit the philosophical work of Margaret Masterman from the Cambridge Language Research Unit who radically re-conceptualized the place of logos in machine translation to inspire important Wittgensteinian innovations in computational linguistics and AI technology.

Lydia H. Liu is the Wun Tsun Tam Professor in the Humanities and former Director of the Institute for Comparative Literature and Society at Columbia University. She has published extensively on critical translation theory, Chinese and comparative literature, digital media, political thought, and the philosophy of language. Her representative books include *The Freudian Robot: Digital Media and the Future of the Unconscious* (2010), *The Clash of Empires: The Invention of China in Modern World Making* (2004), *The Birth of Chinese Feminism: Essential Texts in Transnational Theory* (co-edited, 2013) as well as *Translingual Practice: Literature, National Culture, and Translated Modernity* (1995). Her new book *Global Language Justice* (co-edited with Anupama Rao and Charlotte Silverman) was published by Columbia University Press in 2023. She was a Guggenheim Fellow and more recently a member of the Institute for Advance Study in Princeton.

The Crude Force of Computers: Speech Recognition and the Data of Language

Xiaochang Li (Stanford University)

In 1988, during a three-day workshop held at the historic Arden House, the former estate of gilded-age railroad tycoon Edward Harriman located north of New York City, a computer scientist by the name of Robert Mercer made a startling proclamation: “There’s no data like more data.”¹ Mercer, a member of IBM’s Continuous Speech Recognition (CSR) research group, was describing experimental results using a profoundly unorthodox approach to language modeling. In contrast to the dominant “knowledge-based” methods of the period, in which researchers hand-crafted intricate rule structures using linguistic and contextual information, IBM’s “statistical approach” represented language as the statistical likelihood of words appearing in sequence, based on patterns derived automatically (or “trained”) from large quantities of text data. Improvements to recognition accuracy, they found, came not from carefully incorporating knowledge of linguistic structure or meaning to refine the model, but from simply increasing the quantity of text data used to train it. Mercer’s declaration marked a comprehensive transformation in speech recognition research, one that proved instrumental in the precipitous rise of data-intensive machine learning since the 1990s and the consequent remaking of mainstream artificial intelligence, if not computation more broadly, in the image of data science.

This talk examines the role of automatic speech recognition research in the rise of data-driven machine learning as a privileged and pervasive form of computational knowledge. It focuses on IBM’s Continuous Speech Recognition group between 1972-1993 as they fueled speech recognition’s “statistical turn,” uprooting the field from the simulation of human reason and language understanding and redirecting it towards the acquisition of data for large-scale pattern recognition. This shift, I suggest, played a vital role in refashioning artificial intelligence and computational modeling into radically data-centric pursuits. This history offers a critical piece in the story of how we became data-driven, highlighting how efforts to turn language into data consequently turned data into an imperative, preparing the way for the widespread incursion of algorithmic authority across everyday life.

¹ Mercer, “Language Modeling for Speech Recognition.” Presented at the 1988 IEEE Workshop on Speech 1 Recognition (Harriman, NY: May 31-June 2, 1988), quoted in M. Margaret Withgott and Francine R. Chen, *Computational Models of American Speech* (Stanford, CA: Center for the Study of Language and Information, 1993), 81 n.1.

Xiaochang Li is an Assistant Professor in the Department of Communication. Her research examines questions surrounding the relationship between information technology and knowledge production and its role in the organization of social life. Her current book project explores the history of automatic speech recognition and natural language processing and how the problem of mapping communication to computation shaped the rise of big data, machine learning, and related forms of algorithmic practice. She received her PhD from the Department of Media, Culture, and Communication at New York University and a Master's Degree in Comparative Media Studies from MIT. Prior to joining Stanford, she was a Postdoctoral Fellow in the Epistemes of Modern Acoustics at the Max Planck Institute for the History of Science

Another Collective: The Russian Language Machine Fund (RLMF), or The Last Act of the Soviet Literary Cybernetics

Ksenia Tatarchenko (Johns Hopkins University)

This paper challenges assumptions about the political economy of language, labor, and the dominance of English by examining the Soviet approach to collective labor behind Large Language Models (LLMs) and presenting a non-capitalist history of linguistic data processing. It focuses on a key national initiative to automate lexicography—the Russian Language Machine Fund (RLMF), established in the early 1980s amid public debate over early experiments in computerized thesaurus construction, such as the Russian Semantic Dictionary (1982). A notable example is a 1983 Pravda article titled “Should We Teach the Computer to Write with Mistakes?”, which criticized the dictionary’s mechanically generated associations attracting political scrutiny—such as linking “concrete” to “Marxism” or “debauch” to “socialism.” Archival records reveal that the project’s defenders viewed unexpected linkages of this type not as flaws but as insights into the “anatomy” of the Russian lexicon.

I situate these instances of Soviet “literary cybernetics” within the broader framework of late Soviet cybernetics as a public sphere. Tracing the RLMF’s origins to Cold War-era machine translation projects, I show how they fostered mathematician-linguist collaborations following cybernetics’ official legitimization in 1955. While Slava Gerovitch (*From Newspeak to Cyberpeak*, 2002) documented cybernetics’ failed institutionalization in the 1960s, I argue that its conceptual idioms persisted in language engineering (e.g., the Piotrowski school) and cultural semiotics (e.g., the Lotman school). By comparing the RLMF to contemporaneous projects like the programming literacy campaign, I identify a shared Soviet vision of human-computer interaction—man-machine brotherhood—which rejected Western “master-slave” dynamics in favor of symmetrical dialogue. In uncovering these distinct cultural logics, the paper challenges Western-centric teleologies in the history of technology.

Ksenia Tatarchenko since 2025 teaching in the Medicine, Science, and Humanities program at Johns Hopkins University. Previously, Tatarchenko is the author of *Soviet SCI_BERIA: The Novosibirsk Science Center and the Late Soviet Politics of Expertise* (Bloomsbury, 2024). She is currently working on a second book manuscript tentatively titled *The Algorithmic Community and the Universal Machine* and a project tracing the history of the Soviet translation and reception of Alan Turing’s 1950 paper “Computing Machinery and Intelligence.”

Fantasies and Histories of Effortless Interaction

Justine Zhang (University of Michigan)

A growing body of work has documented how AI systems entrench regimes of political domination. Other accounts have pointed to limits to these systems' functionality, often starting from the philosophical claim that they do not really "understand language." In spite of these critiques, recent developments in AI, marked by the release of increasingly massive large language models, have been narrativized as steadily progressing towards "human level language understanding," and have been widely taken up by people seeking to expedite linguistic tasks. In this paper, I aim to link AI's seeming functionality to its project of world-making. By drawing this connection, I specify how AI systems' grasp of language is partial, while attending to the historical and ongoing processes that render this partialness hegemonic.

My argument starts from ethnomethodological and anthropological accounts that treat language use as a situated activity, and that insist that language understanding is a contingent, intersubjective achievement. In contrast, the project of AI has taken up a different conceptualization of language, fetishizing the production of linguistic forms while promising to eliminate the contingencies of meaning-making. However, I suggest that this fantasy of effortless interaction does not obviate the need for interpretive work so much as distort and relocate it. I show how colonial and capitalist projects have produced linguistic landscapes that naturalize language use as a purely symbolic process, while obscuring and marginalizing the work required to produce this sense of coherence. I cast modern infrastructures of AI—spanning data accumulation, labour exploitation, and land expropriation—as continuations of efforts to produce a world where interactional work can be systematically exploited and disavowed at scale.

Justine Zhang is an assistant professor in the School of Information at the University of Michigan, Ann Arbor. Her research focuses on the political investments of language technologies, using methods and theories from science and technology studies, sociolinguistics, and linguistic anthropology. Her current project examines the ways that social problems, like racial injustice or the underprovision of care, are cast as linguistic problems with linguistic and technological solutions, and the implications of such conceptual moves. She completed her PhD in Information Science from Cornell University, where she received training in natural language processing and computational social science.

Vector Media: Towards a Materialist Epistemology of Artificial Intelligence

Leonardo Impett (Cambridge University) and Fabian Offert (UCSB)

This talk is based on a section of Vector Media (2025, Meson Press, foreword by Johanna Drucker)

Bias in large visual models is not just a question of what is represented but of the logic of representation itself. ImageNet – one of the most popular previous-generation datasets – thus sees the world as a collection of singular, industrially manufactured consumer goods. But the mapping from training data to trained model is always messy and indirect. If we thus want to better understand the place of large visual models within our contemporary visual culture, we will have to ask more difficult questions about the ideologies (and, it turns out, epistemologies) of the “black boxes” themselves.

Following Phil Agre’s claim that artificial intelligence is “philosophy underneath”, in this talk, which is based on our forthcoming book, we show how the “philosophy” of contemporary artificial intelligence is not to be found anymore in the famous thought experiments of Turing and Searle, but, surprisingly, in a long chain of historical attempts to compress (visual) knowledge that reaches from the first formalization of vector mathematics and dependent probabilities in the 19th century, through 1980s computational biology research, all the way to the multimodal models of the 2020s. What we uncover in doing so is a significant and previously little understood technical paradigm shift in artificial intelligence research that continues to shape the ideological function of these models. Their capabilities, we argue, are closely tied to the rise of a specific machine learning technique called “embedding”, a technique that has not been studied from the perspective of critical artificial intelligence studies so far. Embeddings, starting in the 1990s, are thought of, and implemented as an abstract geometry for not only representing, but producing knowledge – a development that, surprisingly, is described by the computer scientists themselves as a post-structuralist turn. Vector mathematics – of the kind employed in the famous analogy query of natural language processing, “men + king = woman + ?” – is imagined as a mathematical tool to transcend the training data and reintroduce meaning into the embedding space. While, on the surface, it seems like technocratic notions of human intelligence determine the claim to power of artificial intelligence, it is in fact this epistemic shift that historically structures it. It is thus the epistemology of embedding that ends up shaping, even determining, the epistemology of artificial intelligence in general.

We show how this technical-ideological turn in machine learning eventually leads to the multimodal models of today, models that seem to transcend the media boundaries of the objects they ingest. Text, image, and audio can all be represented by the same model, as just another embedding. We theorize this tendency towards media collapse – a centrifugal pull of commensurability that dissolves media-specific cultural objects into embeddings – as the rise of neural exchange value: value that specific cultural objects obtain once they become part of a multimodal embedding space. We conclude by proposing the study of embedding spaces, and their machine visual culture, as a necessary complement to the study of datasets.

Leonardo Impett is a University Assistant Professor in Digital Humanities and convenor of the MPhil in Digital Humanities. He was previously Assistant Professor of Computer Science at Durham University. Leonardo has a background in information engineering and machine learning, having worked or studied at the Cambridge Machine Learning Lab, the Cambridge Computer Lab's Rainbow Group, and Microsoft Research Cairo. Alongside his research in digital art history, he frequently works with machine learning in arts and culture, including for the Liverpool Biennial, the Royal Opera House, and the Whitney Museum of American Art.

Fabian Offert is Assistant Professor for the History and Theory of the Digital Humanities and Director of the Center for the Humanities and Machine Learning (HUML) at the University of California, Santa Barbara. His research focuses on the epistemology, aesthetics, and politics of artificial intelligence, with recent publications appearing in *AI & Society*, *Visual Resources*, the *Journal of Digital Social Research*, *American Literature*, and *Media + Environment*, among others. His most recent book project, *Vector Media* (Meson Press/University of Minnesota Press, 2025, with Leonardo Impett) writes a new historical epistemology of artificial intelligence, asking how machine learning models represent culture and what is at stake when they do. Fabian is also principal investigator of the AI Forensics international research project on explainable artificial intelligence, supported by the Volkswagen Foundation.

Toward a Critical Formalism: Philosophical and Theoretical Effects of a Mathematical Critique of LLMs

Juan Luis (Gianni) Gastaldi (ETH Zurich)

Neural language models have become central to contemporary artificial intelligence, exhibiting a significant impact on a wide range of social and scientific domains. This pervasive influence renders the development of a solid critical perspective increasingly urgent. Yet, the formal and technical complexity of these models often relegates critique to an externalist stance, focusing on their societal consequences while failing to engage with the internal epistemological conditions assumed to guarantee their claims to knowledge. As a result, such critique frequently culminates in the wholesale dismissal of any epistemic dimension of neural models, without sufficiently interrogating the internal principles that might justify or challenge their legitimacy.

This presentation seeks to move beyond such externalist limitations by advocating for a critical formalism, namely the use of formal tools as instruments of epistemological and philosophical critique. In contrast to traditional modes of critique inherited from Contemporary philosophy, the central claim is that the epistemic status of AI models requires less a critique of formalism from an external standpoint, than a critique through formalism, addressing the conditions of possibility of the knowledge produced through current neural models.

The first dimension of this critical work concerns the epistemological characterization of neural language models. By assuming a strictly formal perspective, addressing these models as computable functions, I will challenge their widespread portrayal as cognitive agents. This reorientation exposes the conceptual inadequacies of prevailing empirical practices, such as benchmark evaluation, mechanistic interpretability, or probing, which fail to account for the formal conditions capable of characterizing the models as such. Positively, this critique suggests a shift in focus: rather than seeking interpretability at the level of the model, epistemological inquiry should turn to the structure of the data itself, to render explicit its implicit structure. Based on a formal representation of this structure, it should be possible to elaborate principled explanations of model performance as well as theoretical interpretations of the phenomena under analysis, whether linguistic or otherwise, while avoiding many of the ideological effects resulting from cognitivist interpretations.

In the final part of the talk, I will outline the core components of an ongoing interdisciplinary research program that assumes this critical formalist perspective. Beginning with a formal

analysis of word vector embeddings, I will build on established results to portray the structure of embedding spaces as determined by the fixed points of distributional or contextual operators. From this basis, I will propose a categorical generalization of these structures, extending beyond the confines of linear algebra, to identify richer structural features characterizing the data, along with symbolic representations for its underlying logic.

Juan Luis (Gianni) Gastaldi is a philosopher of science, specialized in the philosophy of language and formal sciences (mathematics, logic, and computer science). After obtaining an MA degree in Political Science (UNR, Argentina), and an MA and a PhD in Philosophy (ENS/Panthéon-Sorbonne/Bordeaux-Montaigne, France), while studying Mathematics as an undergrad (UPMC, France), he became a Professor in Philosophy and History of Ideas at MOCO.ESBA (Montpellier, France) and a Marie Skłodowska-Curie Postdoctoral Fellow at ETH (D-GESS). He is now pursuing a second PhD in Natural Language Processing at the Computer Science Department of ETH. Gianni's interests revolve around the linguistic aspects of formal sciences and the formal aspects of language and other sign systems, from a technical, philosophical, and historical perspective. He is also interested in the relationship between language and thought, the nature of meaning, and the possibility that a theory of language can inform both a theory of culture and a theory of science. His current research focuses on the computational and conceptual aspects of segmentation (and tokenization) and their relation to linguistic structure and meaning.

Vector Spaces, Embeddings and the Normalization of Meaning

Tobias Matzner (Paderborn University)

The presentation will analyze the way in which vector spaces – in the form of so called “latent spaces” or “embeddings” are engaged in producing the output of large language models and other forms of contemporary generative AI. The talk will offer a close reading of the way in which vector spaces are employed in LLMs and similar forms of generative AI. This includes some live queries to a production-level word embedding model to illustrate the relevant aspects of the functionality. That way, the talk will illustrate how semantic categories and relationships are all conflated into mathematical measures such as the distance between vectors. While this allows for the efficient production of text and other forms of output, it at the same time entails a loss of the context relevant for meaning making.

The sensible production of text and all kinds of nonsense are all qualitatively the same to such a model, just with slight quantitative differences in some mathematical measures. In other words, if the query to a vector space always consists in finding the closest vector to an input vector, any query will “make sense” because mathematically speaking such a closest vector always exists and it can always be turned into language, images and the like by artificial neural networks. In consequence, the talk will argue in contrast to Bajohr and others, who attribute at least a form of “dumb meaning” to LLMs that the meaning of vector space embeddings is only produced through the queries that users make. To be more precise, meaning that makes sense to users may emerge if the users’ queries match certain patterns that have been present at the time of training the model. Each query, in consequence, establishes a relationship between the context of training, including training data, and contexts of application. Thus, meaning is not encoded in the model but rather in a relationship between input data and output data that only can be established pragmatically at the time of execution. In this regard, vector space embeddings or latent spaces are included in the “machine empiricist” (Möding) epistemology that has structured machine learning research since the 1980s and has been a decisive factor in the rise of artificial neural networks as the central technology of artificial intelligence. According to this epistemology, not the relationship between the model and the world (as in “traditional” empiricism) but only the relationship between different data sets that is measured pragmatically at runtime is the decisive factor. By showing how different forms of such relationships provide rather sensible output or fail to do so, the talk argues that vector spaces are optimized for certain contexts and conditions. The idea of the vector space as a medium that can translate between all

languages and even other modalities of input may appear since the model treats all relationships between input and output data mathematically the same. However, its application only makes sense – and is implicitly only intended – for some queries. It is precisely by reducing this mathematical space of possibilities by forcing – or nudging – users into certain query behaviors that vector space embeddings become usable for LLMs. This is the reason why vector or latent spaces need to be considered in the particular form of application that LLMs are.

The presentation will conclude in showing that these optimization process that make vector spaces part of LLMs imply a kind of normalcy. The output of models makes sense if the queries ask what is normally asked and if a reply of what is normally answered or said is sufficient. In this sense, normalcy drives the meaning of LLMs and they can only ever produce normal text.

Tobias Matzner is professor for “Digital Cultures” at the department of media studies at Paderborn University in Germany. His work combines theories of (digital) media and technologies with approaches from political philosophy, cultural studies, and social theory. He has published a book length study on “Algorithms: Technology, Culture, Politics” that introduces a relational and situated approach to algorithms that bridges technological detail with cultural and political dynamics. Recently, his research has been focused on the entanglement of technology with concepts of subjectivity, affect, and autonomy — with a particular focus on algorithms and machine learning. Earlier (and related) research has been dealing with normative theories of privacy. Before joining Paderborn University he worked at the International Centre for Ethics in the Sciences and Humanities in Tübingen and at the department of philosophy at the New School for Social Research in New York as a Feodor Lynen Fellow of the Humboldt-Foundation.

Lost in Vectorization: Where Critical Hermeneutics Meet AI-powered Creative Sectors

Etienne Grenier, Maxime Harvey & Jonathan Roberge (INRS Montréal)

Labeled as a “Stable Diffusion killer,” OpenAI’s ChatGPT-4o model is now able to support fully multimodal exchanges, accepting text or images to generate responses in any format. Within the confines of this new creative context where crossing the text-image boundary is easily achieved, researchers involved in the specialized fields of digital hermeneutics (Romele, 2020) and Critical AI Studies (CAIS) (Roberge & Castelle, 2021) now face a double challenge: how can we study the ongoing alterations of a cultural fabric given that it is in the midst of being “liquified” by GenAI, and how can we create expressive representations of such a state of instability to contribute to the discussions animating the creative industries and the art sector? While critical hermeneutics and the analysis of algorithmic cultures have brought CAIS closer to today’s cultural life of machine learning, the generative capacities of recent models have redrawn the cultural world and therefore ask for a new effort in terms of theorization.

Today’s GenAI context privileges the description of digital objects’ relations through their given weights (Pasquinelli & Joler, 2021), presiding over the protocol exchanges of interoperating machines (Galloway, 2004). Text is king again, even seemingly more autonomous than Saussure (Saussure et al., 1996) initially thought. In this age of AI-powered neo-structuralism, it appears as crucial to turn back to the critical contribution of sociolinguistics and anthropological linguistics (Jones et al., 2025; Schneider, 2024) to understand how language is not merely a syntactic system but is created interactively, in part through the interpretations provided by actors of the cultural milieu, themselves immersed in model-based creative work (Burkhardt & Rieder, 2024). Twenty-first-century AI represents a challenge in terms of understanding who is making sense of AI, where, and how. In Quebec, the mostly French-speaking province of Canada, the latest disruptive wave of Gen AI is affecting the very fabric of the creative industries. Actors in this milieu are expressing a need for concerted action aimed at integrating the voices of artists, technicians and administrators from the creative industries. Such a process could produce an account of the ongoing AI transformation of a North American French minority culture backed by scientific data. It would also allow us to jumpstart a collective and democratic discussion about the future of minority cultures in a Silicon Valley-dominated GenAI landscape.

To tackle the issue, we are assembling an art-science team composed of social scientists, engineers and digital artists to produce a multilayered research database built through

observations conducted during the fieldwork previously described. Pursuing the initial work of the Montreal School of CAIS by promoting an understanding of AI through critical hermeneutics and political economy, we aim to articulate meaning with action and experimentation (Roberge, 2011) within the context of situated algorithmic cultures (Roberge & Seyfert, 2016). We envision the creation of a “dynamic, constructivist and societally embedded understanding of creative AI” (De Vries, 2020) through the production of digital objects and artworks that imagine possibilities for reflexive action about and with the cultural milieu. In line with the recent participatory turn in sociotechnical controversy analysis (Gourlet et al., 2024), we propose to engage with the ongoing translation efforts deployed by Québec’s artistic community through a sociological exhibition situated in the wake of Lyotard’s *Les Immatériaux* (Broeckmann, 2017). Representations based on the work of individuals “actively making sense of these technologies” not only as users and consumers, but also as interpreters, social actors, citizens and artists (Roberge & Castelle, 2021), will offer a glimpse of what sociology can offer once it leaves the realm of academic journals and proposes the production and dissemination of cultural objects. If “data makes the actors speak” (Marres et al., 2024), there is a definite need for expressive representations that will support interpretations of this inscrutable GenAI regime. What does it mean then to reflect on creative work in such a context, and what will be the story artists will tell of this great cultural transformation? The liquid semantic exchanges between text and image occurring within the machine desperately need translation, otherwise too much will be lost in vectorization.

Etienne Grenier is an artist and researcher working in the field of digital cultures. Currently a PhD candidate at the Institut national de la recherche scientifique in Canada, Grenier studies the impacts of datafication on cultural production and contributed as a researcher to the project *Shaping AI*. Maintaining an active creative practice in digital arts, his installations and performances have been presented in leading institutions and major festivals in Europe and the Americas. (www.projet-eva.org)

The Predictive Turn of Language. Reading the Future in the Vector Space

Paolo Caffoni (Staatliche Hochschule für Gestaltung Karlsruhe)

In 2016, Google Translate implemented a single encoder-decoder architecture capable of supporting over 100 languages through shared parameters (Johnson et al. 2017). This shift enabled what is now known as “zero-shot translation” – the model’s ability to translate between previously unseen language pairs without using pivot languages or fine-tuning. Researchers at Google observed that semantically similar sentences across different languages tended to cluster within the same region of vector space, suggesting the emergence of a shared semantic representation – an “interlingua.”

What is the value of prediction in language? While Foucauldian frameworks have attempted to conceptualize prediction within the rationalities of governance – e.g., “zero-shot politics” (Amoore, 2024) – such interpretations often foreground institutional control while sidelining the underlying infrastructural and material transformations. Reviewing the linguistic and philosophical work of the Cambridge Language Research Unit (1955–1970), Lydia H. Liu notes that the theoretical innovation introduced by the “machine interlingua” (Richens, 1956) lay precisely in its rejection of isolated, monolingual mental spaces that had dominated AI discourse (Liu, 2023). Although it may seem anachronistic to compare the social, economic, and intellectual contexts of 17th-century universal language projects (from Descartes to Wilkins) with mid-20th-century machine translation experiments, both eras – as Jacqueline Léon (2002) observes – placed intermediary and universal languages at the forefront of scientific agendas. Leibniz approached the task of inferring the unknown not as a problem of machine ontology – what we might today call computation, neural networks, or AI – but as a question of language epistemology. He coined the term *cogitatio caeca* (“blind thought”) to describe the capacity to perform calculations using words or symbols whose meanings might not be fully grasped (Leibniz, 1685). Today, Bender and Gebru might dismiss *cogitatio caeca* as yet another “stochastic parrot” (Bender et al., 2021). Yet it was precisely this symbolic manipulation of signs to infer the unknown that interested Leibniz. In Shannon’s information theory – an epistemic and political counterpoint to the literary theorizations of Russian Formalism – prediction is linked to uncertainty: the more predictable a message, the less information it conveys (Shannon, 1951). His measures of entropy and redundancy sought to quantify uncertainty, estimating how much could be anticipated within a communication system.

Numerous examples suggest that the “predictive turn” in language cannot be attributed to a single historical moment or technological rupture. Rather than viewing prediction as a byproduct of epistemic truth-seeking, as in Leibniz’s philosophical language, we might understand it as the result of countless micro-abstractions enacted within everyday linguistic practices. This reconceptualization invites a critical inquiry into prediction’s relationship with labor: How does linguistic production in vector space connect with broader socio-economic structures of work? In this light, prediction becomes a mode of command over the future, operationalized through the accumulation of abstracted linguistic traces across digital platforms.

Paolo Caffoni is a PhD candidate at Karlsruhe University of Arts and Design and a research associate at the KIM and AI Forensics research groups. He is an external expert for the ERC project AI Models at Ca’ Foscari University in Venice. He is part of the editorial team of Umbau journal and curates the series Literatursalon in collaboration with HfG and ZKM Karlsruhe. Caffoni studied Literature, Semiotics and Curatorial Studies in Milan. He is faculty member of the New Academy of Fine Arts Milan and was part of the curatorial team of the 2018 Yinchuan Biennale. From 2009 to 2021, he held the position of Publishing editor at the Berlin based publishing house Archive Books and he co-directed the exhibition and public program at Archive Kabinett.

Ungrounded speculations. The vector grounding problem between linguistics and economics

Tommaso Guariento (Ca' Foscari University)

What is the relationship between meaning and value? The Italian philosopher Ferruccio Rossi-Landi dedicated a series of important studies to delineating what he called a homology between linguistics and economics (Rossi-Landi 1977; Rossi-Landi 1983). This type of research has also been addressed by the post-operaist tradition (Marazzi 2008). The purpose of this presentation is to pick up the threads of these traditions and examine how these theories can provide some interpretive avenues for understanding certain limitations of current Large Language Models, with reference to three problems: 1. Model collapse (Gambetta et al. 2025); 2. vector grounding (Mollo and Millièrè 2023); 3. hallucinations (Xu et al. 2024). A historical link exists between theories of value and meaning, starting from Saussure (Molino 1984) up to the relationship between Piero Sraffa and Ludwig Wittgenstein (Sinha 2009).

Following a Marxist approach, model collapse will be analyzed as the tendency of the quality of outputs to fall, motivated by the relationship between human and synthetic data (Pasquinelli 2014). This collapse is also interpreted from a Bayesian perspective, that is, according to a certain epistemic image (Daston 2015) that conceives of psychology, biology, and economics in predictive terms (Hohwy 2014). Through this lens, the problems of hallucination and collapse occurring within large language models are interpreted as changes in probability distribution, or, in a Bayesian sense, as an excessive weight given to priors. Similar phenomena occur in the economic field (Farmer 2024) in the context of economic bubbles where the meaning of prices ceases to be linked to a real referent and becomes self-subsistent. It could therefore be asserted that the three identified problems (collapse, hallucinations, and grounding) depend on an absence of social and referential ties in LLMs. These are problems of self-reference (Yanofsky 2003). However, these analogies do not concern the observed phenomena as much as the presence of a computational, Bayesian, and vectorial model that is indiscriminately applied to heterogeneous disciplinary fields. This model can lead to interpreting psychiatric conditions in probabilistic terms (Weilnhammer et al. 2020; Watanabe et al. 2025) or establish a direct correspondence between distributional linguistics models and neural coding (Pereira et al. 2018; Grand et al. 2022; Mahowald et al. 2024). Such an overlap between models and phenomena must therefore be evaluated with an appropriate anthropological theory of anthropomorphization (Gell 1998).

The thesis I want to defend is that meaning and value are neither purely natural (Rovelli 2016), nor purely biological (Cimatti 2018), nor subjectivist, nor objectivist (Sinha 2013), but substantially social (Vygotsky 2012; Warglien and Gärdenfors 2013; Warglien and Gärdenfors 2015), and conflictual (Goodwin 1984). In this sense, meaning and value must be interpreted as linked to a non-linear bargaining dynamic subject to continuous shifts and readjustments. This also allows for demystifying the idea that the three identified problems (collapse, grounding, and hallucinations) constitute purely theoretical limitations, when they constitute elements of friction in a conflictual dynamic between capital and labor (Santy et al. 2025).

Tommaso Guariento holds a postdoctoral research position within the ERC AIMODELS project, dedicating himself to the study of the multiple manifestations of collective intelligence, employing an approach ranging from philosophy of mind to complex systems. He earned his PhD in European Cultural Studies from the University of Palermo in 2015, presenting a dissertation focused on the concept of heterotopia in Michel Foucault. Previously, he obtained both his Master's and Bachelor's degrees in Philosophy from the University of Padua. He also conducted research periods as a visiting scholar at Université Paris-1 Panthéon Sorbonne and the École des hautes études en sciences sociales (EHESS) in Paris. His academic expertise includes contemporary French philosophy and anthropology, Visual Studies, Anthropocene Studies, cultural evolution, semiotics, and political philosophy.

The Politics of AI Models: Constructing Selves and Social Orders through Programming

Apolline Taillandier (Cambridge University)

In this paper, I explore the political dimensions of AI models of mind and learning. Focusing on the history of Logo, a programming language for education designed at MIT, Edinburgh and other AI labs from the late 1960s on, I study how AI researchers, programmers, educators and psychologists developed and recast political concepts such as the self, society, and the relationship between the two. Logo advocates claimed that programming could increase cognitive performance through introducing both problem-solving procedures and a learning environment for acquiring complex understandings of representations and concepts. The Logo approach, drawing on Jean Piaget's psychology, would tailor education to individual abilities and needs, in contrast with behaviourist-inspired computer-assisted instruction or traditional pedagogies that conceived children as 'empty jugs' and learning as a 'by-product of order.' It would also contribute to a better understanding of general learning procedures – as Marvin Minsky and Seymour Papert wrote, models of natural intelligence and machine learning were symbiotic elements for developing a systematic approach to AI.

I make two main claims. First, the history of computing can be partly rewritten as a history of competing claims to expertise over the mind but also social and political orders. Scholars have shown that Logo, far from a univocal technoscientific project, involved heated controversies over educational philosophy and approaches to programming. Yet they have not devoted the same attention to its political aims – primarily emphasising its libertarian ambitions and underlying entrepreneurial imaginaries. Although most Logo designers sought to engineer knowledge systems that could minimise the imposition of knowledge over children, they disagreed on whether and to what extent learning should be supervised, and whether computerisation should support a mass education system or prepare children for 'a day when schools no longer exist' through encouraging alternative learning and programming 'styles.' I show how this diversity of political aims manifests across sites of Logo research, focusing on conceptions of individual learning, group dynamics, and differences of gender, race, socioeconomic or linguistic background and ability.

Second, AI and programming projects manifest broader reconfigurations of libertarianism and neoliberalism, which recent analyses of AI's reactionary politics do not fully capture. Libertarian views of self and society, prioritising individual property over social dimensions of

rights or human flourishing, are typically held to reinforce an atomist or ossified version of liberal ideology, and to have inspired highly hierarchical or racially homogeneous social experiments. By contrast, Logo advocates, all the while prefiguring the end of state education, often enacted a neoliberal idea of the social as market. Informed by a mixture of cybernetics and critical epistemologies, their model of mind and society gave central attention to the interactions between different knowledge systems and system nodes (teachers, computer networks, children, etc.). Logo's model of the classroom was both a model of the social and a model of the world. As a model of the future 'computer-rich' society, it was a laboratory for the spontaneous growth of a variety of human minds and computer cultures. As a model of the world, it prefigured how expanding computerised education worldwide would dismantle the 'rampant centralism' of the US school system, a vast network of institutions 'more akin to a state bureaucracy than to the society of physicists.' The history of Logo complexifies the established historiographical divide between symbolic AI and cognitivism, bringing attention to a form of AI neoliberalism that historians have traced primarily within connectionism. It also sheds light on the complex politics of spontaneous market orders, beyond their much-discussed reactionary elements.

Apolline Taillandier defended her thesis entitled "In the Name of Posthumanity: Visions and Justifications of Liberal Order in Contemporary Anglophone Transhumanism" on May 28, 2021 at the Centre for European Studies and Political Studies and MaxPo, under the supervision of Jenny Andersson. She is currently a postdoctoral research associate at POLIS (Department of Politics and International Studies) and the Leverhulme Centre for the Future of Intelligence at the University of Cambridge, and at the Center for Science and Thought at the University of Bonn. In her postdoctoral research, she investigates the historical role of feminist thought and activism in the critique of computer technology and the remaking of artificial intelligence as a scientific project from the 1980s onwards. In the context of rising concerns about the discriminatory and stratifying effects of AI, she studies the transnational circulation of ethics and gender justice norms and their reinterpretation and appropriation by scientists and industry actors, focusing on European and U.S. American sites of technical AI research.

Managing Language, Work & Language Work

Nina Markl (University of Essex)

Language technologies are used to both manage language workers (e.g., assessing performance, tracking behaviour), and more specifically manage language by promoting or discouraging particular kinds of practices and beliefs. The former phenomenon can be understood within the larger framework of ‘algorithmic management’ (Lee et al. 2015; Jarrahi et al. 2021; Gent 2024) while the latter is what I call ‘algorithmic language management’. If workers are forced (or strongly incentivised) to adopt language technologies as part of their linguistic work (e.g., translation, teaching, writing, communicating with customers), they alter the work process and outputs in ways which could degrade their experience and devalue their work. In this way, language technologies can manage workers (and their work) in both the immediate term (e.g., by facilitating real-time ‘insights’ into performance) and the long-term (by shaping what that work looks like). These often operate in tandem, especially in the context of digitally-mediated and algorithmically-monitored language work such as call centre work.

I argue that language technologies are not just downstream of language management, but are perhaps more usefully understood as language management (as established in Language Policy research: Spolsky (2019)). I draw this distinction because I think it’s analytically useful to analyse language technologies as the materialisation of broader ideologies. As Sadowski puts it succinctly, “technologies articulate broader dynamics—political, economic, social, cultural, moral—and give them material form in the world” (Sadowski 2025, p. 6). These dynamics include the language ideologies, which, as Irvine and Gal noted, “locate linguistic phenomena as part of, and evidence for, what [language users] believe to be systematic behavioral, aesthetic, affective, and moral contrasts among the social groups indexed” (Irvine and Gal 2000, p. 37). It’s politics (and policy) all the way down. Language technologies reflect and reproduce the political, social, cultural and economic conditions, and, indeed, language policies they are developed within.

This paves the way for technologies which promise, or threaten, removing workers from language work. Sometimes this threat is implicit, as in the common invocation of ‘magic’ in the context of language technologies, as exemplified in marketing by Google Translate: “Upload your files to magically translate them in place without losing their formatting”. Other times, it is explicit, as in the pitch by AWS to business customers which emphasises that the accession of new linguistic markets is possible “without the need of a human translator” (Tran and Wilkes 2022).

Alternatively, machine translation is often pitched as a tool to make language workers more “productive”, as seen in marketing by Microsoft translator: “Machine translation has been used as a first pass by several of our language service provider (LSP) partners, before using human translation; it can improve productivity by up to 50 percent”. Ultimately, what is promised here is a future in which the frictions, inefficiencies and ambiguities in linguistic interaction and communication are removed.

Nina Markl research focuses on the social, ethical and philosophical aspects of artificial intelligence and language technologies, incorporating methods and concepts from science and technology studies, feminist philosophies, sociolinguistics, design and computer science. She is interested in how communication technologies shape human interaction, including linguistic behaviour and beliefs, and how existing and emerging social relations shape technology development, deployment and use. She is particularly interested in the ways in which power relations and power struggles are made material in digital technologies. She approaches this research through an interdisciplinary lens, paying particular attention to the historical, social, political and legal contexts of technologies. Before joining the University of Essex, she completed her PhD at the UKRI CDT for Natural Language Processing at the University of Edinburgh where she applied her sociolinguistic training and focus on automatic speech recognition tools.

The Life of the Sign and Its Interchangeability Through Automation

Marvin Tritschler (University of Stuttgart)

In my talk, I will argue that since, as Wittgenstein has shown, the life of the sign is to be found in its use, the automation of the production of signs through machine learning can only ever achieve an illusion of meaning, which is based on a generalized interchangeability of linguistic outputs. The temptation to falsely attribute different aspects of language use to Large Language Models (LLM), such as beliefs, mental states, manipulative capacities and linguistic or conceptual understanding has its roots in our tendency to misunderstand what the life of a sign consists of. Just as Marx has shown that we usually take a commodity to be what on its own has economic value, since it is natural to overlook that it is labor by beings like us that produced the value, we often think that the life of the sign must consist in how it is used for other means rather than taking it to be itself an expression of the life of beings like us. My main argument will be that there is more than a mere analogy, but rather an essential connection between Wittgenstein's account of a meaningful sign and Marx' account of a valuable social relation.

Marvin Tritschler is a research fellow at the "Interchange Forum for Reflecting on Intelligent Systems" (IRIS) at the University of Stuttgart, where until recently he led a research group on the subject "Public Reason and generative AI". He received his PhD from the University of Leipzig in 2023. The topic of his dissertation was how thought relates to time, especially in the works of Kant, Frege and Wittgenstein. He studied sociology (B.A.) and philosophy (B.A. and M.A.) at the Ludwig-Maximilians-Universität München (LMU), and stayed abroad for research at the Università degli Studi di Padova and the University of Chicago. He is currently working on two projects: the relation between continental philosophy of language and the analytic tradition, and the effects generative AI could have on our concept of public reason and whether in a digital society, we are in need of a new enlightenment.

Cosine Capital: Large Language Models and the Embedding of All Things

Mikael Brunila (McGill University Montreal)

My talk describes the emergence of a novel form of capital—which I call “cosine capital”—that finds objectified form in the so-called “embedding” structures of large neural models. In the past decade, massive neural network architectures transformed computational approaches to language in the form of LLMs. This approach to modeling language is now being adapted to nearly any sequential data structure imaginable in both academia and industry. While these technologies have been hailed as revolutionary, I situate them within a continuous technological and philosophical lineage that runs directly back to the origins of cybernetics and information science, in particular Claude Shannon’s noisy channel model of communication. I imagine this noisy channel as a sort of “diagram of power,” arguing that the same process of “enclosure” that commodified the bit as the foundational unit of information is now taking place with embeddings, objectifying them as fungible commodities across an increasing range of societal domains.

While the embedding is distinct from the bit, I argue that the ongoing “semanticization” of information started already with early information theory. Paying particular attention to not only Shannon but the works of Ralph Hartley, Warren Weaver, and Zellig Harris, I argue that meaning appears in information theory not only through enclosure, but also disclosure. I show how these pioneers in information theory drew on four different language ideologies to present meaning as contractual (Hartley), referential (Shannon, Weaver), intentional (Weaver), and, finally, distributional (Weaver, Harris). It was only Harris’ distributionalism that properly prepared the ground for the semantic interpretation of the noisy channel and current day emergence of cosine capital.

Finally, I compare this “cosine capital” to Fourcade and Healy’s recent notion of “eigencapital,” suggesting that the particular technical features of embeddings—specifically, their inherently relational nature—challenge the eigencapital model and instead represent a fundamentally novel formation of capital with strong implications for the future of capitalism and technology.

Mikael Brunila is a Montreal-based postdoctoral researcher who recently defended his PhD thesis on information theory. His academic research has been published in outlets for computational linguistics (EMNLP, NAACL) and geography (JAPA, GIScience, Transactions in GIS). His current project applies information theory to understand structural properties of ownership networks in the real estate market as well as shipping networks in logistics. In addition to his academic work, Brunila has published four books and is currently working on an open-source application for encrypted mapping. In the 2000s, Brunila was involved in organizing solidarity actions against file-sharing lawsuits through the Helsinki squatters' movement.

The Latent Space of Meaning and the Novel: World Models in AI and Literature

Hannes Bajohr (Berkeley University)

“A world—nothing less—is the theme and postulate of the novel,” wrote Hans Blumenberg in 1963. At that same moment, AI research, already emerging from its early optimism, turned to “world models” as a means of stabilizing its brittle systems. Today, these two conceptions of “world”—the literary and the computational—converge in large language models (LLMs), which use their latent spaces not just to generate plausible sentences, but entire narratives, even novels—albeit with still uneven results. To what extent, then, can the “worlds” of the novel and of AI be considered analogous? What productive parallels emerge when one attempts this comparison? The talk develops the claim that structured assemblages of relations, events, and inferences form a continuum—from literary to computational—that allows us to meaningfully interrogate notions like coherence, causality, and semantic integrity even in ungrounded but holistic symbolic systems. Both novels and LLMs, I argue, operate within networks of relationality that can produce a kind of “hanging-together” even when classical forms of logical coherence are absent. It is precisely the graded difference between literary and AI-based world models that clarifies the contemporary conditions under which meaning is made—or fails to emerge.

Realist and naturalist novels build patterned universes of social and physical forces; genre fiction formalizes world-building through imagined geographies or ontologies. Even modernist fragmentation retains an underlying world-logic. These literary techniques offer a lens through which to assess LLM-generated texts. Early AI world models, like SHRDLU, used symbolic logic but proved brittle outside constrained domains. Today’s LLMs instead rely on distributed, relational vector spaces that are read as holistic representations of statistical regularities. Some researchers—and many a tech CEO—suggest these models form internal representations of reality. My own experiment with a fine-tuned German-language LLM produced text that lacked causal coherence but displayed stylistic unity—a case of “cohesion without coherence.” These LLM outputs, nevertheless, are not unstructured. They may be read as exemplifying “weak world models” that are relationally dense but inferentially shallow. Like certain experimental novels, they evoke meaning through a “weak force” of association rather than strong narrative causality. This talk tries to follow these ideas and aims to resist both overhyping LLMs’ understanding and dismissing them as mere mimicry, placing AI-generated fiction, as the meeting points of the two uses of “word,” within a broader theory of modeling and meaning.

Hannes Bajohr is an assistant professor in the Department of German. He has published extensively on the impact of digital writing technologies on language and literature, the German philosophical tradition in the 20th century – especially the connection between phenomenology and anthropology – as well as liberal and republican political theory. A particular interest connects him to figures like Hans Blumenberg, Hannah Arendt, Peter Weiss, and the political theorist Judith N. Shklar, six of whose books he has edited and translated into German.

Professor Bajohr is not only a theoretician but also a practitioner of digital literature. He has published numerous generative works as a part of writers' collective 0x0a, including the volume *Halbzeug* (Berlin: Suhrkamp, 2018), which was translated into English as *Blanks* (Denver: Counterpath, 2021). In 2023, he published *(Berlin, Miami)*, a novel co-written with a self-trained large language model. Currently, he is working on a project about "post-artificial writing," the impact of generative AI on literary reading expectations; and on another on "negative anthropology," a strand of German philosophy that eschews any definition of an "essence of man" but still insists on making the human the main focus of its attention.

New Parameters of Power: On LLM-based Manipulation and Control and the Specter of Strategic AI

Jonnie Penn and Yaqub Chaudhary (Cambridge University)

In this talk, we sketch out emerging market dynamics related to the future of computing. Our focus is American technologists' aspirations to make LLMs, foundation models, and generative AI the first point of contact between users and information resources. We highlight that conversational interfaces are only the most visible manifestation of more sweeping transformations that aim to re-shape the way the public engages with information online. To lend structure to this emerging research area, we connect LLMs novel technological possibilities to the ever-steeper valuations of their corporate developers. We argue that the centering of generative computing entails a major transition in the theory of design of computer interfaces from theories that originate in behavioural economics toward psychologized conceptions of economic agents that recognise - and adapt to intervene on - the interiority of agents in their decision making processes.

To advance this case, we identify four key features of what we speculate could become a major turn in the political economy of large-scale connected computing infrastructure. We refer to this horizon as the 'intention economy' (Chaudhary and Penn, 2024). The features in question, which we shall introduce in a moment, can be understood as of value to parties who seek to collect, infer, anticipate, and intervene upon signals of human intention. We argue that the role of LLMs, foundation models, and generative AI within the intention economy is to provide new possibilities and capabilities for intent collection, registration, categorization, and suggestion. Building on existing dynamics within the attention economy, which invite similar potentialities, LLM-based conversational interfaces provide a wider channel to simultaneously infiltrate and exfiltrate user behaviour. As complex computational artefacts, the mass adoption of such tools would provide a vast parameter space to encode and intervene upon users' patterns of thought.

To substantiate our account, we conceptualise four types of power made possible by the rapid and largely unregulated adoption of LLMs. Large language models (LLMs) can reproduce a wide variety of rhetorical styles and generate text that expresses a broad spectrum of sentiments. This capacity, now available at low cost, makes them powerful tools for manipulation and control. These include the power to: (i) pollute and uniformize information environments, (ii) persuade users via conversational interfaces (e.g., via "AI personas"), (iii) create novel computational models of human agents (e.g., "silicon subjects") and (iv) create novel computational models of human

agent populations (e.g., “silicon societies”). We draw attention to Meta’s “Cicero” model as a proof of concept for how such techniques can be used to produce controllable and steerable strategic dialogue models. We draw these strands together to argue that coordinated use of such techniques make LLM-based systems powerful instruments of individual, social and political control.

In line with Edwards’ account of techno-politics, we focus on how the ensconcement of LLMs in global advertising infrastructures might co-construct its stabilisation into social worlds (Edwards, 2003), and deepen the longstanding hegemony of seemingly “participatory” network logics (Mejias, 2013; Han, 2017; Chun and Barnett, 2021). While AI safety research has asked how AI might deceive its human operators (Brundage et al., 2018; Carroll et al., 2023; Hagendorff, 2024), it has also tended to mistake such persuasive capabilities as a bug rather than as a feature. That the development of LLMs is deeply ensconced with the prerogatives of the advertising industry (Meredith, 2021) raises significant questions over their proposed use across public life (Marlin, 2002: 13; Zollmann, 2017).

Jonnie Penn, FRSA, is an Associate Teaching Professor of AI Ethics and Society at the University of Cambridge. He is a historian of technology, a #1 New York Times bestselling author, and public speaker. Penn serves as a Faculty Affiliate at the Berkman Klein Center at Harvard University, a Senior Research Fellow at the Leverhulme Centre for the Future of Intelligence, a Research Fellow and Teaching Associate at the Department of History and Philosophy of Science, and a Research Fellow at St. Edmund’s College. He was formerly a MIT Media Lab Assembly Fellow, Google Technology Policy Fellow, Fellow of the British National Academy of Writing and popular broadcaster.

Yaquub Chaudhary is a Visiting Scholar at the Leverhulme Centre for the Future of Intelligence. His research interests are highly interdisciplinary and the central themes of his research include the epistemology of AI, ML and digital computation, and their use in science and the humanities. His wider research interests span philosophy of science, philosophy of technology, philosophy of mind, history, religious studies, the social and political sciences, and other fields. He completed his doctoral studies in Physics at Imperial College London in the field of Plastic Electronics. He has written on Islam and AI, the use of AI in the ecological sciences and climate change research, the metaphysics of AI, and on emerging technologies such as the philosophy of augmented reality.

A Matter of Disruption, a Case for Preservation: Literary Powerplay In/Against an AI Paradigm of Language

Anna Luhn (Freie Universität Berlin)

“What is the role of literary language and labour in the new knowledge economy of AI?” As a new global, techno-linguistic regime of AI is installing itself at a rapid pace, contemporary practices in the field of literature and the critical humanities are currently (re-)instituting themselves as one key instrument to, firstly, investigate the momentous changes brought about by the at-scale implementation of Large Language Models in world-wide mainstream activities, and, secondly, to intervene into the new language regime imposed by this shift.

As widely shown in modernist and postmodernist studies, progressive literary production of the nineteenth and twentieth centuries has not only functioned as a seismograph indicating the radical change of certain language doxa at a given historical moment – it has also been one of the main driving forces of agitation against that change, fuelled by a concrete desire to fundamentally reshape the conditions of reality. Accordingly, the call for new poetic forms by modernist, avant-garde, and neo-avant-garde movements was underpinned by a strong ideological impulse to exert social and political influence. My talk suggests that the characteristics of the current linguistic paradigm shift and its societal repercussions can be fruitfully discussed via the conceptual framework of a ‘Sprachkrise’ (language crisis), that is, by paralleling and contrasting it with preceding historical configurations that are characterized by a fundamental destabilization of those prevalent beliefs and epistemic groundings which address language as a communicative means, a cultural technique, and a general *conditio humana*. As in the present paradigm break, these past critical shifts are only to be understood in the context of their deep entanglement with technological developments: they occurred in confrontation with or responsiveness to new technological media of (inter)action. Operating both at the level of the producers of aesthetic works and everyday culture at large, such critical constellations, I will argue, exerted a profound and irreversible effect on society’s grip on language.

Following a comparative discussion of these multimodal conglomerates of ‘language crisis’ as an influential force regarding the capacity to perceive, practice, and circulate linguistic matters of a certain kind in a certain way, and taking into consideration the avant-garde and neo-avant-garde language politics of the twentieth century, the second part of the paper will focus on exemplary poetic sites and modes of action at odds with the current reforming and

reframing of language according to the AI paradigm, and will discuss intentions, claims, and effects.

Anna [Anouk] Luhn. Comparative Literature, French Philology, Law and German Literature at Ludwig-Maximilians-Universität Munich and Université Paris IV – Sorbonne from 2006 to 2012, supported by a scholarship from the German National Academic Foundation. Traineeship at Haus der Kulturen der Welt (HKW) Berlin (2013–2014), assistant within HKW's Anthropocene Project, and project coordinator of HKW's interdisciplinary research project Technosphere until 2016. Ph.D. at Freie Universität Berlin (2016–2020), receiving a doctoral scholarship from the Friedrich Schlegel Graduate School for Literary Studies. Postdoctoral researcher (Professional Track) with MOTDYNAMO, a project on experimental concepts of translation and digital literary practice at EXC 2020 "Temporal Communities: Doing Literature in a Global Perspective", Freie Universität Berlin. Research Fellow at the International Research Centre for Cultural Studies (IFK) | University of Arts and Design Linz in Vienna in 2022. Since 2023, conceptual lead of CONSTELLATIONS, a hub for collaborative, interconnected, and transdisciplinary formats at the Cluster of Excellence "Temporal Communities".

Large Language and Models of the Other: A Semiotics of the Token

David Bering-Porter (The New School, New York)

This talk explores how LLMs might be read as a concrete manifestation of Jacques Lacan's theoretical framework concerning the "language of the other." As Bruce Fink describes it, the language, or discourse, of the Other is composed out of the field of language and the networks of discourse that make up the symbolic order². I seek to demonstrate how LLMs embody the fundamental psychoanalytic insight that language precedes and shapes subjectivity. The statistical learning processes underlying LLMs reveal striking parallels to Lacan's proposition that "the unconscious is structured like a language," as these models construct meaning through predictive relationships between signifiers without access to a signified.

LLMs do not strictly model language but, instead, model a kind of fragmentary textuality, this talk seeks to explore a semiotics based not on the sign but on the token: a sublinguistic fragment that serves as the basis for modeling linguistic structures and considering how the technical process of tokenization fragments language into discrete computational units³. This fragmentation process illuminates the arbitrary nature of the signifier while simultaneously generating new insights into language's underlying structure. This suggests that the token – as the atomic unit of meaning in LLM architecture – represents a technological instantiation of Lacan's concept of the signifying chain, where meaning emerges through difference and deferral rather than direct correspondence to external reality.

This framework offers novel insights into how language functions not merely as representation but as a generative system with its own logic and agency. LLMs and machine learning systems offer new models of the Other, which can form around new insights into understandings of language at scale. The vast archive of human writing that constitutes the training corpus for LLMs provides a remarkable instantiation of this Lacanian concept of the big Other / le grand Autre. This archive of over a petabyte of data and trillions of parameters, reveals a vision of the symbolic order that precedes and exceeds any individual subject in computational, if not materialist terms. The homophonic resonance between the "A" of the archive and the "A" of "Autre" is not merely coincidental but symptomatic of a deeper structural affinity: both represent the trans-individual repository of signifiers that structure experience and form from

² Bruce Fink, *The Lacanian Subject: Between Language and Jouissance*

³ Tyler Shoemaker, "Concatenative Textuality"

which subjectivity emerges. Developing a semiotics of the token, particularly as it engages with the problem of fragmentary meaning and sublinguistic structure, offers the possibility for new insights into the corresponding changes in politics, subjectivity, and cultural production. As LLMs ingest and reconfigure the archive, they perform the very operations attributed to the other; the organizing of signifying chains, the perpetuation of symbolic law, and the mysterious determination of meaning beyond conscious intention.

David Bering-Porter is Assistant Professor of Culture and Media at the Eugene Lang College of Liberal Arts at The New School. His research interests bring together digital media theory, media studies, and the intersections of race and political economy and he teaches regularly on generative media, artificial intelligence, and race and the digital. He is a founding member of the Digital Theory Lab at NYU and is an ongoing member of the steering committee for the Code as a Liberal Art program at The New School. For his work in pedagogy and the digital humanities, David was the recipient of the Lilly Teaching Fellowship in 2015 from Michigan State University. His current book project, titled *Undead Labor: Capitalist Fantasies and the Uncanny Vitality of the Zombie*, is under contract with the University of Minnesota Press and explores the ways that race, labor, and value come together in the mediated body of the zombie. David's writing has appeared in the journals such as *Critical Inquiry*, *Flow*, *MIRAJ*, *Post 45*, *Culture Machine* and the *Los Angeles Review of Books*.

‘Forms of Life’: an Applied Investigation of Large Language Models through the Lens of Philosophy of Language

Alessandro Trevisan (Cambridge University)

The advent of ChatGPT and other large language model (LLM)-based chatbots has enabled us to converse in natural language with non-human entities. In this paper, I investigate this novel dynamic through the lens of Wittgenstein’s philosophy of language. I draw on his ‘later’ writings to explore the status of LLMs as language users, and find particular pertinence in Wittgenstein’s notion of ‘form of life’. Taking this concept to express his view that language can function only within a shared socio-cultural and physiological framework, how are we to read the language produced by LLMs—machines with which we do not share a social context (even though they might be trained to simulate one), let alone our physiology? How does this machinic language differ from ours? To tackle these questions, I examine the semantic relations learned by LLMs during their training and encoded in their ‘embeddings’ and ‘weights’. Specifically, I regard the dimensions of an LLM’s embeddings as expressions of an exotic form of life—structures created independently of human guidance through ‘unsupervised learning’. These vectors are, indeed, notoriously difficult to interpret: while some of their dimensions occasionally correspond to recognizable semantic concepts, most remain completely obscure to us.

My objective, in the second half of the paper, is to foreground a method for reading LLM-generated outputs that highlights these highly complex and obscure semantic relations, which are often hidden below a polished and competent style. The language-based investigation of LLMs I propose is inspired by the later Wittgenstein’s ‘therapeutic’ philosophical method. However, while Wittgenstein prescribes this to get to something deeper, to the convictions—or, in his words, ‘pictures’—that underpin individual linguistic expressions, the utterances produced by LLMs are grounded solely in the statistical patterns learned from training data—patterns that I term ‘forms of language’. It is in the context of these forms of language, therefore, that the semantic choices of an LLM have to be analysed. In the absence of an extra-linguistic form of life, indeed, it is forms of language that define the social context that the model is to simulate. I demonstrate this point empirically, noting that even slight linguistic alterations to the form of a prompt—let alone to its semantic content—can change the ‘language-game’ the model enacts.

This recognition, I suggest, demands a new theory of meaning for LLMs. To this end, I propose a ‘functional theory of sense’, by which the meaning of a prompt, for an LLM, is given by the distribution of continuations it renders probable at the ‘token’ level. In the final part of my

paper, I outline a methodology for the close reading of these token distributions, proposing it as a critical approach that can be extended to interpret longer outputs. I argue that the discrete meanings of the predicted tokens must be read as collectively enacting a pattern of linguistic use and, thus, as simulating a social context—not as asserting a proposition.

Alessandro Trevisan is a 2nd year PhD student at the University of Cambridge, affiliated with Cambridge Digital Humanities and the Faculty of English. His research, funded by St John's College's 'Benefactors' Scholarship' and supervised by Dr Leonardo Impett, focuses on the study of Large Language Models (LLMs) through the lens of philosophy of language. In particular, he draws on the 'late' Wittgenstein's philosophical method to explore the semantic relations (and, by extension, the *Weltanschauung*) constructed by LLMs during their training. In the summer of 2024, he was a student mentor for Google DeepMind's 'Research Ready' programme: this work led to a paper, co-authored with Professors Alan Blackwell and Sarah Dillon and accepted for publication by 'Critical AI' (Duke University Press), on the automatic detection of AI-like 'slop' in different language games played under late capitalism. Alessandro came to Cambridge to read for an MPhil in Digital Humanities, thereby developing an interest in the narrative forms and tropes deployed by LLMs in their outputs. Before that, he read for a BA in English at the University of Bristol, gaining a strong theoretical grounding in the critical framings he is now applying to the analysis of LLMs.

Meaning and Metaphor: Making sense of LLMs

Ann Copestake (Cambridge University)

Behind Large Language Models (LLMs) is a long history of research in Natural Language Processing and allied topics, most clearly in the tradition that one of us refers to as ‘machine empiricism’ (Moeding and Matzner, submitted). Compared to earlier systems, over the last few years there has been a massive increase in scale (due as much to the effective deregulation of copyright as to the huge expenditure on highly polluting compute) and a corresponding increase in hype. Both scale and hype are primarily driven by intense corporate competition and by the belief that these systems are leading towards Artificial General Intelligence (AGI), combined with the (unimaginative and generally unstated) assumption that AGI will be humanoid. Indeed, some recent developments can be seen as providing LLMs with a human mask.

In this paper, we want to challenge this by rejecting the I in AI/AGI, and by extension the idea that ‘intelligence’ is a useful concept for the development and critique of current technology. Instead, we investigate how the linguistic notion of meaning might provide a useful tool to talk about the abilities and limits of LLMs, as well as the new types of cognitive load they impose on their human interlocutors.

The context in which we are working is an interdisciplinary pilot project ‘Exploring novel figurative language to conceptualise Large Language Models’. Funded by Cambridge Language Sciences, this project is aimed at helping both specialists and non-specialists gain a more precise understanding of the technology and its implications. Finding good metaphors and other forms of figurative language to describe LLMs is extremely challenging. By a ‘good’ metaphor, we mean something that enables discussion of the technology — ideally, allowing prediction what it can and can’t do, and appropriately contextualizing it. So what we are after here is, ideally, an account that is intuitive and informative for non-experts.

The notion of AGI itself evokes tropes of god-like supernatural beings (in the best case) or ill intentioned, self-replicating space invaders (in the worst case). Both of these metaphors are deeply unhelpful and indeed potentially dangerous, for instance if important decisions are outsourced to systems. In the presentation, we argue that a) the concept of ‘intelligence’ is vague and not useful in the context of understanding machine learning systems (for experts or non-experts); b) meaning, in both its lexical and formal aspects, is instead a fundamental aspect

of language and thought that can be measured and probed; c) in interactions with LLMs, the meaning-making work is currently nearly entirely relegated to the human side of the interaction.

Ann Copestake is Professor of Computational Linguistics at the Department of Computer Science and Technology, University of Cambridge. Her research involves developing computer models of human languages (or, more precisely, models of some aspects of human languages). In conjunction with DELPH-IN, an informal international consortium, she has developed software which has been used to develop formal computational accounts of the syntax and compositional semantics of many different languages. Her current research mainly concerns the development of models of semantics which are compatible with broad-coverage computational processing (parsing and generation). She is also interested in the formal aspects of combining distributional semantics with model theoretic accounts and in utilising DELPH-IN technology to establish the performance of deep learning systems according to linguistic criteria. She has worked on a variety of application areas including scientific text processing, information extraction, augmentative and alternative communication, machine translation, Natural Language Interfaces, lexical acquisition and on tools for lexicographers.

Language, Liquidated

Pierre Schwarzer, New York University

LLMs have become the symptomatic nexus of misunderstandings – both between and within the public sphere and academia, where computational approaches to language clash with the hermeneutic tradition. Intensified by the hyperbole of marketing and contemporary eschatologies, these differends point to the need for new frames and concepts to think through the transformations of our present beyond the repetition of faded promises.

This paper argues that LLMs effect a threefold liquidation of language. In a first step, language is financialized, captured and offered as a service via tokenization, which de- and recontextualizes text for the sake of calculability and monetization. For large-language models, correlation and complexity have a purely formal meaning and order of magnitude, as opposed to living organisms. Hence, hermeneutics, critique, and regimes of mediation are liquidated by the efficiency of machine learning and pattern-matching. Lastly, this liquidation reveals or clarifies modalities of language distinct from its communicative use, namely the emergence of meaning out of a structure of variants composing a linguistic system, and an alien poetics of intertextuality. Mistakenly thought to be about language cognition, not least because of a projection facilitated by the chat-interface, transformer-based models are simulations of language use. Their scale and the multiplicity of vectors embedded in each token constitute an opacity that, instead of being viewed as a set of mathematically controlled variants, serves as a projection surface for our own anthropomorphizing. Neural nets, through highly weighted matrices and their sheer scale, brush over the complexities of inference for an accelerated ‘good-enough’ output of flattened language, bare of context and empirical dimension.

As the distinction between the semantic and asemanic ceases to matter, we, as users, are met with a statistical simulation of deductive reasoning, and a simulacrum of language, a copy without an original. In this sense, AI models are anarchives: their data is not ordered by any intelligible, transcendental principles. Their hyper-indexation collapses the distinction between reality and fiction. Inseparable from the political economy in which they emerge, current LLMs are meant to be or become domain-agnostic and predictive: they impose a virtuality whose immanence pertains less to the world than to the contingency of their training sets. While no model claims accuracy, all current contenders in the field promise a totalization that is at once always deferred, encouraging an accelerated conversion process in which common sense encourages us to liquidate our enunciation. As representation and mediation are short-circuited,

the gap between model and world is resorbed and models engender their own reality, oozing into culture.

As the curiosity of deep learning is domesticated by the cost-function that translates the particular interests behind LLMs, a new, alien kind of meaning, emerges out of the de-historicized and decontextualized intertextuality of tokenized language.

In conversation with the work of Bernard Stiegler, this liquidation of language is read in continuity with a crisis of meaning unfolded by modernity, highlighting the need for a new critique of impure reason that would allow us to resist the reactionary imperatives of the present algorithmic governmentality.

Pierre Schwarzer is a PhD candidate at NYU's Department of French Literature, Thought, and Culture and a fellow of the "Knowledge Alphabets" and "Digital Theory" laboratories of the Center for the Humanities. His dissertation "Unforeseen supplements : Bernard Stiegler and the Digital Transformation" seeks to contextualize Stiegler's philosophy of technics within current problems surrounding the rise of AI. It is supervised, among others, by Emily Apter, Alexander Galloway, Catherine Malabou, and Leaf Weatherby. Pierre's teaching appointments include Parson's School of Design and the Berlin University of Arts, while his writing was published in *Texte zur Kunst*, *Jacobin*, and in the co-edited volume "en plein air – ethnographies of the digital" (Spector Books, 2019). Forthcoming in June is an article for *CLCWeb's* special issue "AI and/as form". He is a member of the editorial committee of "Les Temps qui restent".

The Birth of Synthetic Agents: From ‘World as Language’ to ‘Agency as Language’

Aditya Nayak (University of Pittsburgh) Aditi Vashistha (Western University)

Aakash Gautam (University of Pittsburgh)

Synthetic agents are conceived as proxies for human participants in processes such as policy deliberation, design deliberations, and even legal jury decision-making. The synthetic-agents are intended to replace the need to consult diverse participants including those from marginalized sections of the society. This replacement is being justified on the basis of a technical claim to a ‘reasoning’ capability achieved by the Large Language Models (LLMs) based upon the Transformers architecture. Since the models can be trained on past data of decisions made by human participants in deliberative processes, it is assumed that the models can use their reasoning capability on new real-world scenarios, and in effect replicate the agency of the human participants.

This paper interrogates the technical claim of reasoning capabilities of synthetic agents through an analysis of the epistemic methods of knowledge representation in LLM architecture. We revisit the early philosophical debates around language and its computability in the paper. While the LLMs were trained on linguistic data freely available on the internet, it was discovered that the process of knowledge representation as a tokenized vector space was applicable to non-linguistic tasks as well. The discovery echoed the understanding of neo-structuralist linguistics that agency or intelligence is contained in the fabric of linguistic interactions. This also gave LLMs a general-purpose horizon leading to the resurrection of the Artificial General Intelligence (AGI) race between big-tech companies.

Our interrogation reveals that this claim to agency or an artificial ‘mind’ of synthetic agents depends heavily on human-moderation, and human-generated data on the internet. In the absence of this touch with human laboring ‘body’, the models fail into the problems of ‘hallucination’, errors, and even ‘model-collapse’ where the generated outputs become entirely inaccurate. The methods to deal with hallucinations like Retrieval Augmented Generation (RAG) rely on online fact-checking methods using human-generated content and further demonstrate the dependence of LLMs on human labor. Our analysis reveals that terms like ‘intelligence’, ‘reasoning’, ‘hallucination’, ‘attention’, ‘thinking’, etc. are tactics of anthropomorphizing a technical apparatus and feigning agency by deliberately hiding the human labor which enables

the act. We argue that synthetic agents are incapable of replacing human participants in deliberative processes.

Aditya Nayak is a PhD student at Department of Information, Culture and Data Stewardship (ICDS), School of Computing and Information, University of Pittsburgh. He works in the Socio-Technical Systems for an Interdependent World (STIW) Lab. His PhD work is focused on Human-Computer Interaction (HCI), and Human-Centred AI through community-engagement. Aditya's background training is in Political Theory and Philosophy. He has previously published around 'AI and the Future of Work', affective labour, time-perception, and algorithmic governmentality.

Aditi Vashistha is a PhD student at Faculty of Information and Media Studies at Western University, Canada. She works on Psychtech, formation of self and self-identity through technological mediation, practices of health informatics and HCI. She has a background in Political Philosophy and Social Anthropology.

Aakash Gautam is an Assistant Professor with dual appointments in the Department of Computer Science (CS), and Department of Information, Culture and Data Stewardship (ICDS). He is the founder of the STIW Lab. Aakash's interest lies in designing socio-technical systems to realize an inclusive and just society. His research falls across Human-Computer Interaction (HCI), learning sciences, and community-based participatory action research.

What is not Language in Language. Literature as a Laboratory of Philosophical Anthropology in the context of LLMs

Luz Horne (Universidad de San Andrés)

This paper explores the role of literature in the context of AI's emergence, contrasting the structure of language as proposed by Large Language Models (LLMs) with a series of theories and examples taken from Latin American Literature that reveal how the very condition of possibility for language and literature lies outside their own structure.

With the latest developments of Large Language Models (LLMs) and their use for the creating literary texts, the debate whether these texts can truly be called literary – and whether AI, in fact, can write literature arises. Likewise, longstanding questions that once underpinned a sacralized and conservative vision of literature now take on new meaning and are being reconsidered: Can a textual construction that lacks a foundation in real experience, the body, or sensibility still qualify as literature? What kind of literature emerges when automatism results from the random combination of data stored in a closed system? What would a literature text written without an unconscious be like? What is literature if that aspect of language that is not communication but rather body, sound, pleasure, or pain—something that does not align with any rational intention or with anything in language that constitutes information or knowledge—disappears?

However, the focus of my work will not be on the question of whether LLMs are truly capable of writing literature, but rather on the role of literary language as an aesthetic experience—that is, one tied to the body, considering the etymology of the word *aisthesis*: ‘the faculty of sensory perception, sensitivity’— as a tool to expose the ideological claim that LLMs are perfectly neutral and rational structures that merely imitate the structure of language and the human brain (Pasquinelli; Crawford; Suchman; Roberge & Lebrun).

Drawing on Claude Lévi-Strauss's concept of the “floating signifier”, Jacques Lacan's notion of *parlêtre* (in connection with Aristotle's distinction between *automaton* and *tyché*), and Giorgio Agamben's theory of the human voice, I argue that language is rooted in the body, the unconscious, and contingency—dimensions that lie outside the structure of language yet constitute its very condition of possibility. Through examples from Latin American literature (Jorge Luis Borges, Clarice Lispector, Benjamin Labatut, among others), I contend that literature

reveals language as a site of epistemic rupture, affect and vulnerability. As such, literary language resists the idea of a universal linguistic system or total knowledge.

If what differentiates us from algorithmic models is the biological body, then the modern Cartesian conception of the properly human is reversed. The center of human language no longer revolves—as in modern exceptionalism—around a cogito separated from the body, but rather around a *res extensa*. Literature thus becomes a laboratory of philosophical anthropology for thinking the human, not in opposition to animals—as in modernity—but in continuity with them and with other living species. In this inversion of the Modern Western philosophical tradition, what was once defined as non-subjective (the body) now becomes the most subjective, the most human element. In contrast to the post-Babelian totality of the universal language imagined by artificial intelligence—a logos without a biological body—literature offers a more elusive, affective, and contingent version of language, one that is embodied in the sensible, the symptomatic, the pathos.

Without this historical, corporeal, real, and contingent dimension, language—devoid of its literary and political potential—risks becoming a tool of totalitarianism.

Luz Horne's research lies at the intersection of philosophy, literature, and visual arts, with a focus on the links between epistemology and aesthetics, environmental humanities, new materialisms, and psychoanalysis. Having lived in Brazil and the United States, she is now based in Buenos Aires, Argentina, where she is an Associate Professor in the Humanities Department and Director of the Doctoral Program in Latin American Literature and Cultural Critique at Universidad de San Andrés. Previously, she was a Professor at Cornell University and Northwestern University and a Visiting Scholar at Harvard University and the University of Edinburgh. She has published the books *Futuros Menores. Filosofías del tiempo y arquitecturas del mundo desde Brasil* (Santiago de Chile: Editorial Universidad Alberto Hurtado, 2021) and *Literaturas reales. Transformaciones del realismo en la literatura latinoamericana contemporánea* (Rosario: Beatriz Viterbo, 2012). In addition, she has published academic articles and essays on the relationship between literature and image, documentary cinema, the transformation of the concept of fiction in contemporary aesthetics, the work of Clarice Lispector, the curatorial and essayistic work of architect Lina Bo Bardi, and the work of visual artist Tomás Saraceno. She is currently co-directing the project *Estéticas de lo residual. Usos, topologías y vidas desechables en la producción estética latinoamericana* (FONCyT – Ministry of Science and Technology of Argentina).

Zombie Language: Reflections on Current Research in Deathbots, Griefbots, Digital Doppelgängers, and the Afterlives of Language

Kameelah Janan Rasheed (Yale University)

Over the past two years, I have experienced several family deaths which has led to my informal death doula training, and formal training in July. As a death doula in training alongside my artistic and writing practice, I explore the softened edges, and thus leakage between life, death, afterlife, and haunting. In this presentation, I will share reflections on current research into griefbots. Griefbots, also known as deathbots and digital doppelgängers, are AI-powered chatbots designed to mimic the language, personality, and essence of deceased loved ones. To create griefbots, companies will design an LLM using available information from a range of text-based sources such as emails or social media posts. Beyond the fidelity problem—the question of whether an LLM can ever account for the extralinguistic “data” that shapes a person—I am concerned with how griefbots participate in broader systems of necromancy, necropolitics, and the death industries. These concerns mirror my existing commitments to understanding the treatment of Black life while living—and, increasingly, post-death.

This presentation orbits around the figure of the zombie—originally situated in Haitian folklore, as a fertile ground to consider questions of race, labor, reanimation, and agency in AI. In *Zombie Reader*, Manuel Arturo Abreu engages Sarah Juliet Lauro’s *The Transatlantic Zombie: Slavery, Rebellion, and Living Death* (2015), affirming that the zombie—as a concept—was “deracialized” in its translation into Western horror but originally carried complex connotations. As Abreu notes, Lauro argues “that the myth really takes root and begins to disseminate after the [Haitian] revolution is proof that the living death is an expression of the perceived continuity between colonial slavery and the capitalist system that succeeded it.” Does the Black self continue to labor even in the afterlife? This question guides my emergent articulation of zombified language: a condition in which LLMs are used to reanimate the “processable” (read: legible) available (read: in a formally recognized language) fragments left behind by the dead—repurposed to labor, with dubious consent, on behalf of the living, in perpetuity, as shallow digital doppelgängers. Shallow because how can highly surveilled, thus deeply mediated and telegraphed language ever function beyond the threshold of a mask? In this nascent formation of zombified language, several questions arise concerning the commercialization of

grief, post-data extortion, linguistic telegraphing, “user abuse,” the psychological impact of distorted temporality, and shifting descriptions of “haunting.”

Kameelah Janan Rasheed is a learner*, seeker**, and harvester*** from East Palo Alto, CA. She explores communication practices and poetics across all species, states of living, states of consciousness, and substrates. She creates sprawling, “architecturally-scaled” installations; public installations; publications; prints; performances; performance scores; poems; video; learning environments and other forms yet to be determined. Most recently, she was awarded a 2024 High Desert Test Sites Fellowship at Joshua Tree; 2023 Working Artist Fellowship; a 2022 Schering Stiftung Award for Artistic Research; a 2022 Creative Capital Award; a 2022 Artists + Machine Intelligence Grants - Experiments with Google; and a 2021 Guggenheim Fellowship in Fine Arts. Her recent solo exhibitions include REDCAT (2024), KW Institute of Contemporary Art (2023), Art Institute of Chicago (2023), and Kunstverein Hannover (2022). Rasheed is the author of different artists' books. She is on faculty at the Yale School of Art, MFA Sculpture Department, and an instructor at the School for Poetic Computation. Rasheed founded Orange Tangent Study, a consulting business that provides artist microgrants and supports individuals and institutions in designing expansive and liberatory learning experiences. Additionally, she founded The Little Octopus School, a roaming learning ecosystem for radical play and improvisation.